

Availability and Awareness of Electronic Databases for Teaching and Research by Lecturers in Public Universities in South-West, Nigeria

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Abstract - The introduction of databases by university libraries has presented lecturers with opportunities of obtaining accurate, timely and up-to-date information with little effort. However, research reports have revealed that there is low level of awareness of electronic databases by university lecturers. Hence this study investigated availability and awareness of electronic databases for teaching and research by lecturers in public universities in South-west, Nigeria. The objectives of the study were to: (i) identify the types of databases available to lecturers in public universities in South-west, Nigeria; and (ii) examine the extent of awareness of available databases for teaching and research by university lecturers in South-west, Nigeria. The study adopted the descriptive research design of a correlational type. The population comprised 10,452 lecturers in fifteen public universities in South-west, Nigeria from which a sample size of 836 was drawn using a multi-stage sampling procedure. Questionnaire was used as instrument for data collection. Data were analysed using descriptive and inferential statistics at 0.05 level of significance. Findings of the study revealed that numerous electronic databases were available in public university libraries in South-west, Nigeria and that university lecturers' level of awareness of most of the electronic databases for teaching and research was above average (60.6%) as against below average reported in the literature. It can be concluded from the study that the university libraries in South-west, Nigeria are not creating much awareness of their electronic databases. It is therefore recommended that university libraries, especially in South-west, Nigeria should intensify their promotional activities geared towards marketing their electronic databases.

Keyword: Awareness, Electronic Databases, Lecturers, South-west, University

I. INTRODUCTION

Universities are established to fulfil a constitutional task of teaching and training the higher-level workforce required to provide technical, professional, and other socio-economic activities for the growth of the country. Universities are fortress of learning where high-level manpower needed for the social, economic, and political advancement of a nation are equipped and educated. University lecturers are involved in research, teaching, and community development as well as train students with thinking skills. All these call for the use of

information from different sources. The introduction of electronic databases by university libraries has presented lecturers with huge prospects of finding timely, accurate and up-to-date information with little or no effort.

Electronic databases are large, regularly updated file of digitized information related to a specific subject or field, consisting of records of uniform format organized for ease and speed of search and retrieval and managed with the aid of database management system software (Abubakar&Akor, 2017). The changes in the world of Information and Communication Technology (ICT) have shifted the content of library resources from printed information to online information resources (Israel &Edesire, 2016). ICT has also made electronic databases and other electronic sources of information available to users because e-learning is a new dimension in learning and thus affecting education in many ways (Bajpai, Hada&Bajpai,2016). As a result of technological revolution, libraries do not need to be in a physical space to be able to provide information to its users. This is because ICT is contributing significantly towards the removal of geographical barriers across the globe (Prakash, 2017). Libraries have also formed cooperation among themselves to facilitate resources sharing (Yebowaah& Plockey, 2017). These electronic databases are changing the landscape of information provision by university libraries.

Information explosion has increased the amount of available electronic databases. However, the level of awareness of these databases by library patrons is not encouraging. Kumar, Singh, and Yadav (2011) reported that access to the right information is a difficult task because information is abundant, but users do not know whether it is available and where to locate it. Awareness of databases affects their usage. When users have adequate information on what resources are available in the library, they are encouraged to use them as the need arises. Baro, Endower and Ubogu (2011) argued that though awareness may lead to usage of databases, but users' awareness level may be higher than usage. They reported that the awareness level of their respondents about online resources was more than usage. Similarly,

Eiriemiokhale and Ibeun (2017) found that there is a correlation between awareness, accessibility, and usage of library resources. The correlation, according to them, is that what one is not aware of is hardly desired and once something is not desired it will not be needed and once it is not needed, it will not be sought for and once it is not sought for, it will not be available and accessible for use.

II. OBJECTIVES OF THE STUDY

The study sought to:

1. Identify the types of databases available to lecturers for teaching and research in public universities in South-west, Nigeria; and
2. Examine the extent of awareness of available data bases for teaching and research by university lecturers in South-west, Nigeria.

III. RESEARCH QUESTIONS

1. What types of electronic databases are available to university lecturers in South-west, Nigeria?
2. To what extent are university lecturers in South-west, Nigeria aware of available electronic databases for teaching and research?

IV. RESEARCH HYPOTHESES

H₀₁: there is no significant relationship between awareness and usage of databases by lecturers in South-west, Nigeria.

