

## Utilisation of library based electronic resources and services by postgraduates in Nigerian private universities

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**ABSTRACT:** This study investigated the utilisation of library-based electronic information resources and services by postgraduate students in private universities in southwestern Nigeria. The population of the study included respondents from faculties of science, social/management science and humanities/arts from all selected private universities with a total population of 1534 students. The research instrument adopted was the questionnaire. Out of the 974 questionnaire administered to the respondents, 764 (78.43%) were properly filled and returned for the study. This was considered very adequate for the study. The electronic information scale by Daramola (2016) was adapted in this study. The psychometric properties in the adapted scale included: purpose of using e-resources (for assignments, for research, for leisure, for news/information). Frequency of using e-resources (frequently used, rarely used, not at all) and for various types of e-resources utilised by respondents (E-books, E-journals, E-magazines, E-thesis) among others. The scale used for this study consisted of 36 items on a modified 4-point scale. Findings showed that postgraduates in the selected private universities in Southwestern Nigeria fairly utilised the available library electronic resources. Findings also revealed that postgraduates preferred access to online information rather than electronic databases, such as, Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI commonly found in the library stock in the selected universities.

**KEYWORDS:** Library, Utilisation, Library electronic resources, Private universities, Post graduates

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### I. INTRODUCTION

Library electronic resources make tremendous impact on learning and student development in any institution of higher learning. Without any doubt, electronic information resources are the key to the realisation of the goals of the university library, as well as the institutional outcomes, especially in relation to postgraduate studies. In short, the importance of electronic resources in university education cannot be overstressed. Library electronic resources in this context refer to electronically supported information materials subscribed to, licensed or housed in the library or print library materials in electronic formats. Advancement in technology and related facilities has enhanced provision and availability of university-based electronic resources or e-resources in Nigerian universities, especially in the library where most of these electronic resources are accessible and accessed. As a result of this, postgraduates now have many sources of accessing and utilising information, as against the physically restricted source.

The postgraduates are groups of students that require information for academic and research purposes more than any other category of students within the university. Without doubt, post-graduate programmes need a substantial body of knowledge for research and investigations on various forms of academic enquiries. In Nigeria, a private university is any university that is not funded by public means through the Federal or state government but by private or religious organisations and individuals. Private universities in Nigeria are established primarily to complement the public universities which are becoming overstretched (Ajadi, 2010). As at the time this study was conducted, there was a total number of 61 private universities in Nigeria out of which 28 are spread around the Southwestern geopolitical zone. Nine out of the twenty-eight universities in the zone were approved by the Nigerian National Universities Commission to run postgraduate programmes. The post graduate studies consist of higher degrees usually in the following categories: post graduate diploma, master, and doctoral degrees. This study, however, focused on Master and Doctoral degree programmes which entail more research works and require adequate use of information resources. It is at this level that postgraduate work requires research and training materials necessary for deeper academic enquiries. It is during postgraduate studies that postgraduates are exposed to the relevant body of knowledge and learning activities which enable them to develop relevant competencies and deeper knowledge of their chosen subject areas and careers. This grants students the opportunity to acquire new knowledge and develop further skills and innovations necessary to cope with academic, social and career responsibilities. It is mostly believed that reliable library-licensed

Electronic resources are underutilised or at least not well utilised (Ukachi, 2015), especially in Nigeria. The same had been corroborated by the majority of systems librarians in private universities in southwestern Nigeria who testified during the preliminary survey that different training sessions and awareness programmes were regularly embarked upon to sensitise students and boost electronic information resource utilisation in their respective libraries. This shows that there is the need to boost the utilisation of these resources for the library to justify their provision. Access and utilisation of these resources must be in line with modern practices obtainable in more advanced climes where students are in tune with the library with full access to full textbooks at home on mobile phones through the use of mobile library cards (MLC) and other relevant applications for greater effectiveness and productivity. In a related study, Eruvwe, Sambo, and Salami (2014) observed that majority of the postgraduates in the University of Nigeria Nsukka made use of their mobile phones for research rather than the available library-based electronic resources. They noted further that postgraduates made use of mobile phones all the time and majority of them agreed that cell phones helped them to meet their information needs. This was corroborated by Madukoma (2015) who submitted that in spite of the transformation brought by Information and Communications Technology (ICTs) in Babcock University Library, it seems that users are yet to experience the tremendous advantage brought by Information and Communications Technology ICTs in the aspect of library electronic resources.

