

**ELECTRONIC INFORMATION RESOURCES USE BY UNDERGRADUATE STUDENTS OF  
KADUNA STATE UNIVERSITY, (KASU), KADUNA, NIGERIA**

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**Abstract**

*Electronic information resources now serve as important sources of information to Undergraduate students in Nigerian universities. This study aims to investigate 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. Using the survey research approach, the simple random sampling was used to select participants among the undergraduate students 400 levels that came to use the library within the study period. 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 100. % 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.*

**Keywords:** University library, ICT, Electronic Information Resources, undergraduates, Usage

**Introduction**

Libraries situated within academic institutions are expected to provide effective information services for teaching, learning and research for the university community. However, research is fundamental to the survival of higher education institutions as this is the basic process of acquiring knowledge. In order to impart knowledge, teachers need to engage in research to deepen their understanding of concepts and to learn from students as well as to explore and identify problems. Research is essential in universities because it plays a key role in the quality of the institution's education (Ochogwu, 2007). Ansari and Zuberi (2017) emphasized that higher research profile contributes to the reputation, vision and recognition of institutions.

Research requires extensive literature especially for students who rely on the university library's electronic information resources. The introduction of electronic information resources in Nigerian university libraries will facilitate access to large e-book collections and e-journals for students.

Similarly, university library, as an institution, is considered as the custodian of knowledge where undergraduate students from diverse disciplines obtain knowledge and assistance for self-improvement. Acquisition of knowledge is necessary for better understanding and contribution in community matters. One of the places where undergraduates acquire this knowledge is a university which is known as a custodian of knowledge where students from diverse disciplines obtain knowledge and skills for individual development. The acquisition of knowledge is essential for a better understanding and contribution in society matters and prepares one for participation for the future community (Suwan & Panda, 2013). Thus a university library could be a breeding ground for creativity and independent thinking. This however depends on the quality and quantity of information resources available in the university library (Mbabu, Bertman & Varun, 2012).

Studies have shown that the introduction of Information Communication Technology (ICT) facilities in the university libraries has tremendously enhanced information generation, access, storage and dissemination (Mohammed & Philip nd). Dissemination of timely and up-to-date information is made easier with the advent of these technologies which aid the transmission of information through electronic information resources. The increased awareness of the importance of information in human activities has also necessitated the need for the provision of more diversified, easier and upgrading of the services to meet with the growing information needs of the users (Swain & Panda 2013). Tofi (2019) opined that “the rapid advancement of Information and Communication Technology (ICT) has brought revolutionary changes in the university library giving rise to a number of options to the user community to handle varieties of information sources conveniently and effortlessly”. As a result electronic information 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). However, Electronic Information Resources are very important in university libraries, where most libraries that provide access to this service gain competitive advantage.

Electronic information resources are information documents that can only be accessed in the library electronically, using information communication technologies (ICT) facilities (Obuh, 2011). Examples of electronic resources of information that are frequently accessed by students include: Internet, CD-ROM databases, online databases, online public access catalogue (OPAC), electronic journals, electronic books and digitized documents. These resources are gradually replacing the printed information resources because of their ability to deliver to users current and up-to-date information. With the development of information communication technologies (ICT), electronic information resources have come to be generally used and accepted by scholars and have improved greatly in volume over the places in the world (Oyedapo & Ojo, 2013)

The provision of electronic information resources in tertiary institutions of learning is a new way of gaining quick access to a great number of research information and dissemination globally. As a result of the potential benefits offered, they have been embraced by university libraries. Students, especially those at the undergraduate level, would benefit from the electronic information resources if they are well harnessed as they will provide excellent opportunities to access scholarly information which are beyond the reach of libraries due to geographical barriers and limited finances.

Electronic information resources are needed for students especially because they make information available, easier and provide faster access to information than information accessible via printed media (Ukachi, 2011). Electronic information resources help to promote access, increase usability and efficiency, and create new ways for students to use the available information in the university library. Electronic information resources give users reliable information, and right information for the right user. In addition, the use of electronic information resources 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). EIRs are of great importance to the academic and research needs of undergraduate students in university libraries since they are available in various formats. Even though university libraries conduct workshops, seminars and communicate to undergraduate students frequently about the available

electronic information resources that are in university libraries, they appear not to be using them (Adeniran & Emeahara, 2016).

