

EXTENT OF USE OF ELECTRONIC RESOURCES BY POSTGRADUATE LIBRARY USERS IN UNIVERSITY LIBRARIES IN SOUTH EAST NIGERIA

By

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Abstract

This paper evaluates the extent of use of electronic resources by postgraduate library users in University libraries in South East Nigeria. The study ascertains the types of electronic resources available in the libraries under study and finds out the extent of use of these electronic resources among postgraduate library users in the University Libraries understudy. It employed a descriptive survey design. The population of the study was 2595 respondents consisting of 2509 postgraduate users and 86 librarians in Collection Development, Serials and Digital library (e-library). A 10% proportionate sampling technique was used to select a sample of 251 user respondents while all the 86 librarians working in collection development, serials, and digital library units (e-library) were used. The survey used questionnaire and interview as instruments for data collection. Data collected were tabulated and analyzed using simple statistics (mean). An aggregate of twenty (20) electronic resources were identified in the university libraries under study. The resources that are available in all the libraries under study are online databases such as EBSCO-Host, Medline, OARE, AGORA, AJOL, Jstor Nexus, e-books, and e-journals especially free online resources. Also, the assessment of the extent of use of electronic resources by the postgraduate student's users revealed that majority of the electronic resources is used to a great extent.

Keywords: Electronic Resources, Types of Electronic Resources, Postgraduate Library Users, University Libraries

Introduction

The emergence of Information and Communication Technology (ICT) has brought about an opportunity and severe pressure on academic institutions and their libraries in the provision of electronic resources. With this development, university libraries make available a wide variety of electronic resources for use by the library users which comprise of undergraduates, postgraduates, researchers and staff (both academics and administrative) in their respective institutions for their teaching, research and learning activities. These e-resources form an essential part of the reference services provided by the university libraries especially with the advent of information and communication technology to augment the prints resources. They are of various types and form. But the provision of these resources is only an aspect of the activities of the university library in ensuring that current and updated resources are provided for effective teaching, learning, research and community services and another aspect is to ensure that the available electronic resources must be utilized by library users in order to justify the reason for its existence in the university library. Notwithstanding the numerous advantages of using e-resources, existing literature shows that usage of e-resources is not up to the level expected of it. This problem is more peculiar to developing countries.

University library is defined by Reitz (2004) as a library or library system established, administered, and funded by a university to meet the information, research, and curriculum needs of its students, faculty, and staff. Some large universities maintain separate undergraduate and graduate libraries. These libraries are the focal point of interest in all institutions of learning across the globe without which the institutions will not stand. University

libraries have been widely recognized as indispensable repositories of useful information, and indeed, the ‘heart’ of the university system. Arguably, it is a futile effort to establish a university system without a library, given that the mission and vision of education generally will be a far cry and elusive, observed Okogwu (2017).

The central aim of university libraries is to collect, preserve and disseminate information to users for teaching, research, and learning. In addition to the university’s traditional functions of teaching, research and learning, it has the functions of pursuit, promotion and dissemination of knowledge; provision of intellectual leadership; manpower development; promotion of social and economic modernization; promotion of intra- and inter-continental and international understanding. The university libraries are established to provide information materials to actualize the aforementioned functions of the university. Their central aim and function is to collect, preserve and disseminate vital information resources for teaching, research and learning of staff and students of the university.

The university library users include the staff and students of the university-the undergraduate students of both regular, part time and the postgraduate students and other users from outside of the university community who have the permit to access the university library resources. According to Song and Song (2017) postgraduate students are students who are formally engaged in pursuing a course of study in a university with the aim of obtaining a postgraduate diploma, master’s degree or Doctor of Philosophy (Ph.D). The Postgraduate students form significant group of researchers in a university as they rely so much on electronic resources for their research and learning. Hence this research will use the postgraduate student users to evaluate the extent of use of electronic resources in university libraries in South Eastern Nigeria.

Statement of the Problem

With the emergence of Information and Communication Technology (ICT), academic libraries have strived to complement the prints resources with electronic resources in order to support the teaching, research and learning activities of the university institutions that established them. Electronic resources have made it easier for library users to have access to quality information resources in electronic form notwithstanding the geographical location of the library users. Unfortunately, it has been observed that these electronic resources are underutilized in the university libraries by the postgraduate library users despite the advantages they stand to gain from using them. Hence the research tries to find out the extent of use of these electronic resources by postgraduate library users in University libraries in Southeast Nigeria.

