

LIBRARY HERALD

Vol 60 No 4

December 2022

Socio-Demographic Characteristics and Use of Electronic in Formation Resources Among University Students in Nigeria

OLONIRUHA*
OLADOKUN**
KOLAWOLE***
AGBOOLA****
OWOLABI*****

The study investigated the socio-demographic characteristics and use of electronic information resources among university students in Nigeria. The study employed a survey research method. Questionnaire was used as data collection instrument. The population of the study comprised 377 final year undergraduates from three (3) purposively selected universities in Nigeria. The findings of the study revealed that, the purpose of conducting research is the main reason for using the EIRs by the students while insufficient skill to retrieve needed information is the major challenge facing the use of EIRs. The study, recommended among others that, the need for the inclusion of computer trainings in the university curriculum. However, the study contributes to literature, policy, practice and provide fresh data on the influence of age and gender on the use of EIRs among undergraduate students.

Keywords: *Electronic information resources, gender, age, undergraduate students, Nigeria.*

* Emmanuel Adeniyi, Confluence University of Science and Technology Osara, Kogistate. Kingemmaa2000@gmail.com

** Bolaji David, Department of Library and Information, Prince Abubakar Audu University, Anyigba, Kogi State, Bolaji.oladokun@yahoo.com

*** M.O. , Department of Library and Information Science, Adeseun Ogundoyin Polytechnic Eruwa Oyo state Moseskolawole15@gmail.com

**** I.O, Nimbe Adedipe Library, University of Agriculture, Abeokuta. agboolaio@funaab.edu.ng AlabiOlanikeAdefunke University of Lagos, Lagos oladesh@yahoo.com

***** KehindeAbayomi, Nimbe Adedipe Library, University of Agriculture, Abeokuta. Yomiowolabi2000@yahoo.com

1 INTRODUCTION

The advent of information and communication technologies (ICTs) has changed the information environment in which university students work. Advances in ICT have brought about changes. The pursuit of knowledge has been revolutionized through the vast expansion of data accessible through the internet. ICT has changed the way information is being acquired, organized, stored, accessed and at the same time used.

Due to technological revolution information is now made available in electronic forms which can be in various platforms. Many organisations such as university libraries are moving towards the adoption and use of e-resources which is more accessible, less expensive, and efficient (Devi, 2010). This indicates that, information and communication technologies have led to exponential growth of electronically resources such as e-books, e-journals and a host of others, particularly to meet the information needs of university students especially for learning, teaching, and research activities.

Accurate information is very important to every student. It can be said that, without accurate and up-to-date information, students may not be able to engage in reliable teaching and learning. Based on this, students need to have access to information in their university libraries in order to aid their academic performance. Access to electronic information resources (EIRs) provide opportunity for students to have access to timely and accurate information that will assist them in their academic pursuit and research activities.

Electronic information resources are digitized information which can be accessed electronically with the support of computers and other forms of electronic handheld devices. Tofi and Fanfa (2019) state that, electronic information resources are materials that are readily available in digital formats and at the same time accessible through computer, mainframe or handheld mobile device which can be accessed remotely via the internet or locally. This implies that, electronic information resources (EIRs) are forms of information resources which are being provided in electronic formats through the Internet. There are various types of EIRs which include e-books, e-journals, CD-ROMS databases, Online Public Access Catalogues (OPAC) and various computer-based electronic network. It is observed that, access to electronic information resources makes users to have use information with ease. Using electronic information resources save time and it is also very convenient for users. Okorie and Agboola (2012) state that, electronic information resources are normally in digital formats which can be in form of e-books, e-journals, online databases, e theses and a host of others. These e-resources are normally accessible on the internet, online, offline resources such as CD-ROM, DVD, and other forms of computer-based electronic network. Electronic information resources provide great opportunity for research activities, teaching and at the same time increase discovery and creation of new fields of inquiry, particularly for the university students (Renwick, 2005). This implies that, electronic information resources

are normally accessed electronically through computer based networked facilities such as online library catalogue, the internet and World Wide Web, CD –Rom databases and a host of others. The adoption and use of electronic information resources in university libraries particularly in developing countries will promote access to vast collections of digital resources such as e-books and e-journals not only for students but also for other library users.