Electronic resources in the universities are primarily situated and accessible in the library. However, by the use of the latest technologies most of these resources could be accessed anywhere else because with certain username and password some library-based electronic resources of a particular library could be accessed miles away. Major electronic information access points which make information retrieval easier for students include: mobile learning devices, libraries, ICT centres, cybercafé, dormitories and classrooms. Ajegbomogun and Fagbola (2015) identified global system of mobile telecommunication (GSM), cybercafé, ICT Centres, home, library and departmental offices as major access points for utilisation of electronic resources by postgraduates. However, the GSM was discovered to be the most easily accessible point. This suggests a shift in information users' preference for mobile sources rather than the stationary library point. Ibrahim (2014) reported that EBSCOHOST, CD ROMs, Academic Press database, Linguistic database, free library online, e-magazines, e-newspapers were underutilised by Nigerian university students. In a study of two Nigerian universities by Ibrahim (2014), the researcher came to the conclusion that electronic/digital resources are vital and that they provide a strong support for any collection that is dynamic. A large portion of the electronic resources found in libraries, for example, full content databases, electronic books and so on are not openly accessible for nothing-out-of-pocket but rather they are costly, and they offer innovative conceivable outcomes for extending access just as changing learning and conducting of scholarly research in universities. In any case, as indicated by an investigation Edem and Egbe (2016) did at the University of Calabar (UNICAL), Nigeria online databases were underutilised. The University Library had e-diaries, digital books and access to databases and Internet resources. They recognised the absence of PC capabilities, slow systems, conflicting web availability, control blackout and unimportant electronic resources as serious issues postgraduates experienced while getting to and utilising electronic resources in Unical Library.

However, making information resources available through mobile learning devices and other outlets has not been optimised in the Nigerian academic libraries as it is done in Europe and America. This, perhaps may be why Naveed, Q. N., Alam, M. M. and Tairan, N. (2020) were of the opinion that every area of the world is already being dominated by technological developments. Undoubtedly, utilisation of these new technologies in most parts of Nigeria and some other parts of the developing world is still very low (Almaiah, and Al Mulhem, 2019) In all, there seems to be a major challenge in terms of wastage or neglect of the library-licensed, hard earned resources if they are not adequately utilised by research students in the institutions. Idowu and Oduwole (2012) and Nweke, Yakub and Omale (2012) have affirmed that in many cases the use of the technologies is below expectation resulting from issues like a large chunk of irrelevant information, download delay, failure to find information, lack of search skills, power outages, and unavailability of some websites. Other problems observed include inaccessibility of some websites and difficulties in navigating through e-resources, maintenance cost, and acquisition cost, in addition to time wastage. All these inhibit quick and easy access to electronic resources in the university or at least restrict access to some relevant materials (Akporhonor and Akpojotor, 2016). Therefore, this study considered three dimensions of utilisation of these resources namely: the types of e-resources being used, frequency and purpose of utilisation of university based electronic resources which are mostly resident in the institutional libraries with a view to understanding extent of utilisation of the resources. Perhaps, the perceived advantages derivable from accessing electronic information from other available sources especially mobile devices could also be a major challenge regarding access to and utilisation of information in private universities.

**Statement of the Problem :** Poor utilisation of library electronic information resources may result in wastage or neglect of reliable university electronic assets and constitute serious negative outcomes in students' achievements. Wastage of these hard-earned resources must be avoided by all means. Studies have shown that more and more postgraduates utilise mobile learning devices for academic purposes. Perhaps for convenience's sake, students seem to stick to alternative sources of accessing information rather than the available library resources; but they could be missing out on the more reliable library-based electronic resources. This phenomenon may constitute underutilisation of electronic information resources, as well as poor postgraduates' output as researchers and could result in partial or total neglect or outright wastage of those hard-earned resources in academic institutions. It could also jeopardise the objectives of setting up the university libraries.

## **II. OBJECTIVES**

The main objectives of this study are to:

1. investigate the purpose of utilisation of library-based electronic resource among postgraduates in private universities in Southwestern Nigeria;
2. ascertain the library-based electronic resources most frequently utilised by postgraduates in private universities in Southwestern Nigeria; and
3. identify the types of library-based electronic resources being utilised by postgraduates in private universities in Southwestern Nigeria;

## **III. RESEARCH QUESTIONS**

The following research questions were answered in the study:

1. For what purpose do postgraduates in private universities in Southwestern Nigeria utilise library -based electronic resources?
2. Which library-based electronic resources are most frequently utilised among postgraduates in private universities in Southwestern Nigeria?
3. What types of library-based electronic resources are being used by postgraduates in private universities in Southwestern Nigeria?

