

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

9-23-2022

Use of Electronic Information Resources by Postgraduate Students of Faculty of Education in Imo State University, Owerri Library

Linda Ijeoma Uwandu

Imo State Univeristy, Owerri, ijeomauwandu2014@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Uwandu, Linda Ijeoma, "Use of Electronic Information Resources by Postgraduate Students of Faculty of Education in Imo State University, Owerri Library" (2022). *Library Philosophy and Practice (e-journal)*. 7442.

<https://digitalcommons.unl.edu/libphilprac/7442>

**USE OF ELECTRONIC INFORMATION RESOURCES BY POSTGRADUATE
STUDENTS OF FACULTY OF EDUCATION IN IMO STATE UNIVERSITY,**

OWERRI LIBRARY

By

Linda Ijeoma Uwandu

Department of Library and Information Science

Imo State University, Owerri.

ijeomauwandu2014@gmail.com

Abstract

The study examined the use of electronic information resources by postgraduate students of Faculty of Education in Imo State University, Owerri Library. Four research questions guided the study. Survey research design was adopted in carrying out this study. The population of the study is 181 postgraduate students of Faculty of Education in Imo State University, Owerri. The sample for the study was 181 postgraduate students. Using census sampling technique, the entire population was adopted as sample for the study. Online questionnaire was used to collect data for this study and was rated using the four-point scale. A total of 135 respondents participated in filling out the questionnaire showing 74.6% return rate. Data collected for the study was analysed using frequency and mean. The findings of the study revealed that e-journals, e-books, e-newspapers, e-conference proceedings, Online Public Access Catalogue (OPAC), CD-ROM databases, e-magazines, electronic databases, online databases, e-theses and dissertations and Internet resources are the types of electronic information resources available for use by postgraduate students in the library studied; postgraduate students use electronic information resources to a low extent in the library studied; access to a wider range of information, faster access to authoritative and reliable information, access to current and up-to-date information, provision of unlimited access to information, hyperlinks to other resources and ease in sharing and duplicating are the benefits derived from using electronic information resources by postgraduate students in the library studied and inadequate funds, poor internet connectivity, lack of ICT skills/knowledge, limited subscribed titles, inadequate power supply, irrelevant EIR in various disciplines, inadequate ICT infrastructure and lack of staff orientation and training are constraints to effective use of electronic information resources by postgraduate students in the library studied. Based on the findings of the study, the researcher recommends among others that university library should sustain the provision of electronic information resources to ensure continuous availability in the library.

Keywords: University Library, Information Resources, Electronic Information Resources and Postgraduate Students.

Introduction

University library is a library attached to a university to provide access to information resources in order to support teaching, learning and research activities in the university. It is the nerve center that supports academic programmes in the university environment through the provision of information resources and services. The library is the educational focal point of every university, therefore, its vital role is to assist the university to achieve its objectives and goals. Every university library activity must support the curriculum to fulfil the objectives of its parent institution. Abubakar as cited in Anyaegbu and Wali (2020) maintains that services offered by the university libraries include provision of an organized collection of printed and non-printed, staff trained to provide and interpret such materials and the physical facilities necessary to support such a collection, staff and students. In order to achieve the objectives of its parent institution, university library provides library services aimed at exposing the library users to various information resources available for their use.

Information resources are vital tools in every university library. The success of any library depends on its resources and the utilization of its resources (Nwosu & Opara, 2019). Thus, for any university library to function effectively, there has to be a well-equipped library with vital information resources to meet the needs of library users aimed towards the realization of the overall goals of the parent institution. Information resources exist in several formats such as print and electronic formats. With the advent of Information and Communication Technology (ICT), there has been changes in the way libraries provide information resources. This advancement has created a shift from traditional information resources in print form to digital resources and has affected all aspect of information handling and management as information is being produced more electronically. In order to attract the library users and for effective information service delivery, university libraries develop electronic information resources that are relevant to their users.

Electronic Information Resources (EIR) are information materials in digital format that can only be accessed electronically. IGI Global (2019) describes electronic information resources as electronic products and information materials that deliver a collection of data, be it text referring to full text databases, e-journals, e-books, e-newspaper, image collections, theses, conference papers, government papers, scripts and monographs in an electronic form. They provide timely and easy access to information in electronic format. They are vital academic resources available at any time to meet the needs of students, faculty members, researchers and other library users. Electronic

information resources are increasingly being accepted for use in universities and this high acceptability rate has encouraged university libraries to acquire a lot of these electronic information resources to complement their print materials.