V. REVIEW OF RELATED LITERATURE

Electronic databases are invaluable research tools that complement the print-based resources in a library setting. Many empirical studies (Israel and Edesiri, 2016; Naick and Bachalla, 2016) have reported that the use of electronic databases in the library is an effective way of increasing access and convenience in library utilisation. For example, Kumar and Gopalakrishnan (2016) exclusively demonstrated the effectiveness in digital libraries in universities. Their findings suggested that users of digital library systems were satisfied with the utilization of the resources. They also maintained that electronic databases are important in the design of modern libraries because of their relative convenience in usage.

Tiemo (2016) investigated the availability of electronic databases in university libraries in South- south, Nigeria. The descriptive survey research design was employed for this study. The population of this study consisted of 11 system librarians in charge of the e- library services. Data collection was done using structured questionnaires in a checklist format. The findings revealed that out of the 22 types of electronic databases listed, the federal universities had 17 namely: AGORA, HINARI, EBSCO

host resources, AJO, OARE, DATAD, TEEAL, INASP, MIT Open Course Ware, DOAJ, JSTOR, World Public Library, Lexisnexis, Questia, Ebrary, The Observatory and Egranary. While the state universities in South-south, Nigeria had 12 namely: AGORA, INARI, EBSCO Host Resources, AJOL, OARE, TEEAL, DOAJ, JSTOR, Ebrary, Oxford online journal, Biomed central and Aluka Publication. It was also revealed that six of electronic databases were available in both federal and state universities in South-south, Nigeria. These are AGORA, HINARI, EBSCO Host Resources, OARE, AJOL and TEEAL. However, Bibliomania and BLDS were reported not to be available in all the federal and state university libraries. This is an indication that university libraries in Nigeria are subscribing to electronic databases.

According to the Encyclopedia Britannica (2011), awareness is the state or ability to perceive, to feel or to be conscious of events, objects, or sensory patterns. Basiru and Okwilagwe (2018) stated that awareness raises consciousness and knowledge about a certain technology; it is personal and of social benefits. This view supported their study which established awareness as the central determinant of user attitude and behaviour towards technology. Aina (2014) investigated awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School. The survey research design was adopted. The entire population of study was 116. Simple random sampling technique was adopted. Questionnaire was the instrument used for data collection. The results showed that the level of awareness of electronic databases among the academic staff of Babcock Business School is varied. Majority of respondents were aware of academic Journal (69.4%), followed by JSTOR (56.5%), as well as Theses and Dissertation and Ebscohost (54.1) and (50.6) respectively. The analysis revealed that majority of respondents were not aware of Book boon, World Bank Open Knowledge Repository and National Virtual Library with (25.9%), (32.9%) and (29.4) respectively. Findings also showed that nine out of thirteen databases under consideration were averagely aware of by respondents. Also, the findings of Ibegwam, Ogunyade and Ajuwon (2013) about awareness and use of electronic databases by lecturers of two medical colleges in Nigeria, namely University of Ibadan and University of Lagos, showed that 80% of the respondents who were lecturers at different levels were aware about the availability of electronic databases in the two colleges of medicine libraries.

However, Anaraka and Babalhavaeji (2013) pointed out that where users are not aware of existence of electronic databases, they tend to use general search engines to meet their information needs. There is sometimes a gap between awareness and usage of digital resources. Either users are aware of the resources and use them, users are aware and do not use them, or they are not aware of them

and therefore do not use them. Lawal and Lawal (2015) investigated the factors of the accessibility of databases among users of Umaru Musa Yaradua, University, Katsina, Nigeria. One of the findings of the study was that awareness on the accessibility of electronic databases among the users was inadequate and this affects the accessibility of the electronic databases. The research recommended the need for increased awareness on databases subscription in the university library. The researchers posited that awareness and accessibility will increase the use of electronic databases, whether online or offline. They recommended regular training of lecturers on updating their knowledge of the many sources, and access to electronic databases from the university library. They recommended further that there should be an improvement in the provision of Internet facilities in faculty libraries.

Edem (2016) carried out a research on faculty awareness and utilization of the Essential Electronic Agricultural Library (TEEAL) database for teaching and research in the University of Calabar, Nigeria. The survey research method was used. Structured questionnaire was designed and used for data collection from lecturers of Faculty of Agriculture, Forestry and Wildlife Resources Management. Eighty (80) copies of the questionnaire were randomly distributed to the respondents in their offices. 60 copies of the questionnaire were retrieved and used for data analysis (with 75.0% respondent rate). Findings revealed that majority (88.3%) of the respondents were aware of TEEAL databases, while only a few (11.7%) indicated their non-awareness of the database in the library. This is an indication of usage of the electronic databases for teaching and research.

