International Journal of Library Science;
Volume 21; Issue No. 1; Year 2023;
ISSN 0975-7546; Int. j. lib. sci.

Use of Electronic Information Resources among undergraduates in Selected Private Universities: A Case Study

M. O. Igbinovia[1] and **B. Odelami**[2]

[1]Electronic Resources Library,
Ambrose Alli University, Ekpoma
Email: magnus.igbinovia@aauekpoma.edu.ng

[2]Department of Library, Archival and Information Studies,
University of Ibadan
Email: Bayoodelami@gmail.com

ABSTRACT

The study examined the use of Electronic Information Resources (EIRs) with particular reference to frequency, purposes and challenges. The survey research design of correlational type was adopted for this study. The population of the study comprises 3,665 students across the six and four faculties of Ajayi Crowther University and Lead City University respectively, both located in the Oyo State of Nigeria. Simple random sampling technique was employed and 10% sampling fraction from each faculty was used to ascertain the sample size for the study which yielded 367 undergraduates. Questionnaire was used to elicit data from the respondents. Out of the 367 copies of questionnaire administered, 352 copies were returned and found useful for analysis, giving a response rate of 96%. The data was subjected to descriptive analysis of percentage, mean and standard deviation. The results revealed that the undergraduates' frequency of EIRs use was slightly high and such use was for both academic and non-academic purposes. The challenges faced by most of the undergraduates in the two universities when using EIRs were Internet connection/network problems, frustration of finding too much information, interrupted power supply and limitations in the use of keywords to search. The study concluded that EIRs plays a crucial role in meeting the information needs of undergraduates and for their overall development.

Keywords: Electronic Information Resources (EIRs), Use of EIRs, Private universities, Undergraduates.

Library Congress classification No: ZA4050-4480

1. INTRODUCTION

University libraries are investing substantially in Electronic Information Resources (EIRs) as part of their commitment to addressing the information needs of users. These EIRs allows for convenience, flexibility, and remote access to information by registered users of the university community. Users' of the university community who by extension are potential users of the university libraries include students (undergraduates and postgraduates), staff (teaching and non-teaching) and external

researchers based on referrals. These categories of people translate from been potential users to actual library users upon registration which gives them access to the library and its resources. Observation across university libraries revealed that undergraduates are the primary users of information resources available in the library. This could be accounted for by their large numbers and nature of academic activities. These academic activities necessitate their use of library to access information resources that supplement their course notes, carry out assignment, prepare for assessments and research or project work. While university libraries collect various types of information resources, special emphasis is increasingly being paid to the acquisition and access to EIRs in this modern era which is defined by Information and Communication Technologies (ICTs).

According to Dhanavandan and Tamizhchelvan (2012), EIRs are information resources that are accessed with the aid of a computer or any electronic device that delivers a collection of data in the form of texts, graphics or a combination of both, that has been published under a commercially available title with the intention to meet the information needs of potential users. They are basically divided into online EIRs and offline EIRs (Thanuskodi, 2012). The online EIRs are accessed over the Internet while the offline EIRs does not require Internet for access and appear in form of Diskettes, CD-ROMs and other portable offline databases. Across both divides (online and offline) of EIRs, examples include electronic journals, electronic images, electronic books, electronic databases, electronic multimedia resources, websites and web pages, electronic mail, electronic reference materials like dictionary, directories and encyclopedia, Educational Resources Information Centre (ERIC) and Online Public Access Catalogues (OPAC).

Electronic information resources are characterised with capacity to store and provide vast amount of information relevant for academic and personal development of undergraduates. This is because they usually contain up-to-date information, easy-to-access and easy-to-use contents. EIRs are relevant to the learning and research activities of university undergraduates (Owolabi 2016; Okiki & Asiru 2011; Egberongbe, 2011). EIRs are extensively used because of their features. Notable features of EIRs unlike print information resources include unlimited accessibility, flexibility effectiveness, ease of use and high degree of usefulness. EIRs could be accessed anytime and from anywhere remotely via computers or the internet. This implies that information users may not need to visit the library in order to access and use EIRs. Tekale and Dalve (2012) were also of the opinion that EIRs might give vast amounts of information, a variety of search possibilities, simple citations, simplicity of uploading and updating, ease of storage and distribution, search flexibility, minimise search time, take up minimal space, and are simple to archive. EIRs can be simultaneously accessed by multiple users (Basset, 2012), could be shared, saved and used at any time, and also converted to print formats thus giving users an amount of control over it.