The importance of the use of electronic information resources by library users cannot be underestimated. This is because it helps them to access a wide range of information across the globe. Khan (2016) asserts that hundreds of thousands of monographic materials, journals, learning resources and databases among others are now available in electronic formats and these materials can be accessed from remote corners of a country, thereby increasing the use of information, literature and the efficiency of information services. The emergence of electronic information resources has tremendously transformed the handling of information in Nigerian academic environment and university libraries in particular (Ani & Edem, 2012). Users can access their libraries' electronic information resources from the comfort of their homes without being physically present in the library.

The role of the university library is not complete if electronic information resources are not made available to users. A university library ensures that information resources are made available and accessible to users. In spite of the value of electronic resources and ensuring that it is available for use by library clients, studies have shown that usage is not up to the level expected or is simply underutilized (Kwadzo, 2018). University libraries provide electronic information resources for their users to conform to technology of contemporary times despite the capital intensive nature of the resources. Moreso, library users are faced with problems in the process of utilizing these electronic information resources in university libraries. Edem and Egbe (2016) reveal that lack of computer skills, slow network, inconsistent internet connectivity, power outage, irrelevant electronic information resources among others were constraints to effective utilization of electronic information resources in university libraries.

The study is therefore carried out in Imo State University, Owerri Library to examine the use of electronic information resources by postgraduate students of Faculty of Education. The study was delimited to master's and doctorate degree students of Faculty of Education for the 2020/2021 academic session.

Objectives of the Study

The general purpose of the study is to examine the use of electronic information resources by postgraduate students of Faculty of Education in Imo State University, Owerri Library. Specifically, the study sought to ascertain the:

1. types of electronic information resources available for use by postgraduate students in the university library studied;
2. extent of use of electronic information resources by postgraduate students in the university library studied;
3. benefits derived from using electronic information resources by postgraduate students in the university library studied;
4. constraints to effective use of electronic information resources by postgraduate students in the university library studied.

Research Questions

The following research questions are posed to guide the study:

1. What are the types of electronic information resources available for use by postgraduate students in the university library studied?
2. To what extent do postgraduate students use electronic information resources in the university library studied?
3. What are the benefits derived from using electronic information resources by postgraduate students in the university library studied?
4. What are the constraints to effective use of electronic information resources by postgraduate students in the university library studied?

Literature Review

Electronic Information Resources (EIR) have gradually become a major resource in every university community. Different terminologies are used to describe electronic information resources. Graham as cited in Anyim (2019) stated that electronic information resources are also referred to as electronic library resources, digital resources, digital materials and soft library resources. Electronic information resources are information resources that are stored in electronic format and can be accessed electronically. They are works stored and provided through the use of computers and other ICT gadgets. In this context, Dhanavandan and Tamizhcheivan (2012) defined electronic information resources as resources in which information is stored electronically and it

can be accessible through electronic systems and network environment. The term EIR primarily denotes any electronic product that delivers a collection of data be it in text, numerical, graphical, or time based, as a commercially available resource (Okogwu & Achebe, 2018). Sharma as cited in Edem and Egbe (2016) opined that the term electronic resources is seen as library's information materials that are in electronic form which include: electronic books (e-books); electronic newspapers (e-newspapers); electronic journals (e-journals) as well as Internet resources. Anyim (2018) defined electronic information resources as information resources in which contents could be accessed through the use of internet; CD-ROMs, electronic books (e-books), electronic journals (e-journal), electronic indexes, digital reference materials, online databases and other e-collection.

The emergence of electronic information resources has greatly transformed the way university libraries collect, process, manage, store and retrieve information. University libraries are acquiring and subscribing to different forms of electronic information resources to supplement the print resources so as to fulfill their roles of meeting the information needs of library users. Electronic information resources are provided in electronic form, and these include CD-ROM database, online databases, online journals, OPACs, Internet and other computer-based electronic networks (Quadri, Adetimirin & Idowu, 2014). The various types and forms of e-resources in academic libraries are; e-databases, e-journals, e-data archives, e-manuscript, e-maps, e-books, e-magazines, e-thesis, WWW, e-newspapers, e-research reports, and e-bibliographic databases (Ankrah & Atuase, 2018). The types of electronic information resources that could be acquired in university libraries depend on the needs of the users, cost and complexity of the materials. Consequently, Kenchakkanavar (2014) outlined the types of EIR found in academic libraries and they include; e-books, e-journals, e-newspapers, e-magazines, indexing and abstracting databases, full text database, statistical database, image collection, multimedia products, e-thesis, e-clipping, e-patents and e-standards. Also, Uwaifo (2012) identified databases, metadata, e-books, e-conference proceedings, e-mails, e-journals, online newspapers, Online Public Access Catalogue (OPAC), e-maps, e-thesis, CD-ROMs among others as electronic information resources that are available for use.