Objectives of the Study

The general purpose of this study is to investigate the availability of electronic resources and the extent of its utilization by postgraduate library users in university libraries in South East Nigeria. It has the following specific objectives:

1. to find out the types of electronic resources that are available in the university libraries under study.
2. to ascertain the extent of use of the available electronic resources by postgraduate students in the university libraries under study.

Research Questions

This study has two research questions that were formulated to reveal the extent of utilization of electronic resources by postgraduate library users:

1. What are the types of electronic resources available in the University libraries under study?
2. What is the extent of use of electronic resources by postgraduate students in the university libraries under study?

Significance and Justification of the Study

In a developing country like Nigeria, the application of information technology application in libraries is taking a snail pace when compared them with other developed countries where the application of information technology has long become a commonplace. Consequently, libraries as a matter of urgency acquaint themselves with electronic resources so as to recommend for their procurement (if they are not available) for their universities and ensure that library users access and utilize them (if the e-resources are available) in their various institutional libraries. Reason for selecting the university libraries is because this study has not been conducted in this geopolitical zone of Nigeria and as government owned university, the libraries have statutory sources of fund to acquire electronic resources unlike their private counterpart. The justification of this study is based on the fact that the findings will show the available electronic resources in the university libraries under study and reveal the extent of use of the resources by postgraduate library users. It will also encourage the university library administrators to know the level of electronic resources available in their libraries and can be challenged to improve on them if they are not adequate to achieve the information needs of the university community in teaching, research and learning activities.

Review of Related Literature

Electronic Resources

Electronic resources are concepts which evolved as a result of the rapid growth of information and communication technology. It has been described by different authors in different ways. Shukla and Mishra (2011) described electronic collection as the collection of information which can be accessed only by the use of electronic gadgets. International Federation of Library Association (IFLA) (2012) described electronic resources as those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile devices. They may be accessed remotely via the internet or locally.

Similarly, Mansur (2012) described electronic resources as electronic products that deliver a collection of data, be it text referring to full text databases, e-journals, e-books, image collections, other multimedia products and numerical, graphical or time based, as commercially available title that has been published with a sole aim of being marketed and for information dissemination. According to California State University (2005), electronic resources encompasses both full text and abstract/citation; e-journals, both individual and collections; e-books; e-article delivery services etc. It can be accessed remotely via the World Wide Web or delivered locally. In a related development, Ekwelem, Okafor and Ukwoma (2009) defined electronic resources as information resources that are available and can be accessed electronically through such computer networked facilities as online library catalogues, the Internet, the World Wide Web (WWW), digital libraries and archives, government portals and websites, CD-ROM databases, online academic databases, etcetera.

In a study of electronic resources carried out in the university of Chicago as cited by Oyedapo and Ojo (2013), the following forms of electronic resources were identified to include continuing resources (serials), integrating resources (websites & Databases), e-books, government publications. International Federation of Library Association (IFLA) (2012), Shukla and Mishra as cited in Igamoh and Duro (2012) enumerated the frequently used electronic resources in the library as e-books, books in electronic format, e-Journals, publication issued at regular interval and available electronically, e- Reference Books/database: electronic reference books or materials like biographies, dictionaries encyclopedias, etc. and e –audio/ visual resources, e- images, numerical and statistical databases, indexing and abstracting databases.

Similarly Haridasan and Khan (2009) posited that, there are two types of electronic resources: *data* (information in the form of numbers, letters, graphics, images, and sound, or a combination thereof) and, *programs* (instructions or routines for performing certain tasks including the processing of data and programs (e.g. online services, interactive multimedia). It

has been observed that the Internet has been the right and most extensively used channel to catch hold of the majority of e-resources through different search engines (e.g. Google, AltaVista, Msn, Yahoo, etc. etc.) and Webopac and, of course, some offline databases in CD/DVD formats that can even be accessed without the help of internet (Swain and Panda, 2009).