Tyagi (2011) noted that EIRs are vital to the academic success of university students. Therefore, undergraduates are expected to use EIRs in order to carry out their academic tasks as well as for non-academic activities such as for personal development and leisure. However, there are challenges which undergraduates may encounter in their use of EIRs. This might be due to complexities associated with some electronic materials as well as lack of some certain competences by

undergraduates. There are some resources which may not be full text and sometimes, may require entering of controlled vocabularies in order to access and use the materials. Hence, undergraduates that do not understand this technicality may find use of electronic information resources difficult. In addition, level of undergraduates' computer competence may also pose challenge to use of EIRs.

The advantages or importance of using EIRs abounds; and the challenges cannot be ignored in ensuring utmost utilization. The advantages and challenges both exist as opposing forces to the use of EIRs among undergraduates. Given the high cost of making these resources available and its relevance in the achievement of the libraries' objectives, university libraries are beginning to pay keen attention to the use of EIRs among library users especially undergraduates. Consequently, the objectives of this study are to:

i. find out the frequency of use of electronic information resources by undergraduates in Ajayi Crowther University, Oyo and Lead City University, Ibadan;
ii. examine the purposes of use of electronic information resources by undergraduates in the two universities; and
iii. find out the challenges to use of electronic information resources by undergraduates in the two universities.

2. LITERATURE REVIEW

Multiple researches have been conducted on the usage of EIRs by students, lecturers, researchers, and information professionals all across the world. While some literature report high use of these resources, other results have indicated low use especially among students. Despite these disparities in findings, EIRs have remained essential research and academic tools that have transformed the way information is stored and accessed in the 21st century. As a result, EIRs have become students' companions as they are used as a complement to print information resources for both academic and non-academic tasks. Oduro-Anane (2016) discovered that among electronic databases subscribed to by the College, HINARI (25.2%), AJOL (17.8%), EBSCOhost (17.8%), and Science Direct (17.8%) were mostly used by the students, while Sage journals (2.9%), Scopus (2.9%), and others were less used by the students. Students utilise databases to download articles, search for information on a study subject and associated concerns, access information on a wide range of health and science topics, access full text articles from peer reviewed publications, and keep track of new information. However, lack of instruction, lack of proper search skills, Internet connectivity issues, insufficient availability of current material, and difficulties getting passwords were the most commonly identified hurdles affecting final year students' usage of electronic resources.

According to Kwadzo (2015) findings, electronic databases such as Jstor, Emerald, EBSCOhost, Agora, and Science Direct are widely utilised due to students' awareness of the resources, whilst others are rarely accessed. Generally, the finding shows that 93.8% of the students in both departments frequently used various databases available mainly from school library, as well as

through Wifi network in halls of residence. Furthermore, the students were of the opinion that electronic databases are beneficial to their academic tasks as majority of the students (71.9%) believed electronic databases help them acquire useful information necessary for academic development.

Tyagi (2011) provides further insight into the level of use of electronic journals among university undergraduates, postgraduates, research scholars and lecturers at IIT Roorke, India. Generally, the study reveals high use of electronic journals among students and lecturers, however, level of awareness of e-journals varied among university students. According to the survey, electronic journals are mostly utilised for academic reasons by staff, postgraduate students, undergraduate students, and research scholars. It is evident from the study that electronic journals are highly used for academic purposes among students and lecturers. But, a study conducted by Madondo, Sithole and Chisita (2015) among university undergraduates in Zimbabwe shows underutilisation of EIRs among the students. The primary reasons for poor utilisation were a lack of the practical knowledge needed to access information from electronic information resources as well as a slow or unstable internet connection.

On purpose of use of EIRs, it was discovered by Ajayi, et al. (2014) that most students, undergraduates inclusive, use electronic books for reading. The survey reveals that the majority of respondents read electronic books often. The survey also revealed that the majority of students thought using electronic resources improved their reading habits and that they mostly used them for research. However, 252 students (94.4%) said they utilised them to get quick access to information. Meanwhile, Ferdinand, Eghworo and Ogo (2015) investigated EIRs by undergraduates of Federal University of Petroleum Resources, Effurun, Delta state, Nigeria. Their study reveals that 267(100%) used EIRs to acquire information for their assignment, 267 (100%) for e-mail purpose, 251 (94%) for news acquisition. 243(91%) agreed that EIRs help to complement classroom lectures. Generally, the finding shows that majority of the respondents used the electronic resources for research, current awareness, information acquisition, assignment, e-mail, and for acquiring news.