Electronic information resources use makes learning easier for users to quickly and easily access information they need. Negahban and Talawar, (2009) stated that EIRs have become very important ingredients in many academic institutions. They serve as motivational factors for learners, and give them the opportunity to convey, acquire, transfer, process and disseminate information resources on any topic of interest. They can be used by any information seeker via online access through networks or authentication methods at anytime and anywhere without visiting the library building. In fact, they play an important role in university libraries; electronic information resources promote academic excellence and research. Electronic information resources expose users to the opportunity to search several files at the same time, their performance are achieved easier than the use of printed equivalents.

Ayeni, Omoba, Tella and Tella (2007) highlighted the fact that electronic information resources have many roles and benefits that can positively impact performance of students and researchers in the university as well as other advanced institutions of learning. It is important that students are familiar with the use of electronic information resources for faster and more efficient use of the library. It is evident that electronic information resources facilitate the libraries to get the benefits of large number of resources at an affordable cost and in minimal time. Moreover, the technology has changed the expectations of users, their patience, and their willingness to accept services that are available on demand worldwide. Electronic information resources are the answer to the expectations of the users (Ani, 2013).

Electronic information resources use no doubt has myriad advantages for libraries as users can now access information resources across the globe without restriction which was practically impossible in the past. Lending credence to this view, Dadzie (2007) noted that e-resources use provide access to information that might otherwise, be restricted to users due to geographical location or finance constraints as well as to extensive links to additional resources having related contents. University libraries, can, therefore, go beyond the information resources present in the physical library to enable access to information in remote servers. In university community where students are mostly engaged in research activities, the provision of e-resources becomes important considering that the resources contain frequently updated information. In addition e-resources use have several advantages such as timeliness, search facilities, remote access and up datedness, they become more indispensable after the arrival of the Internet in the academic environment.

### **Statement of the Problem**

EIR are information documents that can only be accessed in the library electronically, using ICT facilities. Examples of EIRs that are frequently used by students include: Internet, CD-ROM, online databases, OPAC, e-journals, e-books and digitized documents. Electronic information resources are of great importance to the academic and research needs of undergraduate students in university libraries, and they are available in various formats. Even though university libraries conduct workshops, seminars etc to sensitize undergraduates on the use of electronic information resources that are available in university libraries, literature has established that their use by undergraduate students was very low. In addition, Ekenna and Ukpebor (2016) stressed that the EIRs were very well accepted in other countries of the world, as against the situation in Nigeria. One wonders why it is not so in Nigeria. Similarly, scholars like Romanove and Aarnio (2016), Watts and Ibegbulam (2016) and Kalechukukwu (2000) have argued that research has shown low usage of EIRs. These have based their conclusion on studies that have been undertaken mainly in Nigerian. It is against this background that the study seeks to investigate the use of electronic information resources by students of KASU, Kaduna, Nigeria.

### **Objective of the Study**

The following are the objectives guiding the study:

1. find out the level of electronic information resources use of undergraduate students of KASU.
2. determine the purpose of use of electronic information resources of undergraduate students of KASU.
3. ascertain the frequency of use of electronic information resources by undergraduate students of KASU.

**Research Questions**

The study will be guided by the following research questions:

1. What is the level of electronic information resources use of undergraduate students of KASU?
2. What is the purpose of electronic information resources use by undergraduate students of KASU?
3. How frequently do undergraduate students use electronic information resources in KASU?

**Scope**

This study is limited to the Electronic information resources Use by undergraduate students of Kaduna State University (KASU), Kaduna.

