

**IMPACT OF ELECTRONIC INFORMATION RESOURCES USE BY UNDERGRADUATES:
EXPERIENCES FROM USMAN DANFODIO UNIVERSITY IN SOKOTO****BY****Dr. Sahabi, Muhammad Kabir: University Library, Kaduna State University, Kaduna;
E-mail: sahabikabir@gmail.com****Ezeudu, B . Ogochukwu: University library Bells university of Technology, Ota Ogun state;
E-mail: benebak@yahoo.com****&****Aliyu Haidar Abubakar: Academy Library, Wudil-Kano; E-mail: aliyuhydar@gmail.com****Abstract**

The study evaluated the use of electronic information resources by undergraduates in Usman Danfodio Universty, Sokoto. The study adopted a survey design with a study population of 822(Student's registration record provided in the reader's services section of the university library). The sample size was 164 undergraduate students who registered with the university libraries between 2017-2019 academic sessions of Usman Danfodio Universty, Sokoto the sample was selected based on Wimmer and Dominick's pomular. The researcher adopted simple random technique. Data was analyzed using the SPSS software, frequency distribution and percentages. The findings revealed that most of the undergraduates of Usman Danfodio Universty, Sokoto have low level of awareness of the importance and use of electronic information resources in the library. The study therefore recommended that the management of Usman Danfodio Universty library, Sokoto should ensure that EIRs with adequate information and communication technology tools are subscribed to regularly as this will encourage undergraduates to constantly engage in EIRs usage to improve their academic performance.

Keywords: *Electronic information resources, undergraduate, Use electronic information resources*

Introduction

Electronic information resources are needed for undergraduate students especially because they make information available, easier and provide faster access to information than information accessible via printed media (Ukachi, 2011). They serve as motivators for learners, as they give them the opportunity to deliver, obtain, transfer and circulate information resources on any topic of interest. EIRs help to develop access, increase usability and efficiency, and create new ways for students to use the available information in the university library. EIRs give users reliable information, and right information for the right user. In addition, the use of EIRs helps students to be well-informed and up-to-date in their respective thematic areas, unlike print information resources that are not updated regularly (Fabunmi, Paris & Fabunmi, 2016).

Use of EIRs in this new global economy implies that as information continues to grow exponentially, universities cannot remain mere avenues for the transmission of prescribed set of information from teacher to student over a fixed period of time but must promote learning as knowledge in more dynamic ways. The world is currently living in an information society where there is exponential growth in information accessible through Information and Communication Technology (ICT) especially the Internet which helps undergraduate students to use EIRs effectively. As a result, the use of electronic EIRs by undergraduate students in universities has become indispensable in this digital age where globalization of education is made possible through ICT. This development has given rise to global, current and up-to-date information with the advent of these technologies which aid the transmission of information through EIRs. Tofi (2019) averred that the use of EIRs and technological change have created a new global economy that is powered by technology, fueled by information and driven by knowledge.

Uses of EIRs afford researchers and undergraduate students the opportunity to have access to global information resources, especially the Internet for their scholarly work. Undergraduate students in university libraries make use of EIRs for many purposes mostly for academic purposes that is, retrieving current literature for studies and preparing for examinations, doing class assignments, carrying out research projects, and communicating and collaborating with peers and teachers via the Internet on e-mail or by following blog discussions (Adeniran, 2013). Undergraduate students use e-books and e-journal articles to acquire knowledge and carry out research work (Ajayi, Shorunke & Aboyade, 2014). Course materials are provided on CD-ROM for students' use which helps them to use EIR at their convenient time. With the emergence of ICT, EIRs have become widely used and accepted among scholars and have increased tremendously in volume around the globe (Oyedapo & Ojo, 2013). All these resources have really improved the quality of education as this is evident in the literature. However, literature has revealed low usage of EIRs by undergraduates in Nigeria (Omoike, 2013).