Extent of use of electronic resources

The use of electronic resources in libraries is an issue of much concern, though provision and availability of these electronic resources may not be an assurance that they are put into use by the users. Therefore, the uses of these resources by users are dependent on some factors such as the awareness of the resources and computer literacy skill. A research carried out by Chirra and Madhusudhan (2009) showed that 100% of doctoral research scholars are aware of the e-journals of the Consortium and access them. According to Ankrah, and Atuase (2018) these scholars were early adopters of e-journals and other electronic library resources and were more comfortable in accessing these information resources for their academic endeavours to complete usage.

Research Methodology

The research design adopted in this study is a descriptive survey. The researcher used three instruments for collecting primary data: checklist, questionnaire, and semi-structured interview. The questionnaire for heads of digital library units was open-ended because they were required to indicate electronic resources available in their libraries; while the questionnaire for postgraduate students were designed to ascertain their extent of use of the existing electronic resources in their university libraries.

The respondents were all the librarians in Collection Development, Serials, and E-library (Digital libraries) and the postgraduate students' users of the libraries under study. The population of this study consists of 2509 postgraduate library users and 86 librarians. The sample size of this study consists of 337 respondents made up of 86 librarians and 251 postgraduate students. A proportionate stratified random sampling technique was used in order to have a sample proportional to the size of the postgraduate library users of the libraries under study for data collection. The sample of the postgraduate library users was obtained using 10% of the population of the registered postgraduate library users in each university library under study. This is in line with the recommendation of Nwana (1981) who stated that for a population of a few thousands, total enumeration can be employed. The questionnaire items were distributed personally by the researchers by visiting the units of the university libraries used for this study and the research libraries for the postgraduate students to access the extent of use of the electronic resources in the university libraries. They were collected by the researchers to ensure maximum return and correctness. Data collected were tabulated and analyzed using simple statistics (mean).

Results and Discussion

Research Question 1: What are the types of electronic resources available in the University libraries under study?

The data providing answers to the above research question are presented in the table below.

Table 1: Types of electronic resources available in the university libraries under study

		Name of institution																					
S/ N	E- resour ces /Data bases	MOUA	NA	NAU	NA	FUTO	NA	UNN	NA	ABSU	NA	ASU	NA	EBSU	NA	ESUT	NA	IMSU	NA	A	N		
		A		A		A		A		A		A		A		A		A			A		
1	Health Intern	✓		✓		✓		✓		✓		✓		✓		✓		✓		9(10 0%)	0(0 %)		

	etwork k Access to Resea- rch Initia- tive (HINA- RI)	MEDLI	Publis- hers Medli- ne (PUBMED)	Access to Global Online Re-sou- rces in Agri- culture (AGOR-A)	Directo- ry of Open Access Journa- ls (DOAJ)	Online Access to Research in the Environ- ment (OARE)	JSTOR NEXUS	DOAB	The Es-sen-tial Electronic Agricu-ltural Librar-y (TEEAL)	Africa-n Journals Online (AJOL)	Directory of open access repository (Open DOAR)	Datab-se of African Thesis and Dissertation (DATA D)	Open Access Scholarly Information Sourcebook (OASIS)
2		v	v	v	v	v	v	v	v	v	v	v	v
3		v	v	v	v	v	v	v	v	v	v	v	v
4		v	v	v	v	v	v	v	v	v	v	v	v
5		v	v	v	v	v	v	v	v	v	v	v	v
6		v	v	v	v	v	v	v	v	v	v	v	v
7		v	v	v	v	v	v	v	v	v	v	v	v
8			v	v	v	v	v	v	v	v	v	v	v
9			v	v		v	v		v		v		v
0		v	v	v	v	v	v	v	v	v	v	v	v
1		v	v	v	v	v	v	v	v	v	v	v	v
2		v	v		v	v		v				v	
3			v	v		v		v					