**Review of Related Literature**

Electronic information resource for the study is the dependent variable and the indicators for this variable include: purpose of use and frequency of use. The purposes for students’ use of electronic resources are mostly for academic activities. They include: research and completion of assignments (Thanoscodi, 2012). Electronic information resources are utilized by 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. Similarly, the study of Osaheni, Oshiotse and Momoh (2016) revealed the reasons for using e-resources to include: research, study, assignment. Others reasons mentioned were examination and lastly for pleasure. The study to a large extent conforms to Ansari and Zuberi (2010) that opined from their study that e-resources are mostly used for research, to prepare lectures note and for gaining subject knowledge.

Students’ e-information seeking behaviour at KSCE, Kiiit University, India, was conducted by Swain and Panda (2013) the aims of the study was to investigate the frequency of usage of electronic information resource databases among the students. The study revealed that sixty one (61) accepted using it daily, twelve (12) respondents accepted using weekly, six (6) respondents accepted using it fortnightly, five (5) respondents accepted using it once a month and three (3) respondents accepted using it rarely. In a study conducted by Manda (2005) on electronic resources usage in academic and research institutions in Tanzania, it was revealed that the frequency of use of the various databases were as follows: Ebsco host had one respondent, Blackwell had four respondents and AJOL had seven respondents that accepted using it daily. Emerald had four respondents, OUP had four respondents and AJOL had six respondents that accepted using it three times per week. OUP had four respondents, Ebsco host had five respondents, Blackwell had six respondents and AJOL had six respondents that accepted using it once per week. OUP had eight respondents, Emerald had four respondents and Blackwell had three respondents that accepted using these databases once per month.

S/ N	Author/ Year	Title of Article	Study Area	Method	Findings	Research Gap
	EIRs Use					

1	Ebijuwa and Mabawonku, (2019)	Demographic Variables and Academic Discipline as Determinants of Undergraduates' Use of Electronic Library Resources in Federal universities in South-west, Nigeria	Ibadan	Quantitative	University libraries should ensure that undergraduates optimize the use of electronic library resources irrespective of age, gender or academic discipline.	The empirical evidence on some demographic variables (age, gender) and academic discipline on use of electronic resources are not currents. There need to repeat the same study with current literature.
2	Ismaila (2019)	Information literacy skills on the Use of electronic resources by Undergraduates students of University of Ilorin and Kwara State University malete, Kwara State, Nigeria	Kwara State, Nigeria	Quantitative	Undergraduate students lacked computer skills, searching skills, and sufficient training in the use of electronic resources.	The research was conducted on undergraduate. There is need for study in the postgraduate level.
3	Akpovire, Olawoyin, Adebayo, and Esse (2019)	Role of information literacy Skills on use of information resources by medical students in Lagos state	Lagos state, Nigeria	Quantitative	The Universities authority should provide state of the art infrastructures/ equipment's and all necessary things like ICT.	The study limited to medical students only, other faculties not included.
4	Ternenge, Tofi and Kashimana (2019)	Availability, Accessibility, and Use of Electronic Information Resources for Research by Students in Francis Sulemanu Idachaba Library University of Agriculture, Makurdi Benue state, Nigeria	Benue state, Nigeria	Quantitative	Efforts should be made by the University Administrators and Library Management to improve on the band width and enhance the internet connectivity so as to enable students have easy access to online e-resource.	The Study Focus on Student in University of Agriculture, Makurdi, not Benue State, Universities.
5	Adebayo, and Omole (2019)	Roles of Health Information Managers on the use of Electronic Resources in Building a Healthy Nation	Ondo state, Nigeria	Quantitative	The availability of accurate, timely, reliable, and relevant health Information is the most fundamental step towards informed public health action.	The study was in health information management. There is need of similar study in university library.
6	Ankrah and Atuase (2018)	Use of electronic resources by postgraduate students of University of Cape Coast, Ghana	Ghana	Quantitative	The findings revealed that most of the postgraduate students were aware of the e-resources in the library.	The influence of information literacy skill on the use of EIRs needs to be carried out.
7	Olawale and Tope (2017)	Use of Electronic Reference Services by Undergraduates in a Nigerian University	Nigeria University	Quantitative	The study established that students lack searching skills to enable them to maximally utilize the resources.	Although the study is on Electronic Reference Services in university, it concentrates on the Reference Services and not on the general library services.
8	Mohammed and Philip (2017)	Availability and utilization of electronic information databases for research by agricultural scientists in federal university libraries in north central Nigeria	North-central Nigeria	Quantitative	The study indicated that two thirds of the students used the electronic information databases for their academic research work.	The study is in North-central. There is need for similar study in North-west, Nigeria.