Electronic information resources have become one of the standard requirements in university libraries to meet the information needs of library users. There is no better way of satisfying the information needs of library users in this information age without them effectively utilizing the electronic information resources in the university libraries. Several studies have been

carried out in Nigerian universities to examine the extent of use of electronic information resources. Oyedapo and Ojo (2013) carried out a study on the use of electronic resources at Obafemi Awolowo University, Nigeria and under-utilization of electronic resources was observed. Baro, Endouware and Ubogu (2011) also studied the awareness and use of online information resources by medical students at Delta State University in Nigeria and found that scholarly electronic journal databases were under-utilized. In a study conducted by Dukper, Sakibu and Arthur (2018), they discovered that regardless of the availability of wide range of electronic resources, the extent of usage by students was low. Also, Osinulu (2020) found out that the level of students' use of electronic information resources was low. On the contrary, Alhassan and Macaulay (2015) in a study revealed that the use of electronic information resources by students in the two universities was very encouraging. More so, Ternenge and Kashimana (2019) discovered that electronic information resources are to a great extent utilized by students for research.

The benefits derived from using electronic information resources by students cannot be overemphasized. Electronic information resources provide students unlimited access to a wide range of information relevant to their different subject areas. Ndubuisi and Udo (2013) discovered that postgraduate students were motivated to use electronic resources in their university libraries because they found them to be more informative, easy to access and use, save time, more useful and less expensive. Availability at any time of the day; hyperlinks to other resources; huge information reservoirs; quick information; various search options; easy citations; ease in uploading and updating; ease in storage and dissemination; flexibility; time, space and ease of archiving are the importance of electronic information resources as noted by Tekale and Dalve (2012). Norris as cited in Edem and Egbe (2016) submitted that electronic information resources reduce pressure on academic libraries for physical storage space for books and journals and provide unlimited access to users. Roberts as cited in Ternenge and Kashimana (2019) opined that availability of electronic resources provides access to authoritative, reliable, accurate and timely access to information. In addition to this, the resources can enable innovation in teaching and increase timeliness in research. Similarly, Owolabi, Idowu, Okocha and Ogundare (2016) maintained that electronic information resources provide access to current and up-to-date information, faster and easier access to information, and access to a wider range of information. Electronic information resources offer postgraduate students the chance to access relevant and current information from different subject areas (Edem & Egbe, 2016). Effective use of electronic information resources remain crucial as

library users are no longer confined to the walls of the library to satisfy their information needs. Thus, electronic information resources promote access and dissemination of needed information regardless of geographical location.

Students' quest to use electronic information resources for their research and other academic works encounter some difficulties in terms of access and usage. Therefore, in order for university libraries to improve their services, it is imperative to better understand the impediments students encounter in accessing and utilizing these resources. Anyim (2019) discovered that poor internet connectivity, lack of steady power supply, lack of information retrieval skills, inadequate ICT infrastructure and insufficient functional computers constitute the challenges associated with utilization of electronic information resources for research by students. Similarly, Mulla as cited in Ternenge and Kashimana (2019) reported that the major barrier to the use of electronic journals is the lack of subscriptions in relevant fields of studies and the lack of staff orientation or training. This means some users are likely to be deprived of the required information for their academic work. Therefore, there is need for librarians to acquire the knowledge and skills for efficient service delivery. Lefuna (2017) discovered that challenges such as budget cuts, low internet bandwidth, lack of up-to-date Information Technology (IT) infrastructure, inadequate searching skills, shortage of staff and high cost of subscription fees posed many of the threats to access to and use of e-resources in the institutions libraries. Also, a study by Ternenge and Kashimana (2019) revealed that inadequate computers in the library, poor internet connectivity, limited subscribed titles, power outages, lack of relevant e-resources in various disciplines and no assistance from the library staff are constraints to effective use of electronic information resources by students. Shukla and Mishra (2011) revealed that majority of academic libraries have problem of low internet connectivity. Osinulu (2020) discovered that inadequate computers, irregular power supply and slow internet speed were identified as major constraints to using EIR. The general low supply of electricity in most parts of Nigeria has also been identified as major challenge and setback to the use of EIR in academic libraries (Ugwuoma, Oguike & Chukwu, 2010). The use of EIR in academic libraries for teaching, learning and research may not be achieved with the current state of electrical power supply in the country.