However, Okiki's (2012) study revealed that the level of awareness of available electronic resources by academic staff in University of Lagos was low. The results showed that out of 113 respondents, 61 (54.0%) indicated unawareness of e-resources when compared to 52 (46.0%) who agreed with level of awareness of electronic resources. This implies that the level of awareness of available electronic resources is quite low. This goes to show that the university library has not done enough in creating awareness to the users' community. On his part, Kwadzo (2015) investigated the awareness and usage of electronic databases by Geography and Resource Development Information Studies graduate students in the University of Ghana. The survey research design was adopted, and questionnaire was used to elicit data. 67 students from the two departments participated in the survey. The finding revealed that majority of the respondents has heard about the available databases. 97.0% responded in the affirmative. Also, Chirra and Madhusudhan (2009) in another survey on the use of electronic databases by doctoral research scholars of GOA University, India, revealed that all the respondents (100.0%) were aware of the electronic databases of the consortium and accessed them.

Yebowaah and Plockey (2017) investigated awareness and use of electronic databases by lecturers in University for Development Studies Library, Ghana. The study adopted a quantitative approach using a survey design. The findings revealed that majority of the respondents 52(65%) were aware of electronic databases in the library. However, 28 (35%) indicated that they were not aware of electronic databases in the library. The study further revealed the various channels through which lecturers became aware of the databases. 28 (35%) respondents indicated that their awareness of the availability of electronic databases in the library was through the UDS mailing system. It was also discovered that 19 (23.8%) agreed they had their information through internal memo from the librarian. Through personal interaction with librarians, 18 (22.5%) respondents were able to get information about electronic databases of the library. Besides, 15 (18.8%) respondents said it was through friends they became aware of electronic databases in the library and 12 (15%) respondents were aware through the library. The category of people who became aware through the library means that they discovered the resources themselves without any personal communication with the librarian. Also, 11(13.8%) respondents pointed out that, is through electronic databases sensitization workshop they were informed about electronic databases of the UDS library. Findings from the study further revealed that 9 (11.3%) respondents were aware of electronic databases of the UDS library through the university website while only 4 (5%) respondents were also aware through faculty board meeting. Meanwhile, the remaining 2 (2.5%) respondents indicated that they were aware of electronic databases of the library through issuance of posters and brochures.

Soyizwapi (2005) focused on the use of electronic databases by postgraduate students in the Faculty of Science and Agriculture at University of KwaZulu-Natal, Pietermaritzburg (UKZNP). The survey instrument was a self-administered questionnaire. The study sought to establish if postgraduate students used electronic databases and to identify problems postgraduates encountered and whether they were aware of the availability of such resources. The study found that students did use and became aware of the availability of electronic databases, through library orientation programmes and through other students. The study concluded that there was a need for training them on use of databases and a need for improving access for all campuses as well as off-campus users.

Sivasubramaniyan and Batcha (2012) indicated that academic libraries play a very important role to users in extending instructional services such as orientation and training in use of library resources. If efficient and effective use is to be made of library's electronic databases, then users training will have to increase in both intensity and coverage. It is important to remember that

the ability of library staff to keep up to date is necessary, and therefore, training for them is vital as well.

Madhusudhan (2010) carried out a study at Kurukshetra University to determine user's skills in handling electronic databases and the purpose of their use. Focus groups were conducted with research scholars of Doctor of Philosophy and Master of Philosophy (PhD and MPhil) from different departments. The research scholars who participated in this survey were aware of electronic databases and most of them used the resources in the support of their research and were thrilled at using the sources. Many research scholars learned about the electronic databases from their teachers, friends, or colleagues. This shows that electronic information sources will continue to be necessary components of the academic community.