## **IV. METHODOLOGY**

This study adopted the survey research design of the correlational type. The target population for the study comprised the entire 1534 Master and Doctor of Philosophy (Ph.D.) degree students in all the 9 private universities accredited to run postgraduate programmes in Southwestern Nigeria as at the time of this study. The National Universities Commission (N.U.C.) accredited 9 private universities to run postgraduate studies in southwestern Nigeria as at 2016. The nine universities were: (1) Redeemer's University, Ede Osun State (2) Pan Atlantic University, Lekki Lagos (3) Babcock University, Ilisan Ogun State (4) Lead City University, Ibadan Oyo State (5) Joseph Ayo Babalola, Ikeji-Arakeji Osun State (6) Covenant University, Ota Ogun state (7) Caleb University, Imota Lagos State (8) Bowen University, Iwo Osun State and (9) Afe Babalola University, Ado Ekiti State. The multi-stage sampling procedure was adopted in selecting the sample for the study. At the first stage, all the 9 accredited universities in southwestern Nigeria were purposively selected to capture the objectives of this study. At the second stage, 80% of the established faculties/schools/colleges available in all the 9 private universities were purposively selected for the study namely: Business and Social Sciences, Education, Education and Humanities, others include Engineering, Environmental Sciences, Leadership Development Studies, Media and Communication, Natural Sciences, Natural and Basic Medical Sciences, Science, and Science and Technology. At the third stage, total enumeration technique was adopted to select all the Ph.D. students in the 9 N.U.C. accredited private universities to run post graduate programmes in Southwestern Nigeria, while proportionate to size probability technique was used to select 60% of Master students.

## **V. RESULTS AND ANALYSES**

### **Demographic profile**

Table 1.1 below presents the demographic profile for the study.

**Table 1.1 Demographic profile of Postgraduates in private universities in Southwestern Nigeria**

s/n	Variables	Institutions	Frequency	Percentage (based on the total no used for the study)
1	Institution	Babcock University	343	44.9
		Caleb University	80	10.5
		Afe Babalola University	76	9.9
		Lead City University	60	7.9
		Covenant University	59	7.7
		Redeemer's University	50	6.5
		Pan Atlantic University	45	5.9
		Bowen University	29	3.8
		Joseph Ayo Babalola University	22	2.9
		Total	764	100.0
2	Gender	Male	400	52.4
		Female	364	47.6
		Total	764	100.0
3	Age	25-30 years	295	38.6
		20-24 years	287	37.6
		31-35 years	111	14.5
		36 years and above	42	5.5
		Below 20 years	29	3.8
		Total	764	100.0
4	Level	Master	622	81.4
		Ph.D.	142	18.6
		Total	764	100.0

Table 1.1 represents the distribution of demographic characteristics of the respondents in the selected private universities used for the study. The majority of respondents were from Babcock University (44.9%). There were male (52.4%) and females (47.6%) respondents. This, therefore, implies that there were more male than female respondents in the selected private universities but the ratio between male and female students was small.

**Research question 1: For what purpose do postgraduates in private universities in southwestern Nigeria utilise library electronic resources?**

Table 1.2 shows the results.

**Table 1.2 Purpose of utilisation of electronic/digital resources by postgraduates in private universities in southwestern Nigeria**

s/n	Purpose	Reading online	For examination	Seminar presentation	For research	$\bar{x}$	S.D
1	Reference materials	95 12.4%	151 19.8%	289 37.8%	229 30.0%	2.85	.99
2	E-books	144 18.8%	101 13.2%	269 35.2%	250 32.7%	2.82	1.09
3	E-journals	138 18.1%	133 17.4%	268 35.1%	225 29.5%	2.76	1.07
4	Electronic theses / Dissertation	193 25.3%	124 16.2%	217 28.4%	230 30.1%	2.63	1.16
5	E-databases related to my course e.g. Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI, etc.	300 39.3%	161 21.1%	129 16.9%	174 22.8%	2.23	1.19
6	Online Dictionaries	316 41.4%	140 18.3%	153 20.0%	155 20.3%	2.19	1.18
7	Online Newspapers	331	130	142	161	2.17	1.20

		43.3%	17.0%	18.6%	21.1%		
8	Online Encyclopedias	332 43.5%	157 20.5%	102 13.4%	173 22.6%	2.15	1.21
9	CD-ROM/DVD Databases	330 43.2%	149 19.5%	158 20.7%	127 16.6%	2.11	1.14
Weighted Mean = 2.43							