Mittal and Bala (2013) list various features of EIRs which include opportunity to store vital information electronically which can be done concurrent and also with multiple accesses through the use of different electronic systems. Furthermore, the accessibility and availability of EIRs in university libraries allow the library users to have access to e-resources in different locations such as their homes, hostels, libraries and other places. Tella et al. (2007) submit that EIRs provide the opportunity for students to transmit, download and disseminate relevant information for immediate and future use.

2 STATEMENT OF THE PROBLEM

Advancements in technology have brought about changes in both the ways in which users access information and the ways libraries provide and manage resources. As a result, university libraries in Nigeria have created more dynamic ways of making their information resources accessible through various digital formats rather than relying solely on print formats. Many university libraries in Nigeria have spent a lot of their budgetary allocations to subscribe to EIRs for the use of their users. Despite this, undergraduate students still abstain from making use of these resources as reported by Owolabi (2020) and Agboola and Bamigboye (2011). Rather they prefer to make use of Google search without considering the limitations of the Google particularly in providing access to accurate and dependable information.

Furthermore, extant literature, personal observation and also pre-research discussions with undergraduate students and academic librarians in many university libraries in the country revealed that, the resources are grossly underutilized by undergraduate students in Nigeria. In spite of the various values and benefits of EIRS, it is widely held that these resources are not fully used among students in Nigeria. There are various reasons for this underutilization which include lack of competences, adequate ICT infrastructure and the influence of demographic variables (Dukiæ 2013). The failure of students in making effective use of EIRs has been a serious concern to academic librarians in Nigeria, and it is against this that, the study sought to investigate the influence of social demographic variables and the use of EIRs in universities in Nigeria.

Based on this, the study sought to provide answers to the following research questions

- a) What are the purposes of using electronic information by undergraduate students in Nigeria universities?

- b) How often do students use electronic information resources?
- c) What are the challenges facing the use of EIR?

3 HYPOTHESES

- a) Gender does not significantly influence the use of electronic information resources among undergraduate
- b) Students' age does not significantly influence the use of electronic information resources among undergraduate

4 LITERATURE REVIEW

In order to promote effective use of e-resources in Nigerian universities, the National Universities Commission which is the regulatory body for university education in the country subscribed to several e-resources, both local and international, and made them accessible to Nigerian universities (Okiki and Asiru 2012). In addition, the body mandated that the 10% of the universities allocation should be earmarked for library resources developments which include the allocation of e-resources. Tella et al (2007) argue that, for effective utilization of EIRs among Nigerian students, it is mandatory to find out the various factors that would promote the usage and also the influence of demographic variables, in so doing, there would be increased in the use of EIRs among students in Nigeria. The utilization of EIRs in Nigerian universities can be determined by various factors which include demographic variables, financial status of the university, technology and organizational readiness (Izuagbe, Hamzat & Idowu, 2016). Togai and Tsiglis (2009) argue that electronic information resources in university environments provide opportunity for researchers to have access to advanced search, basic search and at the same time allow for adequate information without restriction that may be related to time and location. However, there are various advantages of electronic resources over print materials which include high speed, easy usability, ability to search multiple files concurrently, ability to save and to print. This indicates that, electronic information resources are invaluable tools that can be used alongside with the traditional library materials. EIRs are vital and the backbone of library collections particularly in this era of ICT, as a result, the university libraries need to subscribe to full text databases and electronic books for quality access to information for library users. University libraries need to transform in line with the rapid changes that EIRs have introduced to academic library operations. Rowlands (2007) affirms that, many university libraries in developed countries have changed and embraced the adoption of EIRs in their libraries. EIRs have persistently promoting the development of scholarly communication. EIRs are parts of the integral that constitute effective teaching, learning and research processes in universities and the usage of EIRs are very important during the

process of gathering information for research and update knowledge in various disciplines. However, the issue of demographic variables and EIRs has been researched by various scholars and the findings revealed that, there are differences in male and female usage and attitude towards the use of EIRs (Godfrey, 2010)