Msagati (2014) conducted a study, investigating awareness and use of scholarly electronic databases by the academic staff of Dares Salaam University College of Education in Tanzania, while Baroet *al.*, (2011) carried out a similar study at the Delta State University, Abraka, both studies cited lack of awareness as the major challenge for non-utilization of electronic databases. Anaraki and Babalhavaeji (2013) also reported that the greatest obstacles to the use of electronic databases were inadequate information about the existence of these databases and lack of training. Similarly, Rehman and Ramzy (2004) asserted that while libraries purchase and install the latest, most technologically advanced computerised information systems and procure expensive resources, these may not be optimally utilised due to lack of awareness or lack of ability to use these resources by users. Okello-Obura and Magara (2008) also supported this notion of under-utilisation and stated that the common obstacle to the use of electronic databases in higher learning institutions was lack of awareness about the resources. It is evident from the above challenges that, academic libraries, especially systems librarians, subject librarians and other specialists have not fully embraced digital resources approaches, and therefore need to embrace them to effectively enhance access to and use of electronic databases.

Several studies have shown that scholarly electronic databases are becoming increasingly important to academics (Kwadzo, 2015; Basiru & Okwilagwe, 2018). However, in developing countries like Nigeria, studies

shown low level of awareness of electronic databases (Chima-James & Ogaraku, 2018).

VI. METHODOLOGY

A. Design

The study adopted descriptive research design of a correlational type. Correlational design uses the correlational statistic to describe and measure the degree of association (or relationship) between two or more variables or sets of scores (Creswell, 2014). Correlational design was adopted because it is suitable for establishing relationships between variables.

B. Population, Sample and Sampling Procedure

The population comprised 10,452 lecturers in public universities in South-west, Nigeria. A sample size of 836 was selected using guidelines of the Research Advisor (2006) at 95% confidence level and 0.035 margin of error. Multi-stage sampling technique was used to draw a sample from the population. At the first, two universities (one federal and one state) were purposively selected from each of the six states that make up South-west. At the second stage, proportional sampling technique was used to obtain the sample size for each of the universities. Finally, simple random sampling was used to select the sample from each of the universities, making a total of 836 lecturers from all the twelve universities that were used for this study.

C. Instrumentation

Questionnaire was used as instrument for data collection from the sample.

D. Method of Data Analysis

Data were analysed using descriptive and inferential statistics at 0.05 level of significance.

VII. RESULTS

A total of 836 copies of the questionnaire were distributed. However, after a thorough examination of the returned copies, 804 (96.0%) were properly completed and found usable for data analysis.

TABLE I PRESENTS THE DISTRIBUTION OF THE RESPONDENTS BY GENDER.

Gender	Frequency	Percentage (%)
Male	664	82.6
Female	140	17.4
Total	804	100

Table I shows that male respondents were more than their female counterparts with 524 (65.2%). Table II presents the distribution of the respondents by educational qualification.

TABLE II DISTRIBUTION OF THE RESPONDENTS BY EDUCATIONAL QUALIFICATION

Qualifications	Frequency	Percentage (%)
Bachelor's degree	55	6.8
Master's degree	322	40.7
Ph.D.	422	52.5
Total	804	100

Table II reveals the educational qualification of the respondents. It shows that majority of the respondents were Ph.D. holders with 422 (52.5%). Research question: what types of database are available to university lecturers in south-west Nigeria? In order to ascertain the

types of databases available to university lecturers in South-west, Nigeria, a list of common electronic databases was presented to the respondents.

Table III shows the types of databases available to university lecturers in South-west, Nigeria

TABLE III TYPES OF DATABASES AVAILABLE TO UNIVERSITY LECTURERS IN SOUTH-WEST, NIGERIA

SL.No.	Available Databases	Available		Not Available		Remark
1	AJOL (African Journal Online)	726	90.3	78	9.7	Available
2	DOAJ (Directory of Open Access Journal)	700	87.1	104	12.9	Available
3	International Research Journal	695	86.4	109	13.6	Available
4	Google Scholar	652	81.1	152	18.9	Available
5	Educational Resources Information Centre (ERIC)	510	63.4	294	36.6	Available
6	Encyclopaedia of Life Support System	471	58.6	333	41.4	Available
7	World Bank	467	58.1	337	41.9	Available
8	Database of African Thesis and Dissertation (DATAD)	509	63.3	295	36.7	Available
9	Academic Library Online	700	87.1	104	12.9	Available
10	INASP (International Network for the Availability of Scientific Publications)	504	62.7	300	37.3	Available
11	National Virtual Library	576	71.6	228	28.4	Available
12	JSTOR	504	62.7	300	37.3	Available
13	Cambridge Journals	500	62.2	304	37.8	Available
14	Chicago Journals	433	53.9	371	46.1	Available
15	Emerald	504	62.7	300	37.3	Available
16	Science Direct	472	58.7	332	41.3	Available
17	TEEAL (The Essential Electronic Agricultural Libraries)	439	54.6	365	45.4	Available
18	AGORA	180	22.4	624	77.6	Not Available
19	Sage Online Journal	294	36.6	510	63.4	Not Available
20	Ebscohost	280	34.8	524	65.27	Not Available
21	Digital Library for Earth System Education Online	285	35.4	519	64.6	Not Available
22	Sage OARE	213	26.5	591	73.5	Not Available
23	HINARI (Health Internet-Work Access Research Information)	284	35.3	520	64.7	Not Available
24	Bookboon	214	26.6	590	73.4	Not Available
25	Bio Med Centre	104	12.9	700	87.1	Not Available
Average Frequency and Percentage		449	55.8	355	44.2	Available