Table 1.2 reveals the findings under four key indicators which are: for research, seminar presentation, examination, and reading online. Reading online (31.7%) ranked highest followed by seminar presentation (25.1%), research purpose (25.0%), while ‘examination’ (18.1%) had the lowest percentage. Findings further revealed that online encyclopedias ( $\bar{x}$  =2.15) and use of CD-ROM/DVD Databases ( $\bar{x}$  =2.11) had the lowest mean. This implies that the major purpose of use of library electronic resources by postgraduates in the study was for reading online.

Research question 2: Which electronic/digital resources are most frequently utilised by postgraduates in private universities in Southwestern Nigeria?

In Table 2.1, the results for the most frequently utilised electronic/digital resources among postgraduates in private universities in southwestern Nigeria are shown.

**Table 2.1 Frequency of utilisation of electronic/digital resources by postgraduates in private universities in southwestern Nigeria**

s/n	Items	Non-frequency	Low frequency	Moderate frequency	High frequency	$\bar{x}$	S.D
1	Multimedia	55 7.2%	15 15.1%	288 37.7%	306 40.1%	3.11	.91
2	Online magazines	53 6.9%	176 23.0%	212 27.7%	303 42.3%	3.05	.96
3	E-databases related to my course e.g. Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI, etc.	94 12.3%	108 14.1%	273 35.7%	289 37.8%	2.99	1.01
4	Online Newspapers	66 8.6%	159 20.8%	273 35.7%	266 34.8%	2.97	.95
5	Online pictures/photographs	68 8.9%	168 22.0%	245 32.1%	283 37.0%	2.97	.97
6	Online Year books	103 13.5%	136 17.8%	242 31.7%	283 37.0%	2.92	1.04
7	Online Calendars	150 19.6%	178 23.3%	292 38.2%	144 18.8%	2.86	1.01
8	CD-ROM/DVD Databases	111 14.5%	171 22.4%	207 27.1%	275 36.0%	2.85	1.07
9	Online Encyclopedias	106 13.9%	146 19.1%	291 38.1%	221 28.9%	2.82	1.00
10	Almanacs Online	108 14.1%	192 25.1%	305 39.9%	159 20.8%	2.67	.96
11	Online Dictionaries	140 18.3%	201 26.3%	226 29.6%	197 25.8%	2.63	1.06
12	E-books	138 18.1%	272 35.6%	178 23.3%	176 23.0%	2.51	1.04
13	E-Journals	157 20.5%	243 31.8%	192 25.1%	172 22.5%	2.50	1.05
Weighted Mean = 2.84							

Table 2.1 shows the findings based on four key indicators of non-frequency, low frequency, moderate frequency, and high frequency. The most frequently used resource by postgraduates is Multimedia ( $x$  =3.11) followed by Online magazines ( $x$  =3.05), E-databases related to my course e.g. Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI, ( $x$  = 2.99), et cetera. Online Newspapers ( $x$  =2.97), Online pictures/photographs ( $x$  =2.97), while e-journals ( $x$  =2.50) ranked the lowest. The implication is that, Multimedia, Online magazines, Online Newspapers, and Online pictures/photographs were the most frequently

used electronic data/information sources by postgraduates in private universities in Southwestern Nigeria.

Research question 3: What types of library electronic resources are commonly used by postgraduates in private universities in southwestern Nigeria?

Table 3.1 presents the results for the types of electronic resources commonly used among postgraduates in private universities in southwestern Nigeria.

**Table 3.1 Types of library electronic resources commonly utilised by postgraduates in private universities in southwestern Nigeria**

S/N	Types of resources	Frequency	Percentage	Mean	Std Dev.
1	Electronic theses/dissertation	694	90.8	2.94	0.97
2	Online encyclopedias	653	85.5	2.90	1.05
3	Online pictures/photographs	669	87.6	2.87	0.98
4	Internet facilities	653	85.5	2.74	1.06
5	Online newspapers	649	85	2.72	1.01
6	E-journals	649	85	2.64	0.93
7	E-databases related to my course e.g. Science direct, ebscohost, OARE, OPAC, JSTOR, BIOONE	634	83	2.63	0.98
8	Reference materials	631	82.6	2.62	0.97

Table 3.1 reveals that electronic theses/dissertation ( $\bar{x} = 2.94$ ); online encyclopedias ( $\bar{x} = 2.90$ ); online pictures/photographs ( $\bar{x} = 2.87$ ) ranked highest among the other indicators of types of e-resources being used by postgraduates in Southwestern Nigeria. Internet facilities ( $\bar{x} = 2.74$ ); online newspapers ( $\bar{x} = 2.72$ ) closely followed, while reference materials ( $\bar{x} = 2.62$ ) ranked lowest.