14	Plant Resources of Tropical Africa (PROTA)	✓		✓		✓		✓		✓		✓		✓		✓		✓		3(33.3%)	6(66.7%)	N/A
15	E-books	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9(100%)	0(0%)	A
16	E-journals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9(100%)	0(0%)	A
17	E-zines	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
18	Online Public Access Catalogue (OPAC)		✓	✓		✓	✓		✓		✓		✓		✓		✓		✓	2(22.2%)	7(77.8%)	N/A
19	Science Direct	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9(100%)	0(0%)	A
20	Emerald	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9(100%)	0(0%)	A
21	Cellpress		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
22	ProQuest		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
23	Scopus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9(100%)	0(0%)	A
24	Nature Bundle		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
25	Web of Science		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
26	IEEE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
27	JayPe Digital Resources		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
28	Sabine		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
29	Researchpro	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9(100%)	0(0%)	A
30	Educational Resources Information Centre (ERIC)		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	3(33.3%)	6(66.7%)	N/A
31	International Network for the Availability of Science Publication (INASP)		✓	✓	✓	✓		✓	✓		✓		✓		✓		✓		✓	5(55.6%)	4(44.4%)	A
32	Nigerian Virtual Library	✓		✓		✓		✓	✓		✓		✓	✓		✓		✓		7(77.8%)	2(22.2%)	A
33	EBSCO Host Integrated Search	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6(66.7%)	3(33.3%)	A
34	NetWells		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0(0%)	9(100%)	N/A
	TOTAL	21(61.7%)	13(38.2%)	22(64.7%)	12(35.2%)	21(64.8%)	13(35.2%)	22(64.7%)	12(35.2%)	19(55.8%)	15(44.1%)	22(64.7%)	12(35.2%)	22(64.7%)	12(35.2%)	18(52.9%)	15(44.1%)	20(58.8%)	14(41.1%)			

The summary of the result as extracted and summarized from the above table shows that out of thirty-four (34) electronic resources listed on the checklist which are collection of databases, e-publications and other electronic resources that can be accessed with the aid of the internet are listed in the study, an aggregate of twenty (20) resources are available. The resources that are highly available in all the libraries under study are online databases such as EBSCO-Host, Medline, OARE, AGORA, AJOL, Jstor Nexus, e-books, and e-journals especially free online resources.

Also, the researcher observed that in Michael Okpara University of Agriculture, 21(61.7%) of the listed electronic resources are available, while 13(38.2) are not available. Nnamdi Azikiwe University Awka has 22 electronic resources representing 64.7% and 12 (35.2%) not available; Federal University of Technology, Owerri has 21(61.7%) available in their library while 13(38.2) not available; University of Nigeria Nsukka library has 22(64.7) available while 12(35.2) are not available; Abia State University Uturu has 19(55.8%) are available and 15(44.1%) not available; Anambra State University 22(64.7) available while 12(35.2) are not available; Ebonyi State University, 22(64.7) available while 12(35.2) are not available; Enugu State university, 18(52.9) are available while 15(44.1%) are not available; Imo State University, 20(58.8%) are available while 14(41.1%) are not available.

In addition to the above, the interview responses with the collection development librarians of the university libraries under study revealed that the libraries have in their collection institutional repository and other in-house electronic resources such as e-projects in their collection. Virtually all the libraries have Compact Disk Read Only Memory (CD-ROM) which is an offline resource but in electronic form.

Research Question 2: What is the extent of use of electronic resources by postgraduate students in the university libraries under study?

The data providing answers to the above research question are presented in table 2 below.

Table 2: Mean responses on extent of the use of these electronic resources in university libraries in South East Nigeria

	Name of institution										Overall =224	D
		MOUA	NAU	FUTO	UNN	ABSU	ASU	EBSU	ESUT	IMSU		
		N=38	N=43	N=16	N=165	N=16	N=8	N=12	N=17	N=9		
1	Access to Global Online Resources in Agriculture (AGORA)	3.08	2.91	3.19	3.23	3.00	3.13	3.08	2.76	3.67	3.09	GE
2	E-zines	3.21	2.86	3.00	3.15	3.00	2.88	3.33	3.35	2.78	3.08	GE
3	Publishers Medline (PUBMED)	3.13	2.98	3.13	3.09	2.81	2.88	3.50	2.88	2.89	3.05	GE
4	Health Internetwork Access to Research Initiative (HINARI)	3.11	2.72	3.19	3.00	3.06	3.13	3.42	2.65	3.33	3.00	GE
5	MEDLINE	3.16	2.86	3.06	3.05	2.81	2.50	3.08	2.94	2.78	2.98	GE
6	African Journals Online (AJOL)	3.03	2.47	3.25	3.28	3.06	2.88	3.08	2.88	2.56	2.98	GE
7	Science Direct	2.82	3.19	3.63	2.86	2.75	3.25	3.17	2.76	2.78	2.98	GE