The results in Table 3 revealed that electronic databases such as AJOL, DOAJ, Science Direct, International Research Journal, World Bank, National Virtual Library, JSTOR, Cambridge Journal, Chicago Journal, Emerald, Google Scholar, TEEAL, INASP, Academic Library Online, DATAD, Encyclopedia of Life Support System and ERIC were available in university libraries in South-west, Nigeria. This finding agrees with Abubakar and Akpor's (2017) study which reported that electronic information databases were available to agricultural scientist in Federal University libraries in North-central, Nigeria. The finding is also in alignment with Tiemo's (2016) study which revealed that electronic information resources databases were available in Federal and State university libraries in South-south, Nigeria. It should be noted that Ani and Ahiauzu (2008) study had earlier

observed that there are available electronic information resources databases in some Nigerian university libraries either through free-based access or fees-based subscription.

This study found that some databases like HINARI, AGORA, Sage OARE, Biomed Centre, Book boon, Ebscohost, Sage Online Journal and Digital Library for Earth System Education Online were not available in the university libraries in South-west, Nigeria. This situation confirms the report of Tiemo and Ateboh (2015) that lacks funds have limited university libraries in Nigeria from providing electronic databases and other facilities to users.

TABLE IV AWARENESS OF DATABASES FOR TEACHING AND RESEARCH

Sl.No.	Awareness of Databases	Aware		Not Aware		
		%	F	%	Remark	
1	AJOL (African Journal Online)	771	95.9	33	4.1	Aware
2	DOAJ (Directory of Open Access Journal)	733	91.2	71	8.8	Aware
3	World Bank	467	58.1	337	41.9	Aware
4	Science Direct	728	90.5	76	9.5	Aware
5	International Research Journal	728	90.5	76	9.5	Aware
6	National Virtual Library	695	86.4	109	13.6	Aware
7	JSTOR	428	53.2	376	46.8	Aware
8	Cambridge Journals	500	62.2	304	37.8	Aware
9	Encyclopaedia of Life Support System	471	58.6	333	41.4	Aware
10	Educational Resources Information Centre (ERIC)	652	81.1	152	18.9	Aware
11.	Digital Library for Earth System Education Online	433	53.9	371	46.1	Aware
12	Emerald	428	53.2	376	46.8	Aware
13	Academic Library Online	728	90.5	76	9.5	Aware
14	Google Scholar	695	86.4	109	13.6	Aware
15	TEEAL (The Essential Electronic Agricultural Libraries)	510	63.4	294	36.6	Aware
16	INASP (International Network for the Availability of Scientific Publications)	652	81.1	152	18.9	Aware
17	Book boon	328	40.8	476	59.2	Not Aware
18	Chicago Journals	395	49.1	409	50.9	Not Aware
19	Biomed Centre	252	31.3	552	68.7	Not Aware
20	Sage Online Journal	295	36.7	509	63.3	Not Aware
21	Sage OARE	328	40.8	476	59.2	Not Aware
22	Database of African Thesis and Dissertation (DATAD)	324	40.3	480	59.7	Not Aware
23	AGORA	180	22.4	624	77.6	Not Aware
24	Ebscohost	285	35.4	519	64.6	Not Aware
25	HINARI (Health Internet-Work Access Research Information)	176	21.9	628	78.1	Not Aware
Average Frequency and Percentage		487	60.6	317	39.4	Aware

The availability of electronic databases in some public university libraries in South-west, Nigeria can be attributed to the current trends in information packaging and dissemination, especially in the sciences. The non-availability of other databases can be attributed to the seemingly poor financial support to the library by the university management. Most public university libraries in Nigeria heavily rely on TET Fund support for their funding which is usually insufficient.