9	Adeleke and Kenneth (2017)	Availability, Use and Constraints to Use of Electronic Information Resources by Students at the University of Ibadan	Ibadan State, Nigeria	Quantitative	The study revealed that users derived much of benefits from use of electronic resources.	There is need for more empirical research to expound more on the role of Electronic Information
10	Mamo and Amidu (2017)	Library resources use by lecturers of College of Agriculture, Lafia, Nasarawa State, Nigeria	Nasarawa State, Nigeria	Quantitative	Academic staff unlike other staff depends largely on the availability of suitable facilities, including adequate library resources.	The study was on College of Agriculture, Lafia, Nasarawa State, Nigeria. Not university.
11	Olajide and Adio (2017)	Utilization of University library resources by undergraduate students at the Federal University Oye-Ekiti, Nigeria	Oye-Ekiti, Nigeria	Quantitative	They found that library resources like abstract, indexes, yearbooks, atlas were neither satisfactory nor readily available for use.	The need to include academic staff of the university.
12	Lefuna (2017)	Access to and use of electronic information resources in academic libraries of the Lesotho Library Consortium (LELICO).	Lesotho	Try angulation	Findings revealed lack of guidelines and e-resources collection development policies.	The study was conducted in Lesotho. There need for similar study in Nigeria.
13	Daniel and Kacholom (2017)	User education, computer literacy and information and communication technology accessibility and use of e-resources by postgraduate students in Nigerian University Libraries.	Nigeria Nigerian University Libraries	Quantitative	The study found that a few of the students had no knowledge in the use of e-resources.	The need to study User education, computer literacy and use of e-resources by undergraduate students in Nigerian University Libraries.
14	Suleiman and Kazbor (2017)	Easy access and use of electronic databases at the Faculty of Medicine at the University of Ghana	Ghana	Quantitative	The study found that the use of the database was low due to lack of knowledge.	The study was not carried out in Nigeria. There is need study on Easy access and use of electronic databases at the Faculty of Medicine, focusing on Nigeria.
15	Edem and Egbe (2016)	Usage of electronic resources in the University of Calabar Library by postgraduate students	Calabar, Nigeria	Quantitative	Findings which indicated that electronic resources were heavily utilized.	The need to study Usage of electronic resources in the National Library of Nigeria.
16	Roland, Saheed and Edith (2016)	Electronic Information Resources (EIR) Adoption in Private University Libraries.	Nigeria Private University Libraries	Quantitative	The findings of the study revealed that, the use of the e-resources by the students varies significantly with age, gender and level of study.	The study was in Private University Libraries. There need of similar study in public library.
17	Halima (2016)	Digital resources utilization by social science researchers in Nigerian Universities.	Nigeria	Quantitative	The findings of the study revealed that the most common problem identified by majority of respondents is slow access speed.	The study was in Nigerian Universities. There need of similar study in collages of education.
18	However, Daniel and Airen (2015)	Computer literacy on postgraduates' use of e-resources in Nigerian University Libraries	Ibadan, Nigeria	Quantitative	The findings revealed that majority of students have been used e- resources but most of them were unaware how to use various e- resources for their academic activities.	The is need for more studies on the importance of Computer literacy on undergraduates' use of e-resources in Nigerian University Libraries

19	Karunaratna (2015)	Electronic resources by law degree students at Anuradhapura Regional Centre of the Open University of Sri Lanka	Sri Lanka	Quantitative	Findings revealed that lack of computer skills and English language skills have also been affected to the usage of e- resources.	The study was Electronic resources by law degree students at University of Sri Lanka. Not Nigerian based.
20	Hajara and Olatoye (2015)	Usage of e-resources for teaching and learning at Federal University, Dutsin-Ma, Nigeria.	Katsina , Nigeria	Quantitative	The findings showed that the use of electronic resources in teaching and learning is common.	The need to study Usage of e-resources for teaching and learning at National Library of Nigeria.