Ivwighreghweta and Igere (2014) hold that use of search engines and internet information resources could have impact on academic performance of undergraduates. Findings of their study show that 46% of the students use internet to acquire relevant academic materials, 4% and 10% of the students use internet for entertainment and career development purposes respectively. Overall, 90% of the students' reported that use of Internet has significantly improve their Grade Point Average (GPA) while 1% believes internet has brought a decline to their GPA.

The benefits of using EIRs abound, no doubt. However, use of EIRs could be impeded by several challenges worthy of scholarly investigation. In a study carried out by Ugwu and Orsu (2017) to examine the challenges of using EIRs by undergraduates, the findings indicate that factors contributing to the limited adoption of EIRs include low internet speed, erratic power supplies, inadequate ICT infrastructure, weak browsing skills, and high subscription costs. Lack of surfing time and the intricacy of internet materials are two additional challenges. This study also discovered that

there were various departmental and student-related issues that contributed to the students' difficulties with using internet resources.

Ankrah and Atuase (2018) note that due to students' insufficient understanding of the availability and applicability of E-resources to their academic activities, EIRs were not fully utilised by students at the University of Cape Coast in Ghana. In addition, the researchers identified inadequate training, restrictions of access, poor internet connection, inadequate computers as well as erratic power supply and lack of searching skills as factors which limit students' use of EIRs. In view of these challenges, Okiki (2013) suggests that the bandwidth for Internet connectivity should be increased to improve the speed of accessing information from the Internet. While Adeleke and Nwalo (2017) add that the university library should intensify their EIRs awareness campaigns.

It is clear from the results of all the studies we looked at that university undergraduates use EIRs for both academic and non-academic reasons. The use of EIRs has had positive impact on students especially in boosting their academic performance. However, there are challenges to the use of these resources among undergraduates. It was also evident from the reviewed studies that use of EIRs in terms of frequency, purposes and challenges among undergraduates varies from one institution to another.

3. METHODOLOGY

The survey research design of correlational type was adopted for this study. The population of the study comprises 3,665 students across the six and four faculties of Ajayi Crowther University and Lead City University respectively, both located in the Oyo State of Nigeria. Simple random sampling technique was employed and 10% sampling fraction from each faculty was used to ascertain the sample size for the study which yielded 367 undergraduates. A breakdown of the study's population and sample size across the faculties is seen inTable3.1.

Structured questionnaire was used as to elicit data from the respondents sectioned to cater for their on their demographic information, frequency of use, purpose of use and challenges to use. Respondents would indicate their agreement to the statement (or measuring item) on the frequency of use by ticking Daily (D), Weekly (W), Monthly (M) and Never (N). On purpose and challenges to use, respondents are expected to indicate their agreement by ticking Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The data administration and collection was carefully carried out across the departments constituting each faculty to eliminate possible bias toward any particular department(s). Descriptive statistics of frequency count, simple percentages and arithmetic mean were employed for the data analysis with the aid of Statistical Package for the Social Sciences (SPSS).

Table3.1: Population and Sample Size distribution

AJAYI CROWTHERUNIVERSITY (ACU) Faculties	**POPULATION(N)**	**SAMPLE SIZE(10%)**
Education	06	1
Humanities(Arts)	183	18
Law	314	31
Management Science	257	26
Social Science	397	40
Natural Science	462	46
TOTAL	**1619**	**162**
LEAD CITY UNIVERSITYFACULTY (LCU) Faculties	**POPULATION(N)**	**SAMPLE SIZE(10%)**
Education/Arts	425	43
Law	342	34
Management Science/Social Science	670	67
Natural Sciences	609	61
TOTAL	2046	205
GRANDTOTAL	**3665**	**367**

4. PRESENTATION OF RESULTS

A total of 367 copies of the questionnaire were administered to the undergraduates of Ajayi Crowther University and Lead City University. However, 352 copies were returned and found useful for analysis, giving a response rate of 96% (Table 4.1).