8	NetWellNess	2.89	2.84	3.25	3.09	2.94	2.13	3.00	2.94	3.67	2.98	GE
9	Sabinet	2.79	2.86	3.44	3.03	3.00	3.00	3.33	2.59	2.56	2.95	GE
10	Database of African Thesis and Dissertation (DATAD)	2.95	2.60	3.19	3.17	3.50	2.88	2.83	2.24	2.78	2.93	GE
11	Plant Resources of Tropical Africa (PROTA)	2.92	2.51	3.13	3.12	3.00	2.75	3.25	2.88	2.89	2.93	GE
12	E-journals	2.89	2.88	3.13	2.94	2.38	3.00	3.33	2.82	3.11	2.92	GE
13	Online Access to Research in the Environment (OARE)	3.18	2.84	2.88	2.88	2.38	2.88	2.67	3.35	2.78	2.91	GE
14	Open Access Scholarly Information Sourcebook (OASIS)	2.89	3.07	2.25	2.74	3.06	3.25	2.42	3.29	3.11	2.88	GE
15	Educational Resources Information Centre (ERIC)	2.89	2.60	3.44	3.00	2.56	2.63	2.92	2.76	3.00	2.87	GE
16	Online Public Access Catalogue (OPAC)	2.71	2.86	2.94	2.86	3.13	2.38	2.92	2.94	3.11	2.86	GE
17	Emerald	2.73	2.93	3.13	2.89	2.81	2.38	2.75	2.47	2.89	2.83	GE
18	Research pro	2.76	2.63	3.31	2.94	2.94	2.50	2.67	2.82	2.89	2.83	GE
19	DOAB	3.11	2.77	2.75	2.89	2.81	2.38	3.17	2.65	1.78	2.82	GE
20	Nigerian Virtual Library	2.74	2.35	3.19	3.23	2.81	2.50	2.42	2.75	2.78	2.82	GE
21	JSTOR NEXUS	3.32	2.95	2.56	2.60	2.00	3.50	3.17	2.35	2.78	2.79	GE
22	IEEE	2.71	2.79	3.25	2.92	3.00	2.25	2.08	2.82	2.33	2.79	GE
23	ProQuest	2.61	2.86	3.13	2.83	2.94	1.63	3.25	2.71	2.33	2.78	GE
24	Directory of Open Access Journals (DOAJ)	2.61	2.47	2.69	2.97	2.88	3.38	3.33	2.59	2.56	2.77	GE
25	E-books	2.76	2.84	3.00	2.89	3.31	2.88	2.33	1.76	2.56	2.77	GE
26	JayPee Digital Resources	2.58	2.70	2.81	2.89	3.19	2.75	3.08	2.12	2.78	2.76	GE
27	Scopus	2.50	2.63	3.06	2.82	3.06	2.13	3.42	2.76	2.56	2.75	GE
28	Directory of open access repository (OpenDOAR)	2.61	2.72	2.69	2.80	2.44	2.13	2.25	3.35	3.33	2.73	GE
29	EBSCO Host Integrated Search	2.37	2.86	2.38	2.72	2.88	3.25	2.92	2.88	3.11	2.73	GE
30	Cellpress	2.66	2.53	2.69	2.60	3.25	2.88	3.08	2.71	3.11	2.71	GE
31	The Essential Electronic Agricultural Library (TEEAL)	2.42	2.63	2.19	2.62	3.19	2.88	3.33	2.53	3.33	2.67	GE
32	Web of Science	2.47	2.65	2.13	2.92	2.88	2.50	2.33	2.53	3.00	2.66	GE
33	International Network for the Availability of Science Publication (INASP)	2.71	2.53	3.06	2.55	3.19	3.00	2.33	2.47	2.44	2.65	GE
34	Nature Bundle	2.50	2.37	2.44	2.82	2.44	2.88	2.67	2.29	2.56	2.57	GE
Grand Mean		2.82	2.74	2.96	2.92	2.90	2.75	2.94	2.72	2.85	2.85	