Inoue (2000) investigated the use of EIRs by undergraduate students. The finding revealed that, gender has no significant relationship but the academic status influence the use of EIRs. Owolabi et al (2020) investigate the use of EIRs among postgraduate students in the South West of Nigeria. The findings revealed that male students used EIRs more than female students. In another study by Bimber (2000) carried out in a university in China, the study indicated that, there are gender gap in the use of e-resources. The result revealed further that, female students are less users of e-resources. This indicates that, male students use e-resources more than females. In a study by Odell, Korgen, Schumacher and Delucchi (2000) in the United Kingdom, the result revealed that male students preferred using the e-resources for recreational purposes. In addition, Ford, Miller and Moss (2001) investigate the use of EIR among undergraduate students in Nigeria and they found that, the female students faced various challenges in the use of EIRs, that is, students are not incompetent to search for information from EIRs. Furthermore, Oyeniyi (2013), in a similar study in the Southwest part of Nigeria, revealed that qualities and behaviour of male and female students manifested in their cultural and social construction of their personality. Raham, Mahmud, and Jamaludin (2013) indicate that, age and gender influence the use of EIRs among students in Malaysian. The result revealed that male students use e-resources more than female students. Koojang (2004) investigates the use of EIRs among part students where he found that, age is not influence the use of EIRs among students. Tayler and Hasting (2011) reveal that age group of students influence the use of e-resources, especially that students within the age group of 17-20 years were significantly satisfied with the use of EIRS. Quadri (2013) investigated the use of EIRs in two universities in Nigeria. The findings revealed that, there is a very strong positive correlation between the age of respondents and use of e-resources. In addition, Mufutau et al (2012) indicate that demographic variables such as age, gender and academic qualifications influence the use of EIRs among undergraduate students in Nigeria. Bar-Ilan, Peritz and Wolman (2003) investigate the use of EIRs among students in Israel. They found that, there is a significant relationship between the age of the students and the use of EIRs. Okiki and Asina (2011) survey the use of EIRs and by postgraduate students in Nigeria. The result revealed that, there is a positive relationship and use of EIRs. The study also found that, the young students tend to use EIR more compared with the adult students. Similarly, Mufutau et al (2012) examined the influence of demographic variables and the use of EIRs in universities in Nigeria. The finding revealed that level of students' income does not influence their use of EIR. Sivathaasan and Velnampy (2013) examine the use of EIRs among university students in

India and the study found that, EIRs usage have positive relationship with students' academic performances.

5 RESEARCH METHODOLOGY

The study employed a descriptive survey design which is anchored on positivism paradigm. The justification for positivism paradigm is based on the fact that the paradigm promotes precision and at the same time empirical method in collecting data for academic research. Owolabi (2016) argues that positivism paradigm permits academic research to be conducted based on empirical facts. The population of the students comprised 16, 242 undergraduate students primarily in their final year classes that registered in the selected university libraries. In determining the sample size, Krejcie and Morgan (1970) recommended that 377 final year undergraduates should be sampled for a population of 16, 242. The 377 respondents were obtained across all the faculties from the selected three universities as presented in Table 1. Purposive sampling was used to select three universities for the students and the justification for selecting them was based on the fact that they have necessary facilities, infrastructure and manpower that promote the use of EIRs.

The study focused entirely on the final students of three Federal Universities: Federal University of Agriculture, Abeokuta (FUNAAB); (The University of Ibadan (UI), and the University of Lagos (UNILAG). The choice of these universities was based on the fact that they form part of the old generation universities in south-west Nigeria that have in existence necessary facilities and resources in the libraries.

In addition, final year students were chosen because of the basic fact that they will make use of electronic resources and other print materials for writing their research project. By way of example, the final year students need electronic information resources to search for accurate and timely information in writing and completing their research projects and term papers.

The psychometric properties of the instrument were obtained through the use of Cronbach Alpha method. Forty copies of the questionnaire were administered to undergraduate students of Prince Abubakar Audu University, Anyigba, Kogi State. In all, 0.75 reliability coefficient was obtained for the instrument. Copies of the questionnaire were administered on final year undergraduate students with the help of research assistants who established good rapport with the sampled subjects. Out of 377 copies of questionnaire administered, 362 were properly filled and returned representing 96% return rate and were found worthy for the analysis of data collected. The data collected were analysed using descriptive statistics (frequency and percentages) and inferential statistics (independent sample t-test and Analysis of Variance tested at 0.05 level of significance).

6 ANALYSIS OF DATA

Table 1: Summary of the population of final undergraduate students according to faculty

Faculties	FUNAAB	UI	UNILAG	Total
Arts	493	1315	1732	3540
Education	582	2161	2017	4760
Law	163	306	820	1289
Sciences	336	1270	1336	2942
Social and management Sciences	1921	635	1155	3711
Total	3495	5687	7060	16242

Note: FUNAAB = Federal University of Agriculture; UI = University of Ibadan; UNILAG = University of Lagos.