Table 4.1: Response rate for questionnaire distribution

Lead City University (LCU)				**Ajayi Crowther University (ACU)**			
Faculty	**No. of copies administered**	**No. of useful copies returned**	**Response rate (%)**	**Faculty**	**No. of copies administered**	**No. of useful copies returned**	**Response rate (%)**
Management And Social Science	67	64	31.2	Management and Social Sciences	65	62	38.5
Education/Art	43	41	20	Law	31	30	18.6
Law	34	32	16.5	Natural Science	46	45	27.9
Natural Science	61	59	28.7	Humanities/ Education	19	19	11.8
Total	**205**	**196**	**96**		**161**	**156**	**96**

4.1 Demographic characteristics of the respondents

The demographic characteristics of the undergraduates in LCU and ACU were presented in Table 4.2. Results showed that there were more female respondents, 105 (53.5%) in LCU while participants in ACU 87(55.7%) were majorly male. More than three-fifth of the undergraduates 129 (65.8%) in LCU and 111 (71.1%) in ACU were between 21-25 years of age, while the least 2 (1.0%) in LCU and 2 (1.2%) in ACU noted that they were between 31-35 years of age. In both universities, undergraduates in 300 level participated in the study more than the others 59 (30.1%) in LCU and 51 (32.6%) in ACU. In LCU, 100 level students participated theleast36 (18.3%) and in ACUonly2 (1.28%) 500level students participated in the study.

Table 4.2: Demographics of the respondents

Variables	Lead City University		Ajayi Crowther University	
	Freq	%	Freq	%
Gender				
Male	91	46.4	87	55.7
Female	105	53.5	69	44.2
Age (in years)				
16-20	49	25	26	16.6
21-25	129	65.8	111	71.1
26-30	16	8.1	17	10.8
31-35	2	1.0	2	1.2
36-40	-	-	-	-
Above 40	-	-	-	-
Level				
100	36	18.3	23	14.7
200	48	24.4	34	22.7
300	59	30.1	51	32.6
400	53	27.0	46	29.4
500 and Above	-	-	2	1.28

Objective One: Frequency of use of EIRs by undergraduates in the two universities

Table4.3 presents the results of the frequency of use of EIRs by the respondents in LCU and ACU. The findings revealed that the most frequently used EIR in both institutions is search engines (mean=3.78 for LCU; 3.44 for ACU).Other EIRs were used at different frequencies by the respondents. However, E-dictionary top the list on both institutions after search engines (mean=3.38 for LCU; 2.96 for ACU). The calculated mean for LCU was 2.55 which is above the criterion mean of 2.50 (based on four-point likert scale). Thus, the frequency of use of EIRs in LCU is high. The total mean for ACU was 2.50 and the criterion mean is also 2.50 which imply that the calculated mean is at the border line, implying that the frequency at ACU is neither high nor low. However when taken together, EIRs is said to have slightly high frequency of use in the two institutions under study.

Table 4.3: Frequency of use of EIRs by the undergraduates

S/N	Electronic Information Resources	Lead City University						Mean	SD	Ajayi Crowther University						Mean	SD
		Daily		Weekly		Monthly	Never			Daily		Weekly		Monthly	Never		
		F	%	F	%	F %	F %			F	%	F	%	F %	F %		
1.	Electronic Journals	-	-	97	50.3	89 46.1	7 3.6	2.47	0.57	19	12.3	70	45.5	61 39.6	4 2.6	2.68	0.72
2.	Electronic Books	12	6.2	12564.8		52 26.9	4 2.1	2.75	0.59	24	15.6	58	37.7	72 46.8	- -	2.69	0.73
3.	Electronic Databases	15	7.8	12564.8		53 27.5	- -	2.80	0.56	23	14.9	59	38.3	64 41.6	8 5.2	2.63	0.80
4.	Electronic Newspaper	51	26.4	11358.5		29 15.0	- -	3.11	0.64	27	17.5	68	44.2	57 37.0	2 1.3	2.78	0.74
5.	Electronic Theses	-	-	55	28.5	86 44.6	52 26.9	2.02	0.75	11	7.1	25	16.2	66 42.9	52 33.8	1.97	0.89
6.	Electronic Magazine	18	9.3	10252.8		48 24.9	25 13.0	2.59	0.83	17	11.0	46	29.9	83 53.9	8 5.2	2.47	0.76
7.	Electronic Dictionary	93	48.2	80	41.5	20 10.4	- -	3.38	0.67	49	31.8	50	32.5	55 35.7	- -	2.96	0.82
8.	Search Engines	15178.2		42	21.8	- -	- -	3.78	0.42	96	62.3	33	21.4	21 13.6	4 2.6	3.44	0.82
9.	Ebscohost	3	1.6	32	16.6	68 35.2	90 46.6	1.73	0.79	20	13.0	18	11.7	68 44.2	48 31.2	2.06	0.98
10.	E-maps	3	1.6	27	14.0	10554.4	58 30.1	1.87	0.69	10	6.5	23	14.9	10165.6	20 13.0	2.15	0.72
11.	ERIC	-	-	11	5.7	85 44.0	97 50.3	1.55	0.60	5	3.2	25	16.2	32 20.8	92 59.7	1.63	0.87