Research Methodology

Survey research design was adopted for this study. The 181 postgraduate students of Faculty of Education in Imo State University, Owerri for the 2020/2021 academic session constituted the

population of the study. Since the population was relatively small, census sampling technique was adopted. Online questionnaire was used to collect data for this study and was rated using the four-point scale. A total of 135 respondents participated in filling out the questionnaire showing 74.6% return rate. Data collected for the study was analysed using frequency and mean. Decisions were based on 2.50 criterion mean.

Data Analyses

Research Question 1: What are the types of electronic information resources available for use by postgraduate students in the library studied?

Table 1: Types of Electronic Information Resources Available

S/N	Item Statements	SA	A	D	SD	Mean	Remarks
1.	E-journals	53	74	8	-	3.33	A
2.	E-books	44	66	25	-	3.14	A
3.	E-newspapers	69	33	26	7	3.21	A
4.	E-conference Proceedings	36	67	23	9	2.96	A
5.	Online Public Access Catalogue	28	63	32	12	2.79	A
6.	CD-ROM Databases	29	72	18	16	2.84	A
7.	E-magazines	24	68	43	-	2.86	A
8.	Electronic Databases	63	42	21	9	3.18	A
9.	Online Databases	54	70	6	5	3.28	A
10.	E-theses and Dissertations	31	64	30	10	2.86	A
11.	Internet Resources	72	37	20	6	3.36	A
Grand Mean						3.07	A

¶

Table 1 shows the item- by- item mean rating of the type of electronic information resources available for use in the library studied. From the Table, the respondents agree that E-journals (3.33), E-books (3.14), E-newspapers (3.21), E-conference Proceedings (2.96), Online Public Access Catalogue (2.79), CD-ROM Databases (2.84), E-magazines (2.86), Electronic Databases (3.18), Online Databases (3.28), E-theses and Dissertations (2.86) and Internet Resources (3.36) are among the types of electronic information resources available for use in the library studied. The grand mean score of 3.07 shows that the respondents agree that electronic information resources are available for use in the library studied.

Research Question 2: To what extent do postgraduate students use electronic information resources in the library studied?

Table 2: Extent of Use of Electronic Information Resources by Postgraduate Students

S/N	Item Statements	VHE	HE	LE	VLE	Mean	Remarks
1.	E-journals	37	57	16	25	2.79	HE
2.	E-books	17	20	55	43	2.08	LE
3.	E-newspapers	16	14	69	36	2.07	LE
4.	E-conference Proceedings	9	21	72	33	2.04	LE
5.	Online Public Access Catalogue	-	15	81	39	1.82	LE
6.	CD-ROM Databases	-	26	64	45	1.86	LE
7.	E-magazines	4	17	80	34	1.93	LE
8.	Electronic Databases	18	35	65	17	2.40	LE
9.	Online Databases	7	21	60	47	1.91	LE
10.	E-theses and Dissertations	36	59	28	12	2.88	HE
11.	Internet Resources	33	73	19	10	2.96	HE
Grand Mean						2.25	LE

Presented in Table 2 are the item- by- item mean rating of the extent postgraduate students use electronic information resources in the library studied. From the Table, the result shows that E-journals (2.79), E-theses and Dissertations (2.88) and Internet Resources (2.96) are used to a high extent while E-books (2.08), E-newspapers (2.07), E-conference Proceedings (2.04), Online Public Access Catalogue (1.82), CD-ROM Databases (1.86), E-magazines (1.93), Electronic Databases (2.40) and Online Databases (1.91) are used to a low extent. Generally, the postgraduate students use electronic information resources to a low extent in the library studied as shown in the grand mean which is 2.25.

Research Question 3: What are the benefits derived from using electronic information resources by postgraduate students in the library studied?