### Research Methodology

The research design for this study is the survey research design. A survey seeks to find out certain facts concerning an existing phenomenon. According to Aina (2006) survey is a study which uses the sample data in any systematic investigation to describe and explain what is existent or non-existence on the present status of a phenomenon being investigated.

The instrument used for data collection was questionnaire. 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. A total number of 74 copies of questionnaires were distributed and 54 were returned after filling by the staff.

### Data Analyses and Presentation

Data was analyzed using descriptive statistics with frequency distribution tables and percentages.

### Results

**Table 1: EIRs used by undergraduate students**

SNSs	No: of Respondents	Percentage (%)
e-journal	91	100
e-book	84	91
CD Rom	62	50

Table 1 presents the EIRs used by undergraduate students of Kaduna state university [KASU] Kaduna. The data shows that 91 (100 %) respondents are using e-journals, 84 (91 %) respondents are using e-books, and 62 (57%) respondent are using CD Rom.

**Table 2: Purpose of using EIRs**

Purpose	No	Percentage (%)
Research/writing project	8	14.8
I use the e-resources to retrieve current literature for studies	14	25.9
internet search engines	38	70.3
I use the e-resources to update my knowledge in subject areas of interest	0	0
I use e-book to augment my class works	5	9.2
I use e-journal to do assignments	8	14.8
I use opac in the library	3	5.5
Any others	0	0

Table 2 shows that 8 (14.8) respondents used EIRs for research/writing project, 14 (25.9) respondents used for retrieve current literature, 38 (70.3) respondents used internet search engines, 5 (9.2) respondents used

EIRs for augment class works, 8 respondents used to do assignments, only 3 (5.5) respondents used opac in the library.

**Table 3: Frequency of Use**

FREQUENCY	No	Percentage (%)
Electronic journal (Daily)	36	66.6
Electronic books (Twice a Week)	6	11.2
Online databases (Once a week)	9	16.6
CD Rom (Occasionally)	3	5.6
OPAC (Never)	0	0
Total	54	100

Table 3 shows the frequency of using EIRs. Majority of the respondents 36 (67%) expressed that they used electronic journal (Daily), 6 respondents (11.2%) used electronic books (Twice a Week), 3 (5%) of respondents said they used CD Rom (Occasionally), while 9 respondents (17%) used Online databases (Once a week).

### Findings of the study

In the study, it was observed that majority of the respondents are aware of the EIRs.

- 1) The e-journals were the most popular EIRs used by undergraduate students followed by e-books.
- 2) The main purpose of using EIRs was found that majority used internet search engine for class assignment.
- 3) Most of the respondents which represent 66.6% frequently use electronic journals.

### Conclusion

The results obtained from this study have shown that a reasonable number of undergraduate students use electronic information resources. However, only about more than half of the students are frequent users and the undergraduate students mainly used their laptops and desktops to access electronic resources from the university library to gain access. The students used e-resources for completing their class assignments, to retrieve current literature for studies and related materials and to update knowledge. Lack of skills, difficulty in finding relevant information, lack of time and frequent power outages were the major factors militating against effective use of electronic information resources.

### Recommendation:

There should be greater awareness programmes by the university and the library in particular to market the different types of electronic information resources available in the university library. The library should put in place strategies that will promote and, monitor on a regular basis the use of electronic resources by undergraduate students of the university community.

The university and the library should make effort to organize more in-depth training for effective use of electronic resources by students. Though, information about the library electronic resources is presently included in the use of library which is a compulsory course for all students, however, the teaching needs to be made more practical. The course should not only focus on how students should locate electronic resources, but should also include how they can use electronic resources to attain their academic goals.

The university lecturers should be involved in creating an awareness of the importance of library electronic resources to the undergraduate students. They should encourage the students to use electronic resources by giving those assignments that will compel them to use electronic resources in the library.

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