6.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Results in Table 2 on demographic characteristics of respondents reveal that the majority of them were female (58.6%) who were within the ages of 23 and 27 years old (42.2%), mostly from the University of Lagos (42%).

Table 2: Demographic features of respondents

Variables	Respondents	Percentage
GENDER		
Male	150	41.4
Female	212	58.6
AGE		
18- 22	96	26.5
23-27	153	42.2
28 -31	61	16.9
32 and above	52	14.4
UNIVERSITY ATTENDED		
FUNAAB	81	22.4
UI	129	35.6
UNILAG	152	42.0

Table 3: Purposes of using electronic information by undergraduate students in Nigeria universities

Variables	Frequency	Percentage
To complete class assignment	102	28.2
For research purposes	142	39.3
To obtain course related information/study materials	51	14.1
To update knowledge/keep abreast with latest development	32	8.8
For seminar/oral class presentation	17	4.7
Leisure	11	3.1
Entertainment	7	1.9

Table 3 presents the purposes for which undergraduate students use electronic information resources (EIRs). The table shows 142 representing 39.3% used EIRs for research purposes, followed by 102 (28.2%) respondents who used EIRs to complete class assignments. 51 (14.1%) respondents use EIRs to update course related information/study materials, 32 (8.8%) used EIRs to update knowledge and keep abreast with latest development while 17 (4.7%) respondents used EIRs for seminar and oral class presentation. Those who used electronic information resources for leisure (3.2%) and entertainment (1.9%) were least. This implied that, majority of final undergraduate students used electronic information resources for research purposes.

Table 4: Frequency of using electronic information resources

Variables	Frequency	Percentage
Daily	51	14.1
Once in two days	24	6.6
Once in a week	63	17.4
Occasionally	224	61.9

Table 4 shows that 224 (61.9%) respondents used electronic information resources occasionally, 63 (17.4%) used electronic information resources once in a week, 51 (14.1%) used electronic information resources daily while 24 (6.6%) respondents used electronic information resources once in a week. The implication is that, majority of respondents who used electronic information resources occasionally were in the majority

Table 5: Challenge affecting the use of electronic information resources

Variables	Frequency	Percentage
Limited access to internet point	20	5.5
Slow internet speed	17	4.7
Frequent power outage	32	8.8
Difficulty in finding relevant information	82	22.7
Some full texts require subscription or payment	29	8.1
High cost of accessing electronic resources	14	3.9
Information overload	31	8.6
Insufficient skill to retrieve needed information	124	34.2
The library staff are not supportive to facilitate easy usage	13	3.6

Table 5 presents the challenges affecting final year undergraduates in the use of electronic information resources. The table shows that, 124 (34.2%) respondents had insufficient skill to retrieve needed information, 82 (22.7%) had difficulty in finding relevant information while 32 (8.8%) were constrained with frequent power outage. Other challenges ranged from information overload

(8.6%), some full texts require subscription or payment (8.1%), limited access to limited point (5.5%), slow internet speed (4.7%), and high cost of accessing electronic information resources (3.9%) to library staff are not supportive to facilitate easy usage (3.6%). This implied that, the major challenge impeding the use of electronic information resources by final year students is insufficient skill to retrieve needed information.

Hypothesis 1: Gender does not significantly influence the use of electronic information resources among undergraduates

To test this hypothesis, the use of electronic information resources among final year undergraduates was compared between male and female respondents using the independent t-test analysis. The result is presented in Table 6.

Table 6:Independent t-test analysis of the influence of gender on undergraduates' use of EIRs

Gender	N	Mean	Std. Dev	Df	T	Sig	P	Remark
Male	150	12.9442	3.7314	360	-1.07	.414	0.005	Not significant
Female	212	13.2241	2.9871					

The result in Table 6 reveals that an insignificant influence was found ($t = -1.07$, $df = 360$; $p = 0.414$). This implies that gender does not significantly influence the use of electronic information resources. Therefore, null hypothesis was not rejected.