Keys: VGE-Very Great Extent, GE-Great Extent, LE-Low Extent, NA-Not at All

Table 2 above shows the mean ratings of the respondents on the extent of the use of electronic resources in university libraries in the South East Nigeria. Using the principle of real limit of numbers, the results of the data analysis revealed that all the electronic resources are used to a great extent by the users. That shows that users access and use electronic resources for research and learning. Also, the overall mean showed that Access to Global Online Resources in Agriculture (AGORA) (mean = 3.08) is ranked highest, while nature (mean = 2.57) is ranked lowest when evaluating electronic resources by users in university libraries in the South East Nigeria.

Summary of the Findings

Types of E-Resources Available in University Libraries in South East Nigeria

The result from the findings revealed the types of e-resources available in university libraries in South East Nigeria. Research shows the types of e-resources available in the university libraries under study. These include, e-books, e-journals, online databases, indexing and

abstracting databases, subject databases, and other offline resources such as Compact Disk Read Only Memory (CD-ROM). Availability of a variety of information resource is what defines the worth of a library, especially in this electronic age. The types of e-resources available in these university libraries under study are mainly open access resources, free online resources and very few e-resources that the library can access through subscription or purchase. University libraries under study have in its collection, indexing and abstracting databases, reference databases, numerical and statistical databases, and EBSCO databases are the commonest databases found in all the libraries under study. Also observed in libraries under study are subject databases which include, Hinari, Medline, Oare, Agora, and other open access resources like DOAB, DOAJ and Jstor.

This finding has supported the study carried out by Tsakomas and Paptheodorou (2006) who listed e-resources to include e-books, e-journals online databases CD-ROM databases and other computer based electronic networks. *Isiakpona and Ifijeh (2012) study on the availability of electronic resources for service* supported this study by revealing that university libraries have electronic databases, the most common of the databases was Access to Global Online Resources in Agriculture (AGORA) while Institute of Electrical Electronic (IEEE) was the least common. Edem, Ani and Ocheibi (2009) observed that for a university library to perform its myriad of functions of supporting the parent body, its library collections must not only have quality and current books/journals, but also modern information sources in electronic formats, such as e-books, e-journals, internet etc.

The importance of e-resources in university libraries is enormous. According to Shukla and Mishra (2011), university libraries need e-resources in order to attain to the information needs of the library users. The availability of these resources has supported the under listed advantages by Shukla and Mishra (2011) which include that; e-resources are the quickest method of access of information in comparism to other traditional methods; its updating is easy for the producers and beneficial to users; it is more economical compared to traditional collection; it is also economical in terms of space, it requires no physical space; it is flexible and can be formatted to suit users; Its access and use may not be location or time specific; and it is easily searchable.

Extent of use of electronic resources by postgraduate library users of university libraries under study.

On assessment of the extent of use of electronic resources by the postgraduate student's users revealed that majority of the electronic resources is used to a great extent by the users. That shows that they are accessing it and using it for their research and learning. The study revealed that the postgraduate library users access and use them in their education. Also, the overall mean showed that Access to Global Online Resources in Agriculture (AGORA) (mean = 3.08) is ranked highest, while nature (mean = 2.57) is ranked lowest when evaluating electronic resources by users in university libraries in the South East Nigeria.

Conclusion

From the above analysis of the study, an aggregate of twenty electronic resources were indicated as being available in the nine university libraries in South-East Nigeria under study. These include, e-books, e-journals, online databases, indexing and abstracting databases, subject databases, and other offline resources such as Compact Disk Read Only Memory (CD-ROM). The study revealed that the postgraduate library users use the electronic resources to a great extent. The postgraduate library users use Access to Global Online Resources in Agriculture (AGORA) more and the least used are Nature which may be as a result of the subscription fees attached to Nature than the Access to Global Online Resources in Agriculture AGORA and other database.

Recommendations

Based on the findings, the study recommends the followings:

- The university libraries in South East Nigeria should increase the budgeting allocation of their libraries to enable the libraries improve subscription to electronic resources.
- There should be regular and fast internet facility in the libraries under study to enable postgraduate users access electronic resources for their research and learning.

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