Table IV shows that lecturers were aware of most electronic databases for teaching and research. The table also showed that some of the respondents indicated that they were not aware of the usefulness of some of the electronic databases for teaching and research. On the overall, 487 (60.6%) respondents indicated they were aware of the usefulness of electronic database for teaching and research, while 317 (39.4%) respondents indicated that they were not aware. It was revealed that lecturers in South-west, Nigeria were aware of databases such as AJOL, DOAJ, Science Direct, International Research Journal, World Bank, National Virtual Library, JSTOR, Cambridge Journal, Google Scholar, TEEAL, INASP, Academic Library Online, Digital Library for Earth System Education Online, Encyclopedia of Life Sciences and ERIC. This finding agrees with previous findings of Basiru and Okwilagwe (2018) who reported that majority of academic staff in universities in South-

west, Nigeria were aware of electronic databases. Similarly, the findings of Ibegwam, Ogunyade and Ajuwon (2013) reported that lecturers at different levels are aware about the availability of e-resources in the colleges of medicine.

The results further indicated that some of the respondents were not aware of the following databases: HINARI, AGORA, Sage OARE, Biomed Centre, Book boon, Ebscohost, Chicago Journal, Sage Online Journal and DATAD. This result is buttressed by the study of Aina (2014), which showed that the level of awareness of electronic resources among the academic staff of Babcock Business School is varied. This situation is worrisome as the lecturers are not aware of the usefulness of the databases for teaching and research.

The implication of this result is that the lecturers are not aware of some of the electronic databases for teaching and research. This result is a terrifying development as the interest of electronic databases developers is to increase usage of the databases. This development may not be unconnected with the low level of awareness currently created by university libraries. Most university libraries in Nigeria do not market their information products and services. Most of their patrons are unaware of most of their available services.

Hypothesis I: There is no significant relationship between awareness and usage of databases by lecturers in universities south- west, Nigeria.

Table V presents the summary of Pearson Product Moment Correlation (PPMC) analysis of correlation between perception of lecturers on the awareness of databases and usage of databases in South-west universities

TABLE V SUMMARY OF PPMC ANALYSIS OF CORRELATION BETWEEN PERCEPTION OF LECTURERS ON THE AWARENESS OF DATABASES AND USAGE OF DATABASES IN UNIVERSITIES (N=804)

Variable	Mean (\bar{X})	SD	df	Cal. r value	p- value	Decision
Awareness of Databases	24.00	2.86		0.005	0.88	Accepted
Usage of Databases	52.46	10.17	802			

The test of hypothesis shows that awareness of electronic databases is not statistically correlated with usage of electronic databases. Since *p*-value is greater than 0.05 significance level, the hypothesis was accepted. This means there was no significant correlation between perceived awareness and usage of databases by lecturers in South-west, Nigeria. Thus, awareness of database is not statistically correlated with usage of electronic databases (PPMC *r* value = 0.005, *p*>0.05). This finding disagrees with study of Eiriemiokhale and Ibeun (2017) which revealed that there is a correlation between awareness and accessibility and usage of library resources.

The finding is also at variance with that of Akpojotor (2016) which reported that in southern Nigeria, post-graduate students of Library and Information Science are quite aware and use electronic information resources. The implication of this study is that awareness is not the only factor affecting the usage of electronic databases. Further studies have revealed that awareness of electronic databases may not necessarily result in usage. It further shows that there are other factors which could affect usage of databases even in a situation where the awareness level is high.

VIII. SUMMARY OF FINDINGS

Findings of the study were that:

1. African Journal Online (90.3%), Directory of Open Access Journal (87.1%), International Research Journal (86.4%), Google Scholar (81.1%), Emerald (62.7%) among other databases were available to lecturers in public universities in South-west, Nigeria.
2. university lecturers' level of awareness of the usefulness of most of the electronic databases for teaching and research was above average (60.6%) against below average reported from literature; and
3. There was no significant correlation between awareness and usage of electronic databases by lecturers in universities in South-west, Nigeria.

IX. CONCLUSION

The study concluded that numerous electronic databases are available for teaching and research in public universities in South-west, Nigeria. The extent of awareness of available databases by university lecturers in South-west, Nigeria is above average.

X. RECOMMENDATIONS

Based on the finding so if this study, the following recommendations were made to improve the awareness of electronic databases by university lecturers in Nigeria.