Hypothesis 2: Students' age does not significantly influence the use of electronic information resources among undergraduate

Table 7:one-way ANOVA of the influence of age on the use of EIRS by final year undergraduates

Source of Variance	SS	df	MS	F-ratio	p-value	Remark
Between groups	2343.21	3	101.428	5.564*	.000	Significant
Within groups	32411.57	359	46.353			
Total	35852.67	362				

*Significant at 0.05 Level of Significance

The result in Table 7 shows that, there is a significant influence of undergraduate students' age on their use of electronic information resources ($F = 5.564$; $p = 0.00$). Hence, the null hypothesis that, students' age does not significantly influence the use of EIRs was rejected at 0.05 level of significance. This further implies that, final year undergraduate students' use of electronic information resources differ significantly within age range.

7 DISCUSSION OF THE FINDINGS

The study revealed that, research purpose is the major reason for using EIRs among the students. The finding corroborated the findings of Ama-Abasi

and Agba (2021) who found that, undergraduate students in southern part of Nigeria used EIRs primarily for research purposes. In addition, the finding of the study is in tandem with the finding of Sharma (2009) who found that, undergraduate students used EIRs for conducting research. Also, the finding corroborated the findings of Krishnan (2015) in India, Mwenge and Mwantimwa (2019) in Tanzania and Okiki and Ashiru (2011) in Nigeria. The implication of this finding is that, students realize the importance of EIRs for research activities. Using EIRs for research purposes will provide opportunity for students to discover new ideas, facts and information through scientific and systematic study.

In addition, the study revealed that the students used the EIR resources occasionally. This finding supported the finding of Allen and Weber (2014) which indicated that students used e-resources occasionally. Furthermore, the finding of the students affirmed the finding of Adesoye and Amusa (2013), in a similar study among health science students in Nigeria that, students used e-resources occasionally. Also, another study by Gakibayo and Okello-Obura (2013) in Uganda revealed that, students used the resources occasionally. However, the finding of the study contradicts the findings of Bankole, Ajiboye and Otunola (2015) in a university in Nigeria. It was revealed that, majority of the students used the resources frequently. Also, the finding confirmed the finding of Murugan (2015) that, students in a university in India used e-resources regularly.

Insufficient skill to retrieve needed information was as a major challenge facing the use of EIRs. This finding supported the findings of Bankole, Ajiboye and Otunola (2015) who in a similar study in Nigeria found that, insufficient skill to retrieve information is the main challenge facing the use of EIRs. In addition, the study corroborated the findings of Gakibayo et al. (2013) in Mbarara University, Uganda and Makgahlela and Bopape (2014) in a study in South Africa. The studies revealed that, the use of electronic resources was constrained by lack of computer and information literacy skills. In another development, the finding of the study contradicts the findings of Kalusopa (2011) in a similar study in Botswana which revealed various challenges facing the use of EIRs such as inadequate time and various institutional barriers. Akiuffo (2020) affirmed that, slow internet speed is the major challenge facing the use of the EIRs among students in Ghana.

Analytically, the study also indicates that, gender does not significantly influence the use of electronic information resources by final year undergraduate students in Nigerian universities. This finding is in consonance with Oyeniyi (2013) who found that there was no statistically significant difference in the use of electronic resources on the basis of gender. The finding however negates the findings of Sivathaasan, Achuthan and Kajanathan (2013) who reported that there is a statistically significant mean difference between the mean

numbers of usage of electronic information resources of male and female university teachers. They reported that male have the highest mean usage of electronic information resources. This finding is supported by previous findings of Sivathaasan, Achchuthan and Kajanathan (2013) who revealed that usage of electronic information resources differs significantly among age group. This study also disagreed with the findings of Adepoju (2017) who found that there was significant difference in the utilization of ICT resources among users of different age groups.

Finally, the study reveals that, there is a significant influence of undergraduate students' age on their use of electronic information resources. The implication of this study is that, final year undergraduate students' use of electronic information resources differ significantly within age range. This result contradicts the findings of Korobili, Tilikidou and Delistauro (2016) who posited that, age does not significantly influence utilization of electronic library resources. The study upheld that, the undergraduates fall within the same age bracket and this group of persons are very conversant with ICT and as such will likely make use of electronic resources in the library. In contraction to the present study, Hayelom (2014) confirmed in his findings that age of students does not significantly influence use of electronic information resources. However, the studies of Lucky (2016), Abosede and Ibikunle (2011), Popoola (2008), Dulle (2014) and Quadric (2013) agrees with this present study. The studies observed that age of students significantly influence utilization of electronic library resources.