Objective Two: Purposes for which undergraduates in the two universities use EIRs

Table 4.4 captures the responses of the undergraduates on the reasons why they use EIRs. Results in LCU showed that the most prominent reason why most of the undergraduates (mean=3.54) used EIR was to read current affairs. Other prominent reasons why a significant number of the undergraduates used EIR were general reading (mean=3.52), writing of term paper (mean=3.46), sharing of information with colleagues (mean=3.39) and for fun and leisure (mean=3.36). However, in ACU, the most prominent reason why the majority of the undergraduates (mean=3.58) made use of EIRs was for completing assignments. A notable number of the undergraduates (mean=3.39) also affirmed that they used EIRs for fun and leisure. EIRs were also used for the purpose of general reading as observed by a significant number (mean=3.36). Other reasons were examination preparation (mean=3.36) and to update their knowledge (mean=3.32). In general, these results indicate that undergraduates in the two universities use EIRs for both academic and non-academic purposes.

Table 4.4: Purpose of use of EIRs by the undergraduates

Purpose(s)	Lead City University										Ajayi Crowther University									
	SA		A		D		SD		Mean	SD	SA		A		D		SD		Mean	SD
	F	%	F	%	F	%	F	%			F	%	F	%	F	%	F	%		
I use electronic information resources for completing assignments	65	33.7	12866.3		-	-	-	-	3.34	0.47	89	57.8	6542.2		-	-	-	-	3.58	0.49
I use electronic information resources for general reading	10152.3		92	47.7	-	-	-	-	3.52	0.50	56	36.4	9863.6		-	-	-	-	3.36	0.48
I use electronic information resources for examination preparations	74	38.3	11961.7		-	-	-	-	3.38	0.49	58	37.7	9461.0		21.3		-	-	3.36	0.51
I use electronic information resources for writing term papers	89	46.1	10453.9		-	-	-	-	3.46	0.50	24	15.6	12581.2		31.9		2	1.3	3.11	0.47
I use electronic information resources for reading current affairs	10453.9		89	46.1	-	-	-	-	3.54	0.50	50	32.5	10266.2		21.3		-	-	3.31	0.49
I use electronic information resources for writing thesis	65	33.7	11760.6		8	4.1	3	1.6	3.26	0.61	16	10.4	8555.2		4931.8		4	2.6	2.73	0.68
I use electronic information resources to prepare for seminars	67	34.7	12665.3		-	-	-	-	3.35	0.47	47	30.5	10467.5		31.9		-	-	3.29	0.49
I use electronic information resources to share information with colleagues	75	38.9	11861.1		-	-	-	-	3.39	0.49	38	24.7	11474.0		21.3		-	-	3.23	0.45
I use electronic information resources for fun and leisure	94	48.7	64	33.2	25	12.9	105.2		3.36	0.48	60	39.0	94	61.0	-	-	-	-	3.39	0.49
I use electronic information resources to update my knowledge	67	34.7	12665.3		-	-	-	-	3.35	0.47	50	32.5	10467.5		-	-	-	-	3.32	0.47

Objective Three: Challenges to the use of EIR by undergraduates in the two universities

The challenges faced in the use of EIRs by the undergraduates in LCU and ACU were presented in Table 4.5. Findings revealed that in LCU, most of the undergraduates (mean=3.58) were in the affirmative that they had limitations in the use of keyword search which they considered as a challenge. This is followed by a significant number (mean=3.56) of them who noted that they found it difficult to access the Internet. In addition, Internet connection/network problems were also identified as a challenge by a notable number of the undergraduates (mean=3.51). Majority of the undergraduates (mean=3.47) pointed out that they find too much information when they use EIRs and this they considered frustrating every time it happens.