In the same vein, various studies have been carried out on the use of EIRs by different categories of users (Ekhanuere, Olayinka, Taiwo, Alonge & Obono, 2015). Surveyed users include students, lecturers, researchers, experts of various profession and scientists. While some researchers claim that there are more studies that have reported high usage of electronic information resources, others have argued that the opposite is the case. Romanove and Aarnio (2016) have argued that there is low usage of EIRs on studies that have been undertaken mainly in Northern Nigerian. They have explained that factors that have led to the low usage of EIRs include lack of adequate ICT infrastructure, unaffordable online access and poor ICT skills of librarians to adequately serve their clients. Despite these differences between the two groups of researchers, most of them agree that online databases have not been equally patronized by students due to lack of awareness of the available EIRs, lack of time to access them and the use of passwords.

Electronic information resources (EIRs) are the bedrock of academic success (Ekenna & Mabawonku, 2013). They provide accurate and timely information for better educational outcomes and aid in the retrieval of huge amount of information for teaching, learning and research. According to Omoike (2013), electronic information resources (EIRs) comprise sets of instructional materials such as audio and video cassettes, CD-ROM, television and radio broadcast as well as multimedia components such as computer and satellites. Undergraduate students make use of e-books, e-journals, electronic reference materials like e-encyclopedias, e-theses/dissertations, CD-ROM databases, e-mail and e-news. Electronic information resources (EIRs) have become very important in academic work. Teaching, learning and research have been made easier through the use of these resources. EIRs are vital to students learning and research as students have greater access to vast amount of information that is not easily available on print media. These resources can only be accessed using computers and other ICT devices. Electronic information resources that are available for use by students include e-journal, e-books, e-reference, e-news, e-mail, Compact Disk Read Only Memory (CD-ROM) databases, and Online Public Access Catalogue (OPAC).

According to Dadzie (2005) electronic information resources are invaluable research tools that complement the printed ones that are available in the traditional library. E-book has been described as a text similar to a book that is in digital form to be displayed on a computer screen. E-books can be read just like a paper book, using dedicated e-book reader such as Gemstar e-book or on a computer screen after downloading it. Access to articles in electronic journals (e-journals) can also be made through services which offer searchable databases of contents of e-journals from several publishers like Emerald, Sage, etc. and links to journal site for full text.

Brinkley, Lewin, and Cathy (2009) stated that use of electronic resources offers advantage for class activities. It makes users' preparation for their assignment and participation in group discussion more compelling, informative, and different. They recognized five techniques that librarians should consider using EIRs to gain benefit from technology. These five are: Administration: Use of EIRs can help in the

administration of course delivery. EIRs can be advertised in home page of the course. Use of EIRs can decrease the amount of time and energy librarians spend in providing information resources.

Electronic information resources are inseparable part of today's educational system. This is because electronic resources have increased in popularity and use. They can and do enable innovation in teaching, and they increase timeliness in research as well as increase discovery and creation of new fields of inquiry. Moreover, Ismaila (2019) and Akpovire, Olawoyin, Adebayo and Esse (2019) argued that low patronage of scholarly electronic journals in the library was largely attributed to lack of information literacy skills among library users, limited access points, low bandwidth and recurrent power supply. Furthermore, Ekong and Ekong (2018) found out that most undergraduate students lacked computer skills, searching skills, and sufficient training in the use of electronic resources and that lack of awareness, and lack of information literacy skills and computer self-efficacy contribute to the learners' negative attitude towards the use of electronic resources.

Alegbeleye, Madukoma and Sahabi (2019) conducted study on electronic information resources use by undergraduate students of Kaduna State University, (Kasu), Kaduna. They investigated the usage of electronic information resources by undergraduate students of Kaduna State University, (KASU) Kaduna. Survey research method was adopted to carry out the study; the simple random sampling was used to select participants among the undergraduate students that came to use the library. The instrument used for data collection was a questionnaire tagged usage of electronic information resources. A total of 74 questionnaires were administered, of which 54 were duly filled giving. The findings revealed that majority of the respondents had used electronic journal, with 70.3% of them being using them for the purpose of assignment and majority are frequently using electronic journals. The most used electronic resources by students were internet search engines and they use it for completing class assignments.