1. Since information resources are necessary for teaching and research by lecturers, there is need for Nigerian university libraries to continuously subscribe to current, up-to-date and qualitative electronic databases to support the teaching and research of lecturers.
2. University libraries in Nigeria should intensify their promotional activities geared towards marketing their electronic databases. New campaign methods on social and new media should be adopted.

REFERENCES

- [1] Abubakar, M. S. & Akpor, P. U. (2017). Availability and utilization of electronic information databases for research by agricultural scientists in federal university libraries in North Central Nigeria. *Library Philosophy and Practice (e-journal)*. Retrieved from <http://digitalcommons.unl.edu>.
- [2] Aina, R. F. (2014). Awareness, accessibility and use of electronic databases among academic staff of Babcock University Business School. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 3 (6), 40-47.
- [3] Akpojotor, L. O., (2016). Awareness and usage of electronic information resources among postgraduate students of library and information science in southern Nigeria. *Library Philosophy and Practice (e-journal)*. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1408>.
- [4] Anaraki, L. N. & Babalhavaeji, F. (2013). Investigating the awareness and ability of medical students in using electronic resources of the integrated digital library portal in Iran: A comparative study. *The Electronic Library*, 31 (1), 70-83.
- [5] Angello, C. (2010). The awareness and use of electronic information sources among livestock researchers in Tanzania, *Journal of Information Literacy*, 4 (2), 6-22.
- [6] Ani, O. E. & Ahiazu, B. (2008). Towards effective development of electronic information resources in Nigerian university libraries. *Library Management*, 29 (6&7), 504-514.
- [7] Ayele, A. A. & Sreenivasarao, V. (2013). A case study of acceptance and use of electronic library services in universities based on SO-UTAUT model. *International Journal of Innovative Research in Computer and Communication Engineering*, 1 (4), 902-911. Retrieved from <http://www.ijirccce.com>.
- [8] Bajpai, R. P., Hada, K. S. & Bajpai, G. (2016). Academic libraries and e-learning: initiative and opportunities. *International Journal of Library & Information Science*, 5 (3), 159-165. Retrieved from <http://www.iaeme.com/IJLIS/issues.asp>.
- [9] Baro, E. E., Endouware, B. C. & Ubogu, J. O. (2011). Awareness and use of online information resources by medical students at Delta State University, Nigeria. *Library Hi Tech News*, 28 (10), 11-17.
- [10] Baro, E. E., Endouware, B. C. & Ubogu, J. O. (2011). Awareness and use of online information resources by medical students at Delta State University, Nigeria. *Library Hi Tech News*, 28 (10), 11-17.
- [11] Basiru, A. B. & Okwilagwe, O. A. (2018). Awareness of electronic databases by academic staff in private universities in South-west Nigeria. *Information and Knowledge Management*, 8 (4), 23-31. Retrieved from <http://www.iiste.org>.
- [12] Chima-James, N. O. G. & Ogaraku, D. N. (2018). Awareness and utilization of databases subscribed to by FUTO library among FUTO academic staff. *International Journal of Library and Information Science Studies*, 4 (2), 21-31. Retrieved from www.eajournals.org
- [13] Chirra, R. & Mahhusudhan, M. (2009). Use of electronic journals by doctoral research scholars of GOA University, India. *Library Hi Tech News*, 26 (10), 12-15.
- [14] Cresswell, J. W. (2014). *Research design: Qualitative and quantitative approaches*. London: Sage publications.
- [15] Eiriemiokhale, K. A. & Ibeun, M. O. (2017). Awareness, availability and accessibility of library resources by students of Kwara State University, Malete, Nigeria. *Library Philosophy and Practice*. Retrieved from <http://www.digitalcommons.unl.edu>.
- [16] Edem, N. B. (2016). Faculty awareness and utilization of the Essential Electronic Agricultural Library for teaching and research: A study of academic staff in the University of Calabar, Nigeria. *Education Journal*, 5 (3), 33-38. Doi: 10.11648/j.eu.20160503.11
- [17] Encyclopedia Britannica (2011). *Macropaedia (Knowledge in-depth) 10*. Chicago: Encyclopaedia Britannica.
- [18] Emwanta, M. & Nwalo, K. I. V. (2013). Influence of computer literacy and subject background on use of electronic resources by undergraduate students in universities in South-Western Nigeria. *International Journal of Library and Information Science*, 5 (2), 29-42. Retrieved from <http://www.academicjournals.org/IJLIS>.
- [19] Ibegwam, A., Ogunyade, T.O. & Ajuwon, A.G. (2013). Awareness and use of electronic information resources by academic staff of two medical colleges in Nigerian university. *Middle Belt Journal of Library and Information Science*, 11 (1), 74-91.
- [20] Israel, O. & Edesiriu, O. (2016). Undergraduates' computer skills and the use of online information resources: A case study of library and information science students of Delta State University, Nigeria. *International Journal of Academic Library and Information Science*, 4 (3), 87-93. Retrieved from <http://www.academicresearchjournals.org/IJALIS/Index.htm>.
- [21] Kumar, A., Singh, S. N. & Yadav, A. K. S. (2011). An investigation of use of information sources by social scientists. *Library Philosophy and Practice*. Retrieved from <http://www.digitalcommons.unl.edu>.
- [22] Kumar, M. M. & Gopalakrishnan, S. (2016). Use and views on e-learning materials among the LIS professionals: An empirical study. *International Journal of Library & Information Science (IJLIS)*, 5 (3), 09-23. Retrieved from <http://www.iaeme.com/IJLIS/issues.asp>.
- [23] Kwadzo, G. (2015). Awareness and usage of electronic data bases by Geography and Resource Development Information Studies graduate students in the University of Ghana. *Library Philosophy and Practice*. Retrieved from <http://www.digitalcommons.unl.edu>.
- [24] Lawal, M. T. & Lawal, B. (2015). Information literacy skills and accessibility of databases among undergraduate students of Umaru