In ACU, the major challenge identified by majority of the undergraduates (mean=3.48) was Internet connection/network problems. Other challenges faced by the respondents in the use of EIRs were interrupted power supply (mean=3.30) and the frustration of finding too much information whenever they use the EIRs (mean=2.66). As a result of this, it can be concluded that the challenges faced by most of the undergraduates in the two universities when using EIR are Internet connection/network problems, frustration of finding too much information (information overload), interrupted power supply and limitations in the use of keywords to search (lack of search strategies).

Table 4.5 Challenges to the use of EIRs by the undergraduates

Challenges	Lead City University								Mean	SD	Ajayi Crowther University								Mean	SD
	SA		A		D		SD				SA		A		D		SD			
	F	%	F	%	F	%	F	%			F	%	F	%	F	%	F	%		
I do not know how to search for Information	-	-	9	4.7	128	66.3	58	29.0	1.76	0.53	8	5.2	14	9.1	53	34.4	79	51.3	1.68	0.85
Interrupted power supply	73	6.6	71	36.8	94	48.7	21	10.9	2.33	0.72	74	48.1	54	33.1	24	15.6	2	1.3	3.30	0.78
Internet connection/network problems	110	57.0	71	36.8	12	6.2	-	-	3.51	0.61	100	64.9	38	24.7	6	3.9	10	6.5	3.48	0.85
I do not have essential IT skills to use EIRs	63	1.1	28	14.5	156	80.8	3	1.6	2.19	0.50	10	6.5	24	15.6	69	44.8	51	33.1	1.95	0.87
There are no adequate computers to use In the library	31	6.6	163	84.5	27	14.0	-	-	1.88	0.37	95	8.8	14	9.1	78	50.6	53	34.4	1.86	0.81
I find it difficult to access the internet	130	67.4	46	23.8	13	6.7	4	2.1	3.56	0.71	11	7.1	15	9.7	80	51.9	48	31.2	1.93	0.83
I do not know how to use search) Keywords	42	21.8	144	74.6	-	-	7	3.6	3.58	0.47	15	9.7	17	11.0	76	99.4	46	29.9	2.01	0.89
I find too much information when I use EIRs and it is always frustrating	99	51.3	90	46.6	4	2.1	-	-	3.47	0.54	20	13.0	77	50.0	42	27.3	15	9.7	2.66	0.83
I find it cumbersome to retrieve Information that meets my needs	56	29.0	53	27.5	84	43.5	-	-	2.85	0.84	8	5.2	25	16.2	93	60.4	28	18.2	2.08	0.74
EIRs in my university are not adequate	-	-	11	5.7	100	51.8	82	42.5	1.63	0.59	10	6.5	20	13.0	85	55.2	39	25.3	2.01	0.80

5. DISCUSSION OF FINDINGS

The study surveyed EIRs among undergraduates with particular reference to their frequency of use, purpose for use and challenges to use. Findings of the study revealed that use of EIRs among the undergraduates was high though slightly. The majority of undergraduates at the two campuses utilised search engines every day, while the respondents used other EIRs at varying intervals. This implies that most of the undergraduates rely on search engines like Google, Bing and the likes to retrieve information in order to meet their information needs. The ubiquity of smart devices, such as Android phones, which come preinstalled with search engines, increases this frequency rate. This has placed search engines at the fingertips of the undergraduates. This result is consistent with the Wijetunge (2014) study, which examines the preference for web search engines among students at the University of Peradeniya in Sri Lanka. According to the study's findings, undergraduates utilized search engines the most. Equally, the finding of this study agrees with Head and Eisenberg (2010) in which majority of the respondents affirmed that they used search engines including Google for their research activities. Tariq and Zia (2014) also reported in their study on use of EIRs by students of Faculty of Science, Karachi University; that majority of the students use website resources (search engines) for meeting various information needs. Togia and Tsigilis (2009) found that the majority of participants used Internet/search engine resources and that nearly half of the respondents (49.1%) had never used the ERIC, a fundamental resource of education literature. Thus, in collaboration with this study, low levels of use of other EIRs like ERIC were reported. The reason for this low use might due to lack of awareness. This reinforced the necessity of awareness creation for EIRs as a way of facilitating their use.