Ankrah and Atuase (2018) conducted a study on the use of electronic resources by postgraduate students of University of Cape Coast. The main purpose of this study was to examine the use of electronic resources by postgraduate students of the University of Cape Coast, and with a view of giving recommendations based on findings. The findings revealed that most of the postgraduate students were aware of the e-resources in the library. The findings of this study also revealed that most postgraduate students rather preferred to access information from Google scholar, and other web based databases more frequently than the databases in the library. Madukoma, Onuoha and Ikonne (2014) identified lack of awareness as major contributing factor to non-use of e-resources.

Toyo (2017) conducted a study on undergraduates' information literacy skills and the use of electronic resources in Delta State University, Abraka, Nigeria. The study revealed high level of information literacy skills of the undergraduates. From the previous studies on information literacy levels of undergraduate students, it was revealed that undergraduate students possessed low level of information literacy which could affect their ability to utilize required information resources for academic success and better decision making in life situations. This situation calls for a collaborative effort of university and librarians to improve the information literacy of undergraduate students as reiterated by Maughan (2011) who stated that information literacy is much more than library instruction, and requires an institutional involvement that extends far beyond the library.

Statement of the Problem

The use of electronic information resources (EIRs) in learning and research by students has become indispensable in this digital age where globalization of education is made possible through Information and Communication Technology (ICT). EIRs are information documents that can only be accessed electronically using ICT facilities. Electronic information resources are of great importance to the academic and research needs of undergraduate students in university libraries. Use of Electronic information resources (EIRs) has become inevitable for undergraduates in the digital age, given the

volume of academic materials that are available in EIRs. Even though university libraries conduct workshops and seminars to sensitize undergraduate students on the use of electronic information resources that are available in Usman Danfodio Universty library, the literature has established that their use by undergraduate students have been very low. The study conducted by Ekenna and Ukpebor (2016) showed that EIRs were very well accepted in other countries of the world as against the situation in Nigeria. One is curious as to why the situation should be different in Nigeria. In the light of the above, the present study investigated the use of electronic information resources in Usman Danfodio Universty, Sokoto.

Purpose of the Study

The main purpose of this study is to investigate the use of electronic information resources by undergraduates in Usman Danfodio Universty, Sokoto. The specific purpose is to:

1. ascertain the frequency of use of electronic information resources by undergraduates in Usman Danfodio Universty, Sokoto.

Research Questions

The following research question guided the study:

1. How frequently do undergraduates use electronic information resources used by undergraduates in Usman Danfodio Universty, Sokoto?

Methodology

Survey method was adopted for this study primarily because it was a suitable and efficient way of studying large populations. It allows only a sample population to be used to represent the entire population. The target population for this study was the undergraduates of Usman Danfodio Universty, Sokoto. The population consisted of mainly 300 and 400 level students. This is simply because they tend to understand and use the library more because of their projects for the final year. The questionnaire was used as an instrument for data collection. The reliability of the instrument was established by conducting a pilot study within seven (7) days. To determine the reliability of the instrument for this study, thirty (30) copies of the questionnaire were administered to undergraduate from Ahmadu Bello library, Zaria. A. B. U. library, is a federal government-owned university in Zaria, Kaduna State is outside the area of this study, but shares the same characteristics with the study community. Questionnaire was the only instrument used for the collection of data for this study because it is capable of reaching a large number of respondents and provides privacy and confidentiality. The questionnaire was prepared on the basis of the objective of the proposed study and was distributed randomly among the target population under the study. Total 822 questionnaires were distributed and 600 were returned back after filling by the staff. The descriptive statistical technique made up of tables and percentages was used in analyzing the data collected.

Results

The following data shown in Tables (1) were collected to enable the researcher provide answers to the research questions raised in the study. To this end, data gathered from the questionnaires were analyzed and presented based on the research questions.

Research Question 2: How frequently do undergraduate students use electronic information resources in Usman Danfodio Universty, Sokoto?