8 CONCLUSION AND RECOMMENDATIONS

The study revealed that, the various purposes of using EIRs are for research purposes and for completion of assignments. In addition, students admitted that, they used the resources occasionally. This may be attributed to poor awareness of availability of the resources in the university libraries, and at the same time, lack of necessary computer skills needed to operate and use the resources. The major challenge facing the use of the resources is mainly insufficient skill to retrieve needed information. This implies that, the users do not have necessary skills and competence to operate and use available electronic resources in the libraries.

In addition, the study indicated that, gender does not significantly influence the use of electronic information resources. Furthermore, the study revealed that, there is a significant influence of undergraduate students' age on their use of electronic information resources. Based on the findings of the study, the study recommended that, there is need for the inclusion of computer trainings in the university curriculum. This will enable students to develop necessary ICT skills that will encourage them to use the resources more effectively. In

addition, the faculty members should endeavor to frequently give students tasks or assignments that will compel them to use the resources. Finally, the library management should provide necessary incentives that will promote the students to use the resources regularly. This could be in form of constant trainings, creating awareness and organizing library orientation programmes. In so doing, the academic librarians need to educate the students to identify the need for using EIRs for doing research and class assignments.

However, the limitations of the study lie on the fact that, it focused on three (3) selected universities in Nigeria and as a result, the findings of the study cannot be generalized. In addition, the study focused on the two aspects of social demographic variables (age and sex), other parameters were not considered in the study. In subsequent research, this study can be replicated in other universities in the country like wise in other higher institutions in the country.

Consequently, the study contributes to knowledge in the areas of literature, and the study will be useful for policy makers in university libraries on the necessary steps that can adopt in order to promote the use of EIRs in our universities. In addition, the study provides fresh data on EIRs usage in Nigeria.

REFERENCES

1. ABOSEDE, A.T., & IBIKUNLE, O.O. (2011). Determinants of library use among students of Agriculture: A case study of Lagos State Polytechnic. *Libr Philos Pract.* 6(1):40-521
2. ADEPOJU, O. E. (2017). Demographic factors affecting ICT utilisation by undergraduate students in some selected universities in Nigeria. *International Journal of Library and Information Science Studies*, 3(2), 20-33. Retrieved from <http://www.eajournals>.
3. ADESOYE, A.E., & AMUSA, O. I. (2013). Use of electronic resources in health sciences institutions in Ogun State, Nigeria. *PNLA Quarterly*, 77(3) 28-41. [Online]. Available at: <http://www.pnla.org/assets/documents/Quarterly/pnlaq77-3spring2013.pdf>
4. AGBOOLA I.O., & BAMIGBOYE, O.B. (2011). Students' level of study and user of library resources in Nigerian Universities: A comparative study. *Libr Philosophy and Practice. (E-journal)*.
5. ALLEN, E.J., & WEBER, R.K. (2014). The library and the web: Graduate students' selection of open access journals for empirical literature searches. *Journal of Web Librarianship*, 8(3), 243-262.
6. AKUIFO, M.N. (2020). Use of electronic resources by students in a premier postgraduate theological university in Ghana. *SA Journal of Information Management*, 17(3), 12-24.