## VI. DISCUSSIONS

**Level of utilisation of electronic/digital resources by postgraduates in private universities in southwestern Nigeria** Findings of this study showed that respondents demonstrated a low level of utilisation of electronic/digital resources available in the universities used for the study. The major purpose of utilisation was for ‘reading online’ followed by seminar presentation. It was further uncovered that the most regularly utilised electronic resources by respondents was Multimedia followed by Online magazines and then e-databases related to my course such as Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI, while e-journals were the least frequently used. Also, e-journals and reference materials ranked lowest among the types of resources being used by postgraduates in private universities in southwestern Nigeria. This implies that Multimedia, Online magazines, electronic theses/dissertations, online encyclopedias and online pictures and photographs were the commonly utilised electronic/digital resources by postgraduates. This connotes that the respondents in this study prefer access to online data/information sources rather than electronic databases such as Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI and reference materials commonly found in the library stock. This corroborates the findings of Mawere and Sai (2018) that regardless of various attempts by the college to promote e-resources, there is poor use and is in tandem with Ankrah and Atuase, (2018) who reported in a study conducted in Ghana involving postgraduate students that most postgraduate learners fairly wanted to get to data from Google researcher, and other online databases more habitually than the databases in the library. They further revealed that tragically e-resources were not utilised to their fullest by postgraduate learners due to low exposure, insufficient preparations, and confinements of access.

**Purpose for which postgraduates in private universities in southwestern Nigeria utilise library electronic data/information sources :** The present discoveries demonstrate that in rank order, the reason for which postgraduates in private universities in southwestern Nigeria utilise electronic/digital resources was mostly for reading online, followed by seminar presentation. This is similar to what Tiemo (2017) reported that a greater percentage of postgraduate students used electronic information resource databases to write their assignments. This was followed by other purposes for which postgraduate students reasonably used EIR databases in order of

popularity namely: preparing for seminars, preparing for examinations, writing of thesis, for group discussion, sharing of knowledge, update of their knowledge, for recreation and leisure and preparing for conferences.

**Frequency of utilisation of electronic/digital resources by postgraduates in private universities in southwestern Nigeria :** Findings revealed that multimedia and online magazines were the most frequently utilised resources, followed by online databases related to my course such as Science Direct, EBSCOHOST, OARE, OPAC, JSTOR, BIOONE, HINARI, et cetera, while e-Journals and e-books had the lowest. It is important to note that majority of the respondents indicated high frequency of utilising multimedia and online magazines as against library-licensed resources. This indicates that majority of postgraduates appreciated Internet-enabled facilities and sources of information with multimedia features such as audio, sound, animation and pictures.

This trend implies that majority of postgraduates in the study would rather prefer audiovisual contents to only written texts. This could also be explained in terms of young adults' interests in pictures and visual aids. Low frequency of e-journals and e-books utilisation may be because of the way that dominant part of the respondents were mobile phone freaks who may not be conversant with looking for such items of information on the phone. It could be inferred from the findings that library-licensed electronic/digital resources were not as frequently used as would have been expected. This supports the finding of Gilbert (2015), who conducted a study among postgraduate students in Modibbo Adama University of Technology, Yola and found out that the recurrence of utilisation of electronic/advanced resources was just genuinely high, specifically for research, education and news which were frequently patronised online.

## VII. COMCLUSION

Based on the findings of this study, it is necessary to note that library electronic resources available in the institutions selected were only fairly utilised by postgraduates in private universities in southwestern Nigeria. Majority of the postgraduates involved in the study maintained that mobility and flexibility qualities of mobile learning devices contributed significantly to accessibility of academic related information. However, a lot of the library-based electronic information resources in this study were not mobile phone compliant.