The study showed that most of the undergraduates used EIRs for general reading purposes, fun and leisure, assignment completion, examination preparation, writing of term paper and in order to update their knowledge. This is an indication that majority of the undergraduates used the EIRs for different academic activities. This also reveals that the undergraduates consider the use of the EIRs as beneficial to their academic and non-academic endeavors. This aligns with the study conducted in Akure, Nigeria by Daramola (2016) who reported that undergraduates used electronic information resources EIRs to search for assignment, leisure, news/information and for research purposes. Kwadzo's (2015) study that was carried out in Ghana among Geography students also reported that students use EIRs to enhance their academic development. By implication, EIRs are not limited in content as they contain both information expedient for academic success in line with the university's curriculum and also content for light reading intended to inform, entertain and all-round development of the student. As a result, the reasons why undergraduates use EIRs depends on what information they at that particular time.

The findings of the study also revealed that there are challenges encountered by undergraduates in use of EIRs. The challenges faced by most of the undergraduates in the two universities when using EIRs were Internet connection/network problems, frustration of finding too much information, interrupted power supply and limitations in the use of keywords to search. These challenges are infrastructural and personal in nature. The problems associated with Internet and power supply are those affecting the entire Nigerian society, private universities inclusive. The inability of the

undergraduates to find useful information from the different information sources could be a reflection of the gap in their information retrieval skills. This supports the findings of Ndubuisi and Udo (2013) that conducted a study in universities in South-east, Nigeria and reported that the challenges faced in the use of EIRs by undergraduates were incessant power outage, slow Internet connectivity and difficulty in finding relevant information. The findings of the study conducted by Oduro-Anane (2016) also support that of this study, since it was stated that undergraduates encountered difficulties using EIRs due to a lack of guidance, a lack of suitable search skills, and issues with Internet access. Similarly, This finding supports those of Fyneman et al (2014), who found that the use of EIRs by undergraduates at two universities in the Nigerian Niger Delta Region faced significant challenges due to slow Internet connectivity, poor infrastructure, restrictions on some databases, limited access time, poor power supply, and a lack of IT skills and knowledge.

6. CONCLUSION AND RECOMMENDATIONS

It is noteworthy that EIRs plays a crucial role in meeting the information needs of undergraduates and for their overall development. Thus, it's importance to achieving the objectives of the library and by extension that of the university, cannot be overemphasized. These resources which is an outcome of technological invasion into education, allows for users' flexibility which gives them an edge over the conventional print resources. They are considered vital to undergraduates for both academic and personal purposes, dimmed to be of immense benefits to these students. Consequently, the provision and access to these resources by universities, is fundamental to the use of EIRs by undergraduates. However, how frequently these undergraduates will use EIRs which cumulate into their level of use will be a function of their perceived usefulness of EIRs to meet their information needs and how well the university that setup structure to combat institutional challenges confronting undergraduates use of EIRs. Based on the findings and conclusion of the study, the following recommendations are made:

i. University management should strengthen effort at providing and granting access to useful and up-to-date EIRs for undergraduates' use.
ii. University libraries set up structures and mechanisms that improve undergraduate's awareness of EIRs in order to stimulate use.
iii. Alternative sources of electricity such as generator, inverter, and solar system should be provided in order to enhance continuous use of EIRs without obstruction.
iv. The university management should invest more in its Internet bandwidth and connectivity to enable undergraduates have access EIRs without network difficulties.
v. The university should periodically provide training programmes or workshops to improve students' capacity to use EIRs.
vi. Library professionals should always be available to guide undergraduate using EIRs within the library. While Help-lines can be provided for students using the libraries' EIRs from outside the library.

7 REFERENCES

Adeleke, D. S. & Nwalo, K. I. N. (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 and Technology*,7(4),51-69. Retrieved from https://doi.org/10.5865/IJKCT.2017.7.4.051

Ajayi, S. A., Shorunke, O. A., & Aboyade, M. A. (2014). The influence of electronic resources on students' reading culture in Nigerian universities. A case study of Adeleke University, Ede, Osun State. *Library Philosophy and Practice* .Retrieved from https://digitalcommons.unl.edu/libphilprac/1182/

Daramola, C. F. (2016). Perception and utilization of electronic resources by undergraduate students: The case of the Federal University of Technology Library, Akure. American *Journal of Educational Research*, 4(5), 366-370. Retrieved from http://article.scieducationalresearch.com/pdf/EDUCATION-4-5-1.pdf