Table 3: Benefits Derived from Using Electronic Information Resources by Postgraduate Students

S/N	Item Statements	SA	A	D	SD	Mean	Decision
1.	Access to a wider range of information	101	34	-	-	3.75	SA
2.	Faster access to authoritative and reliable information	72	53	10	-	3.46	A
3.	Access to current and up-to-date information	84	51	-	-	3.62	SA
4.	Provide unlimited access to information	66	62	7	-	3.44	A
5.	Hyperlinks to other resources	90	33	12	-	3.58	SA
6.	Ease in sharing and duplicating	96	39	-	-	3.71	SA
Grand Mean						3.60	SA

Table 3 presented the item-by-item mean rating of the benefits derived from using electronic information resources by postgraduate students. The result of the analysis shows that Access to a wider range of information ranked first with 3.75 mean score, followed by Ease in sharing and duplicating (3.71), Access to current and up-to-date information (3.62), Hyperlinks to other resources (3.58), Faster access to authoritative and reliable information (3.46) and Provide unlimited access to information (3.44). The grand mean score of 3.60 indicates that the respondents strongly agree that there are benefits derived from using electronic information resources.

Research Question 4: What are the constraints to effective use of electronic information resources by postgraduate students in the library studied?

Table 4: Constraints to Effective Use of Electronic Information Resources by Postgraduate Students

S/N	Item Statements	SA	A	D	SD	Mean	Remarks
1.	Inadequate funds	72	50	8	5	3.40	A
2.	Poor internet connectivity	90	36	5	4	3.57	SA
3.	Lack of ICT skills/knowledge	35	73	27	-	3.06	A
4.	Limited subscribed titles	26	81	19	9	2.92	A

5.	Inadequate power supply	70	55	10	-	3.44	A
6.	Irrelevant EIR in various disciplines	27	56	45	7	2.76	A
7.	Inadequate ICT infrastructure	65	52	18	-	3.35	A
8.	Lack of staff orientation and training	57	63	7	8	3.25	A
Grand Mean						3.22	A

Presented in Table 4 are the item- by- item mean rating of the constraints to effective use of electronic information resources by postgraduate students in the library studied. The result of the analysis in the Table shows that the respondents strongly agree to poor internet connectivity as one of the constraints to effective use of electronic information resources by postgraduate students in the library studied with mean score of 3.57. They also agree that inadequate funds (3.40), lack of ICT skills/knowledge (3.06), limited subscribed titles (2.92), inadequate power supply (3.44), irrelevant EIR in various disciplines (2.76), inadequate ICT infrastructure (3.35) and lack of staff orientation and training (3.25) are among the constraints to effective use of electronic information resources by postgraduate students in the library studied. The grand mean score of 3.22 indicates that there are constraints to effective use of electronic information resources by postgraduate students in the library studied.

Discussion of Findings

The finding for research question 1 revealed that e-journals, e-books, e-newspapers, e-conference proceedings, Online Public Access Catalogue (OPAC), CD-ROM databases, e-magazines, electronic databases, online databases, e-theses and dissertations and Internet resources are the types of electronic information resources available for use by postgraduate students in the library studied. The finding shows that electronic information resources are available in the library studied. This finding gave credence to the findings of Ankrah and Atuase (2018) who revealed that the various types and forms of e-resources in academic libraries are; e-databases, e-journals, e-data archives, e-manuscript, e-maps, e-books, e-magazines, e-thesis, WWW, e-newspapers, e-research reports, and e-bibliographic databases. Similarly, the finding is in consonance with that of Kenchakkanavar (2014) who outlined the types of EIR found in academic libraries as e-books, e-journals, e-newspapers, e-magazines, indexing and abstracting databases, full text database, statistical database, image collection, multimedia products, e-thesis, e-clipping, e-patents and e-standards. Also, the finding supports that of Uwaifo (2012) who identified databases, metadata, e-

books, e-conference proceedings, e-mails, e-journals, online newspapers, Online Public Access Catalogue (OPAC), e-maps, e-thesis, CD-ROMs among others as electronic information resources that are available for use.

It was also revealed that postgraduate students use electronic information resources to a low extent in the library studied. Corroborating this finding, Bara Endouware and Ubogu (2011); Oyedapo and Ojo (2013); Dukper, Sakibu and Arthur (2018) and Osinulu (2020) found out that the extent of usage of electronic information resources by students was low. The finding however is contrary to the finding of Alhassan and Macaulay (2015) in their study revealed that the use of electronic information resources by students in the two universities was very encouraging. Equally, Ternenge and Kashimana (2019) discovered that electronic information resources are to a great extent utilized by students for research.