## RECOMMENDATIONS

**Based on the findings of this study, the following recommendations are proffered:** Library electronic resources should not only be accessible though the traditional methods and the use of personal computers in universities proper utilisation by postgraduates of private universities in southwestern Nigeria, University libraries must ensure mobile compatible and mobile friendly electronic information resources for the use of library clients, most especially postgraduates. Private university administrators must ensure availability of mobile deliverable electronic information resources in private universities across the south west. University administration should provide adequate funding for university libraries to procure current materials and state of the art equipment

## REFERENCES

1. Ajadi, T.O. 2010. Private Universities in Nigeria-the Challenges Ahead. *American Journal of Scientific research* 7:15-24
2. Ajegbomogun, F.O. and Fagbola, O. O. 2015. Electronic Resources Access and Usage for Scholarly Research Work by Postgraduate Students at Federal University of Agriculture, Abeokuta. *Information and Knowledge Management*. 5.5:142-149
3. kporhonor, B. A. and Akpojotor, L. O. 2016 "Challenges Confronting Postgraduate Library and Information Science Student in the Use of Electronic Resources in Southern Nigeria" . *Library Philosophy and Practice (e-journal)*. 24.9: 321-334
4. Almaiah, M. A. and Al Mulhem, A. (2019). Analysis of the essential factors affecting of intention to use of mobile learning applications: A comparison between universities adopters and non-adopters, *Edu. Inf. Technol.*, vol. 24, no. 2, pp. 1433–1468.
5. Ankrah, E. and Atuase, D., 2018 "The Use of Electronic Resources Postgraduate students of the University of Cape Coast". *Library Philosophy and Practice (e-journal)*. 1632.

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6. Asproth, V. 2005 Information technology challenges for long term preservation of electronic information. *International Journal of Public Information Systems*. 1. 27-37.
7. Bassey, R. S. and Odu, J. O. 2015. Evaluation of the Extent of Utilization of Electronic Library Resources and Services by Undergraduate Students in University of Calabar Library, Calabar – Nigeria. *Education Journal*. 4: 2: 71-74
8. Edem, N.B. and Egbe, N. 2016 Availability and utilisation of electronic resource by postgraduate students in a Nigerian university library: a case study of University of Calabar, Nigeria. *Information and Knowledge Management* 6. 2: 60-69.
9. Eruvwe, U. Sambo, A. S. and Salami R. 2014 Utilization of Cell Phone for Research among Postgraduate Students in the University of Nigeria Nsukka: *Journal of Research on Humanities and Social Sciences* 4.18: 119-134
10. Gilbert, K. 2015. Utilisation of electronic information resources by postgraduate students of Modibbo Adama University of Technology, Yola. *IOSR Journal of Humanities and Social Science* 20.8: 58-65
11. Ibrarhim, H. 2014. Accessibility and use of electronic information resources and services in MTN universities connect libraries in Nigerian universities. Thesis, Ahmadu Bello University. 50-54.
12. Idowu, A. O. and Oduwale, A. A. 2012. Electronic Resources Provision and Internet Accessibility Challenges in Nigerian Academic Libraries. *Global Journal of Library and Information Sciences* 1.1:001-007
13. Madukoma, E. 2015 Users' Perception of Electronic Reference Services in Babcock University Library, Ilishan-Remo, Ogun State, Nigeria. IFLA World Library and Information Conference Proceedings (Online) Retrieved October 22, 2016 from [http://www.ifla.org/documents/assets/reference-and-data-administrations/distributions/2015\\_ifla\\_reference\\_section-madukoma-en2.pdf](http://www.ifla.org/documents/assets/reference-and-data-administrations/distributions/2015_ifla_reference_section-madukoma-en2.pdf).
14. Mawere, T. and Sai, K.O. 2018 An investigation on e-resource utilisation among university students in a developing country: a case of Great Zimbabwe University. *South African Journal of Information Management*. 20.1: 1-5
15. Naveed, Q.N.; Alam, M.M.; Tairan, N. Structural Equation Modeling for Mobile Learning Acceptance by University Students: An Empirical Study. *Sustainability* 2020, 12, 8618. <https://doi.org/10.3390/su1220861>
16. Nweke, P.O., Yakub, M. and Omale, A.I. (2012). “Challenges Militating against Effectiveness of Electronic Library in Nigerian Higher Institutions” *International Journal of Studies in the Humanities, Lagos*. 2:8
17. Tiemo, P.A. 2017. Use of electronic information resource databases among lecturers and postgraduate students in university libraries in South-South Nigeria. *International Journal of Education, Learning and Development*. 5.2: 46-72
18. Ukachi, N.B. 2015 Information literacy of students as a correlate of their use of electronic resources in university libraries in Nigeria", *The Electronic Library*, Vol. 33 Iss 3 pp. 486 – 501