Table 1: Frequency of use of electronic information resources

Statement	Never (%)	Sometimes (%)	Often (%)	Very Often (%)	Mean	SD
The Internet	43(6.8)	146(23.1)	91(14.4)	352 (55.7)	3.19	1.01
Online databases	102(16.0)	183(28.7)	137(21.5)	216	2.73	1.09

				(33.9)		
Electronic books	92(14.6)	207(32.8)	151(23.9)	181 (28.7)	2.67	1.04
Electronic journal	125(19.8)	199(31.6)	144(22.9)	162 (25.7)	2.54	1.08
Electronic catalogue (OPAC)	143(22.9)	206(33.0)	127(20.3)	149 (23.8)	2.45	1.09
Grand Mean Score = 2.72						

Decision Rule: The decision rule states that: 1.0-1.49 = Never Used; 1.50-2.49 = Sometimes Used; 2.50-3.49 = Often used; 3.50-4.0 = Very Often Used. Criteria mean of 2.5 is calculated as follows: $4+3+2+1=10/4=2.5$.

Respondents were asked to indicate their frequency of electronic information resources use. Findings in Table indicate that undergraduate students in Usman Danfodio Universty, Sokoto frequently use electronic information resources, making a decision by the overall mean score of 2.72 on the scales of 1-4. Furthermore, the table shows that internet (n=3.19) was the most frequently used while electronic catalogue was the least used by the undergraduate students (mean=2.54), though this was considered to be the lowest under resources examined in the study. Also, electronic books (mean=2.67) was considered to be frequently used by the undergraduates. Interestingly, 4/5 (80.0%) of the resources were used while 1/5 (20.0%) was not used by undergraduate students during library visits. This finding might imply undergraduate students' low level of awareness of the importance and use of electronic catalogue in the library.

Discussion of Findings

This study investigates use of electronic information resources by undergraduates in Usman Danfodio Universty Sokoto Library. The research questions were tested. The discussion of findings was based on the results of the research question of the study, which were derived from the objective of the study.

Research question was formulated to establish the frequency of use of electronic information resources by undergraduate students in Usman Danfodio Universty Sokoto, Nigeria. This result in Table indicates that majority of undergraduate students in Usman Danfodio Universty, Sokoto use electronic information resources once in a week. Perceptions were high on four of the electronic information resources except "electronic catalogue". The internet ranked highest among the electronic information resources frequently utilized, followed by online databases, electronic books, and electronic journal. Increase in electronic resources is assisting universities as they provide access to up-to-date information. The finding agreed with that of Head (2013) that University students frequently use electronic information resources for different academic purposes namely organizing class meetings, writing articles, intensifying classroom work, restoring existing literature, pursuing blog discussions in the area of interest, finding scholarship opportunities, and finding training and research information resources. The finding also corroborates that of Oyegade (2015) that internet as sources of electronic information is the best way to retrieve information for students' research because it is the gateway to the world. He opined that this allowed different groups of people, especially students and researchers to establish channels of communication and personal expression. In support of the findings, Afolake, Sabur, and Osifila (2012) revealed that the trend in the use of technology is the adoption of digital libraries for research activities. In agreement with this finding, Williamson, Bernath, Wright and Sullivan (2007) submitted that the Internet and other electronic search tools influence the manner in which students search for information and the kinds of sources they select.

Conclusion

Electronic information resources have indeed become very important to undergraduate students in Nigerian federal university libraries especially in accessing up-to-date information as they give access to

quality information irrespective of place, time and space. The study also revealed high frequency of usage of electronic information resources among undergraduates in federal university libraries.

Recommendations

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

1. Based on the high frequency of use of the EIRs as found by the study, the management of Usman Danfodio University library, Sokoto should ensure that EIRs with adequate information and communication technology tools are subscribed to regularly as this will encourage undergraduate students to constantly engage in EIRs usage to improve their academic performance.