7. AMA-ABASI, D.R., & AGBA, U.M. (2021). Students' demographic variables as determinant of utilization of information resources by undergraduate students in South-South Nigeria. *IP Indian Journal of Library Science and Information Technology*, 6(1), 33-39.
8. BANKOLE, B.A., AJIBOYE, A.O. & OTUNLA, A. (2015). Use of electronic information resources by undergraduates of Federal University of Agriculture, Abeokuta, Ogun State, Nigeria. *International Journal of Digital Library Services*, 5, 1-14.
9. DEVI, T.S. (2010). *Problems and prospects of digital library in Manipur: A conceptual study*. Onl.
10. FORD, N., MILLER, D., & MOSS, N. (2001). The role of individual difference in internet searching; An empirical study. *J Am Soc Inf Sci Technol*, 52(12):10-49
11. GAKIBAYO, A., & IKOJA-ODONGO, J.R. (2013). Electronic information resources utilization by students in Mbrara University library. *Library philosophy and practice* (e-journal). Retrieved on June 10, 2015 from <http://digitalcommons.unl.edu/libphilprac/869>.
12. HAYELOM, T. (2014). Determinants of information resources and services use among students and instructors in selected federal ATVET colleges in Oromiya National Regional State, Ethiopia. M.Sc. Thesis.
13. IZUAGBE, R. A., HAMZAT, S. & IDOWU, E.D. (2016). Electronic Information Resources Adoption in Private University Libraries .The Moderating Effect of Productivity and Relative Advantages on Perceived Usefulness.” *Journal of Information Science Theory and Practice* 4(1): 30–48. <https://doi.org/10.1633/JISTaP.2016.4.1.3>.
14. KALUSOPA, T. (2011). Developing an e-records readiness framework for labour organisations in Botswana', PhD thesis, Dept. of Information Science, University of South Africa.
15. KOROBILI, S., TILIKIDOU, I. & DELISTAVROU, A. (2016). Factors that influence the use of library resources by faculty members. *Library Review: Emerald Group Publishing Limited*, 55 (2), 91-105. Doi: 10.1108/00242530610649594
16. MITTAL, P., & BALA, M. (2013). A Study of Various Types of E-resources Used by Research Scholars.” *International Journal of Research in Computer and Communication Technology* 2 (3): 146–150.
17. MUFUTAU, D. A., OKUNLAYA, R. O. A., & OLUWADAMILARE, I. R. (2012). Influence of demographic factors on the use of digital library by the post graduate students in private universities: A case study of Babcock and Covenant University in Ogun State. *Information and Knowledge Management*, 2(5), 10–18.

18. MURUGAN, K.(2015). Utilization of E-resources by Faculty and Students of Universal College of Engineering and Technology, Vallioor. *Journal of Advances in Library and Information Science*, Vol.4, No.1, 2015. PP, 73-76.
19. ODELL, P.M., KORGAN, K.O., SCHUMACHER, P., & DELUCCHI, M. (2000). Internet use among female and male college students. *Cyberpsychol Behav.* 3(5):855-62
20. RAHMAN, A. L. A., JAMALUDIN, A., & MAHMUD, Z. (2013). Intention to Use Digital Library Based on Modified UTAUT Model: Perspectives of Malaysian Postgraduate Students. *World Academy of Science, Engineering and Technology* 75(1): 116–122
21. OKIKI, O. C., & ASIRU, S. M. (2011). Use of electronic information sources by postgraduate students in Nigeria: Influencing factors. *Library Philosophy and Practice*. Retrieved from <http://www.Uidaho.Edu/Mbohn/amireekhabhazan.htm>
22. OKORIE, A., & AGBOOLA, J.A. (2012). Availability and Use of Electronic Resources in Agricultural University Libraries. *PNLA Quarterly*, the official publication of the Pacific Northwest Library Association, 76(3).
23. OWOLABI, K.A., ADERIBIGBE, N.A., DIYAOLU, B.O., & MUDASIRU, Y.A. (2020). Factors Influencing the Adoption of Electronic Information Resources among Postgraduate Students in Nigerian Universities. *Mousaion: South African Journal of Information Studies*, 38(2), 14-22.
24. OYENIYI, A. S. (2013). Gender differences in information retrieval skills and use of electronic resources among information professionals in South-west Nigeria. *International Journal of Library and Information Sciences*, 5 (7), 209-215. Doi: 10.5897/IJLIS12.044
25. POPOOLA, S.A. (2008). The use of information sources and services and its effect on the research output of social scientists in Nigerian Universities. *Libr Philos Pract.* 143. http://digitalcommons.unl.edu/cgi/view_content .pdf
26. QUADRIC, G.O. (2013). Influence of demographic factors on use of online library resources by undergraduate students in two private Nigerian University libraries. *Libr Philosophy Pract.* Paper 976. <http://digital commons. un/ edu / libphi / prac / 976>
27. RENWICK, S.(2005). Knowledge and use of electronic information resources by medical science faculty at the University of the West Indies. *Journal of Medical Library Association* 93(1), 21-31.
28. SIVATHAASAN, N., ACHCHUTHAN, A. & KAJANANTHAN, R. (2013). Demographic variables of university teachers and usage of electronic information resources: A case in Sri Lanka. *International Journal of Business and Management*, 8(19), 90-98. Doi: 10.5539/ijbm.v8n19p90.
29. TELLA, A., TELLA, A. AYENI, C.O., & OMOBA, R.O.(2007). Self-efficacy and use of electronic information as predictors of academic performance. *Electronic Journal of Academic and Special Librarianship* 8(2), 69–83.