The finding also revealed that access to a wider range of information, faster access to authoritative and reliable information, access to current and up-to-date information, provision of unlimited access to information, hyperlinks to other resources and ease in sharing and duplicating are the benefits derived from using electronic information resources by postgraduate students in the library studied. This finding is in agreement with the views of Roberts as cited in Ternenge and Kashimana (2019) who opined that availability of electronic resources provides access to authoritative, reliable, accurate and timely access to information. Similarly, Owolabi, Idowu, Okocha and Ogundare (2016) maintained that electronic information resources provide access to current and up-to-date information, faster and easier access to information, and access to a wider range of information. This finding agrees with Edem and Egbe (2016) who in their study opined that electronic information resources offer postgraduate students the chance to access relevant and current information from different subject areas. This finding also is in tandem with Tekale and Dalve (2012) who asserted that availability at any time of the day, hyperlinks to other resources, huge information reservoirs, quick information, various search options, easy citations, ease in uploading and updating, ease in storage and dissemination, flexibility, time, space and ease of archiving are the importance of electronic information resources.

It was revealed that inadequate funds, poor internet connectivity, lack of ICT skills/knowledge, limited subscribed titles, inadequate power supply, irrelevant EIR in various disciplines, inadequate ICT infrastructure and lack of staff orientation and training are constraints to effective use of electronic information resources by postgraduate students in the library studied.

The finding is in line with the findings of Lefuna (2017), Anyim (2019), Ternenge and Kashimana (2019) and Osinulu (2020) who also identified such factors as militating the use of electronic information resources.

Conclusion

From the findings of this study, it was discovered that e-journals, e-books, e-newspapers, e-conference proceedings, Online Public Access Catalogue, CD-ROM databases, e-magazines, electronic databases, online databases, e-theses and dissertations and internet resources are among the electronic information resources available in the library studied. This implies that there are sufficient electronic information resources available for use in the library studied. However, the extent of use is low and this implies that postgraduate students do not make effective use of these electronic information resources. Postgraduate students need to make effective use of the electronic information resources as it will go a long way in helping them access current and relevant information in diverse subject areas.

Recommendations

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

1. University library should sustain the provision of electronic information resources to ensure continuous availability in the library.
2. University library should create adequate awareness on the available electronic information resources in the library and also organize a workshop for postgraduate students to encourage them to effectively use these resources.
3. Supervisors of postgraduate students' theses and dissertations should make effort to ensure that electronic information resources are cited by postgraduate students.
4. University management should install inverter and standby generator in the library to ensure regular power supply. Also, university library management should subscribe to appropriate databases related to the faculty and students' fields of study so as to address the problem of limited subscribed titles.

References

- Alhassan, J. A. & Macaulay, S. O. (2015). Availability and utilization of electronic resources by university students in Niger State. *International Conference on 21st Century*, 7(1), 10-19.
- Ani, O. & Edem, N. (2012). Access and usage of online databases in Nigerian universities

- in teaching/research. *Library and Information Practitioner*, 5(1&2), 475-486.
- Ankrah, E & Atuase, D (2018). The use of electronic resources by postgraduate students of the University of Cape Coast, *Library Philosophy and Practice (e-journal)*. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=4675&context=libphilprac>. Retrieved on 10/05/ 2022.
- Anyaeagbu, M. I. & Wali, N. B. (2020). Influence of staff training and development on librarians job performance in federal university libraries in South-South, Nigeria. *Library Research Journal*, 1 (1), 38-60.
- Anyim, W. O. (2019). Electronic information resources for learning and research activities among undergraduate students in the university library. *Journal of Computer Science and Technology Studies*, 1(1), 28-35.
- Anyim, W. O. (2018). E-library resources and services: Improvement and innovation of access and retrieval for effective research activities in university e-libraries in Kogi State Nigeria. *Library Philosophy and Practice (e-journal)*. Retrieved from <https://digitalcommons.unl.edu/libphilprac/1647> on 10/05/2022.
- Baro, E. E., Endouware, B. C. & Ubogu, J. O. (2011). Awareness and use of online information resources by medical students at Delta State University. *Library Hi Tech News*, 28(10), 11-17.
- Dhanavandan, S. & Tamizhchelvan, M. (2012). An evaluation of e-resources in academic libraries in Tamil Nadu. *Journal of Emerging Trends in Computing and Information Science*, 3(3), 421-426.
- Dukper, K. B., Sakibu, B. & Arthur, B. (2018). Awareness and utilization of electronic resources by students of Tamale Technical University, Ghana. *Library Philosophy and Practice (e-journal)*. Retrieved from <https://digitalcommons.unl.edu/libphilprac/2078> on 15/05/2022.
- Edem, N. B & Egbe, N. (2016). Availability and utilization of electronic information resources by postgraduate students in a Nigerian university library: A case study of University of Calabar, Nigeria. *Information and Knowledge Management*, 6(2), 60-69.
- IGI Global (2019). What is electronic resources. Retrieved from <https://www.igi-global.com/dictionary/taxonomy-collaborate-learning/13651> on 09/05/2022.
- Kenchakkanavar, A. (2014). Types of e-resources and its utilities in library. *International Journal of Information Sources and Services*, 1(2), 97-103.
- Khan, J. (2016). Impact of Information Communication Technology on library and its services. *International Journal of Research Grant*, 4(9), 97-100.