References

- Adeleke, O., & Emeahara, M. (2016). Electronic resources librarian. *Journal of humanities and social sciences*, 46(2), 2110-2086
- Adeniran, M. (2013). Electronic resources librarian. *Journal of humanities and social sciences*, 46(2), 2110-2086
- Ajayi, S. A., Shorunke, O. A., & Aboyade, M. A. (2014). The influence of electronic resources use on students' reading culture in Nigerian Universities: a case study of Adeleke University Ede, Osun state. *Library Philosophy and Practice* (e-journal). <http://unllib.unl.edu/LPP/>
- Alegbeleye, O. G., Madukoma E. & Sahabi M. K. (2019). Electronic information resources use by undergraduate students of Kaduna State University, (Kasu), Kaduna. *Global Journal of Applied, Management and Social Sciences (GOJAMSS)*17(6), 172 - 181
- Ani, O. E., Esin, J. E., & Edem, N. (2005). Adoption of information and communication technology (ICT), in academic libraries: a strategy for library networking in Nigeria, *The Electronic Library*, 23(6), 701-8.
- Ani, O. E. (2010). Internet access and use by undergraduate students in three Nigerian universities. *The Electronic Library*. 28(4); pp.555-567. <http://www.emeraldinsight.com/0264-0473>.
- Ani O, & Edem N, editors (2015). Trends in the development of virtual libraries in Nigeria Universities. *A Paper presented at the 50th National Conference of Nigerian Library Association (NLA)*.
- Brinkley, O., Lewin, M., & Cathy, (2009). *The Chicago handbook for teachers: a practical guide to the college classroom*. Chicago: University of Chicago Press.
- Dadzie, P. S. (2015). Electronic resources: Access and usage at Ashesi University College. *Campus-Wide Information Systems*, 22(5), 290-297.
- Ekenna, M. M., & Ukpebor, C. O. (2016) Availability and use of electronic resources in African Universities: The Nigerian perspective. *PNLA Quarterly*, 76 (3) 121-142.
- Ekong,U. O. & V. E. Ekong (2018). Impact of information literacy skills on the use of e-library resources among tertiary institution students in Akwa Ibom State. *Nigerian Journal of Technology (NIJOTECH)*, 37(2), 423 – 431
- Fabunmi, B. A, Paris, M. & Fabunmi, M. (2016) Digitization of library resources: Challenges implications for policy and planning. <http://ajes.siue.edu/ois/index.php/ijaas/article/viewfile/80/142>
- Fosnaht, I. (2017). Information retrieval skills and use of library e-resources by University undergraduates in Nigeria. *Information and Knowledge Management*, 3(9), 6-14.
- Ku, K. M. (2008). Services collection development: *Electronic resources collection development policy*. <http://lib.hku.hk/cd/policies/cdp.html>.
- Kumari, B. T. S. (2017). Perception and usage of e-resources and the Internet by Indian academics. *The Electronic Library*. Retrieved from www.emeraldinsight.com/0264-0473.htm on March 12, 2012.
- Madukoma, E., Onuoha, U. D., & Ikonne, C. N. (2014). Electronic resources information behaviour of faculty members at Babcock university Ilishan-Remo, Ogun state, Nigeria. *Information Trends*, 1(1), 60-68.
- Magha, E. (2011). Application of digital libraries and electronic technologies in Uganda. *African Journal of Library, Archival and Information Science*, 12(2), 145 – 154.

- Omoike, A. D. (2013). Use of electronic resources by distance students in Nigeria: the case of the National Open University, Lagos and Ibadan Study Centers. *LibraryPhilosophy and Practice (e-journal)* Retrieved from <http://digitalcommons.unl.edu/libphilprac>
- 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 and Practice (e-journal)*, 8(8), 4-14.
- Sahabi, M. K., Alegbeleye, G. O. & Madukoma, E. (2019). Literature review on information literacy skills, computer self-efficacy and electronic information resources use by undergraduates in university libraries, Nigeria. *International Journal of Social Sciences and Humanities Reviews*, 9(2), 165 – 179.
- Saye, J. D. (2001). “The organization of electronic resources in the library and information science curriculum”, *OCLC Systems and Services*, 17(2), 71-8.
- Swain D. K., & Panda K. (2013). Use of e-services by faculty members of business schools in a state of India: A study. *Collection Building*, 28(3),108-16.
- Tofi, S. (2019) Use of e-resources by the students and researchers of faculty of Arts, Annamalai University. Retrieved from: <http://article.sapub.org/10.5923.j.library.20120101.01.html>
- Ukachi, N. B. (2011), Electronic information resources and undergraduate users’ patronage in University of Lagos Library: a survey, *International Journal of Information Research*, 1(2), 27-38.