Dhanavandan, S. & Tamizhchelvan, M. (2012). An evaluation of E-resources in academic

libraries in Tamil Nadu. *Journal of Emerging Trends in Computing and Information Sciences,* 3(3), 421.Retrieved from http://citeseerx.ist.psu.edu/messages/downloadsexceeded.html

Egberongbe, H. S.(2011). The use and impact of electronic resources at the university of Lagos. *Library Philosophy and Practice (e-journal)*.Retrieved https://digitalcommons.unl.edu/libphilprac/472/

Fyneman, B., Idiedo, V.O., & Ebhomeya, L. (2014). Use of e-resources by undergraduates in two selected universities in the Niger Delta region of Nigeria. *Journal of Information and Knowledge Management,* 5(2),170-186. Retrieved from https://www.ajol.info/index.php/iijikm/article/view/144655

Head, A.J. & Eisenberg, M.B. (2010). Truth be told. How college students evaluate and use

information in the digital age. Project information literacy progress report. Mac Arthur Foundation. Retrieved from https://projectinfolit.org/pubs/evaluating-information-study/pil_evaluating-information_2010-11-01.pdf

Ivwighreghweta, O. & Igere, M. A. (2014). Impact of the Internet on academic performance of students in tertiary institutions in Nigeria. *Journal of Information and Knowledge Management,*5(2),47-56. Retrieved from https://www.ajol.info/index.php/iijikm/article/view/144636

Kwadzo, G. (2015). Awareness and usage of electronic databases by Geography and Resources

development information studies graduate students in the University of Ghana. *Library Philophy and Practice*. Retrieved from https://digitalcommons.unl.edu/libphilprac/1210/

Madondo, T. Sithole, N., & Chisita, C. (2017). Use of electronic information resources by

undergraduates students in the faculty of management and administration at Africa university, Mutare, Zimbabwe. *Asian Research Journal of Arts and Social Sciences*, 2(2),1-12. Retrieved from https://doi.org/10.9734/ARJASS/2017/29633

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. Retrieved from https://academicjournals.org/article/article1389349323_Ndubuisi%20and%20Udo.pdf

Oduro-Anane. (2016).Use of electronic databases by final year students of the University of Ghana College of health science. Masters' thesis, Department of Information Science, University of Pretoria. Retrieved from https://repository.up.ac.za/bitstream/handle/ 2263/55837/OduroAnane_Use_2016.pdf?sequence=3&isAllowed=y

Okiki, O. & Asiru, S. (2011). Use of electronic information sources by postgraduate students in

Nigeria: Influencing factors. *Library Philosophy and Practice (e-journal)* Retrieved from https://digitalcommons.unl.edu/libphilprac/500/

Owolabi, S., Idowu, O., Okocha, F., & Ogundare, A. (2016).Utilization of electronic information resources by undergraduate students of University of Ibadan: A case study of Social Sciences and Education. *Journal of Education and Practice,*7(13),30-36. Retrieved from https://files.eric.ed.gov/fulltext/EJ1102819.pdf

Tariq, H. & Zia, M. W. (2014).Use of electronic information resources by the students of Faculty of Science, University Of Karachi. *International Journal of Digital Library Services,* 4(3),80-91. Retrieved from http://www.ijodls.in/uploads/3/6/0/3/3603729/8434.pdf

Tekale,R.&Dalve,D.B.(2012).E-resourcesreviewofresearch.Retrievedfrom https://reviewofsearch.net/publisharticles/45.pdf

Thanuskodi, S. (2012). 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

Togia, A. & Tsigilis, N. (2009). Awareness and use of electronic information resources by Education graduate students: Preliminary results from Aristotle University of Thessaloniki. Paper presented at the International Conference on Qualitative and Quantitative Methods in Libraries, 464-472.Retrieved from https://doi.org/10.1142/9789814299701_0058

Tyagi,S.(2011).Use and awareness of electronic resources at IIT Roorkee, India: A case study. *JLIS.it*, 2:1,4586-1-4586-20.

Wijetunje, P. (2014). Digital information resource preferences of undergraduates with special

reference to faculties of Agriculture, Arts, Engineering and Science of the University of Peradeniya, Sri Lanka. Proceedings of the Peradeniya Univesity International Research Sessions (iPURSE 2014) ,Vol. 18, July 4 & 5. 18. Retrieved from http://www.dlib.pdn.ac.lk/archive/handle1/4605