- Kwadzo, G. (2018). Awareness and usage of electronic databases by geography and resources development information studies graduated students in the University of Ghana. *Library Philosophy and Practice (e-journal)*. Retrieved from on <http://digitalcommons.unl.edu/Libphdprad/245> on 09/05/2022.
- Lefuma, S. (2017). *Access to and use of Electronic Information Resources in the academic libraries of the Lesotho Library Consortium*. (Doctoral dissertation submitted to College of Humanities, University of Kwazulu-Natal, Pietermaritzburg, South Africa). Retrieved from <https://researchspace.ukzn.ac.za/xmlu> on 23/05/2022.
- Ndubuisi, C. J. & Udo, N. (2013). Empirical study of motivation, challenges and strategies in the use of electronic information resources by postgraduate library users in South-East Nigerian federal universities. *International Journal of Library and Information Science* 5(11), 468-473.
- Nwosu, M. C. & Opara, G. (2019). Information resources in Nigerian university libraries. In C. O. Nnadozie, C. P. Uzuegbu, M. C. Nwosu, K. N. Igwe and J. O. Akidi (Eds.) *University librarianship: Issues and perspectives in Nigeria*. Lagos: Zeh Communications.
- Okogwu, F. I. & Achebe, N. E. (2018). Selection and acquisition of electronic resources in university libraries in South-East, Nigeria: Challenges. *Library Philosophy and Practice (e-journal)*. Retrieved from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5115&content=libphilprac> on 10/05/2022.
- Osinulu, L. F. (2020). Awareness of use of electronic information resources by students of College of Health Sciences in Olabisi Onabanjo University, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 11(3), 1-11.
- Owolabi, S., Idowu, O., Okocha, F. & Ogundare, A. O. (2016). Utilization of EIRs by undergraduate students of University of Ibadan: A case study of social sciences and education. *Journal of Education and Practice*, 7(13), 30-37.
- Oyedapo, R. O. & Ojo, R. A. (2013). A survey of the use of electronic resources in Hezekiah Oluwasan Library, Obafemi Awolo University, Ile-Ife, Nigeria. *Library Philosophy and Practice*. Retrieved from <http://digitalcommons.unl.edu/libphilprac/884> on 13/05/2022.
- 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.
- 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> on 13/05/2022.
- Tekale, R. B. & Dalve, D. B. (2012). E-resources review of research. Retrieved from [http://www.reviewofresearch.net/ Publish Articles/45.pdf](http://www.reviewofresearch.net/Publish%20Articles/45.pdf) on 12/05/2022.
- Ternenge, T. S. & Kashimana, F. (2019). Availability, accessibility and use of electronic information resources for research by students in Francis Sulemanu Idachaba Library University of Agriculture, Makurdi. *Library Philosophy and Practice (e-journal)*. Retrieved from <https://digitalcommons.unl.edu/libphilprac/2352> on 14/05/2022.
- Ugwuoma, S. C., Oguike, M. O. & Chukwu, B. M. (2010). Use of ICT resources for library services in Nigerian tertiary institutions: Challenges and prospects. *FCT College of Education Zuba Journal of Education Studies*, 1(3): 127-130.
- Uwaifo, S. O. (2012). Awareness and use of electronic information resources by library and information students in Delta State University, Abraka. *Nigerian Libraries, Journal of the Nigerian Library Association*, 45(2), 62-74.