- Musa Yar'adua University, Katsina. *Information Technologist*, 12 (2), 95-105.
- [25] Lunenburg, F. C. & Irby, B. J. (2008). *Writing a successful thesis or dissertation: Tips and strategies for students in the social and behavioural sciences*. California: Corwin Press.
- [26] Madhusudham, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. *The Electronic Library*, 28 (4), 492-506.
- [27] Msagati, N. (2014). Awareness and use of scholarly electronic journals by members of academic staff: A case study of Dar es Salaam University College of Education. *Library Philosophy and Practice*. Retrieved from <http://digitalcommons.unl.edu/libphilprac/>
- [28] Naick, B. R. D. & Bachalla, N. (2016). Application of digital forensics in digital libraries. *International Journal of Library & Information Science (IJLIS)*, 5 (2), 89-94. Retrieved from <http://www.iaeme.com/IJLIS/issues.asp>.
- [29] Naqvi, T. H. (2012). Use of electronic databases by postgraduate students and research scholars at GBPUAT library, India. *Library Philosophy and Practice*. Retrieved from <http://www.digitalcommons.unl.edu>.
- [30] Okello-Obura, C & Magara, E. (2008). Electronic information access and utilization by Makerere students in Uganda. *Evidence Based Library and Information Practice*, 3 (3), Retrieved from <http://www.ejournals.library.ualberta.ca>.
- [31] Okiki, O. C. (2012). Electronic information resources awareness, attitude and use by academic staff members of University of Lagos, Nigeria. *Library Philosophy and Practice*. Retrieved from <http://www.Uidaho.Edu/Mbohn/amireekhabhazan.htm>.
- [32] Prakash, I. N., (2017). Resource sharing: A library perceptive. *International Journal of Library & Information Science*, 6 (1), pp.19-22. Retrieved <http://www.iaeme.com/IJLIS/issues.asp>.
- [33] Rehman, U. S. & Ramzy, V. (2004). Awareness and use of electronic information resources at the Health Science Centre of Kuwait University. *Library Review*, 53 (3), 150-156.
- [34] Sivasubramaniyan, G. & Batcha, S.M. (2012). Dependency of electronic resources and information by the faculty members of Pondicherry University and its affiliated colleges: A study. *International Journal of Engineering Research and Development*, 2 (3), 16-21.
- [35] Soyizwapi, L. I. (2005). *Use of electronic databases by postgraduate students in the Faculty of Science and Agriculture at the University of KwaZulu-Natal, Pietermaritzburg* (Masterstheis). University of KwaZulu-Natal, Pietermaritzburg. Retrieved from <http://researchspace.ukzn.ac.za/handle/10413/1930>
- [36] Tiemo, P. A. (2016). Availability of electronic information resource databases in university libraries in South- south, Nigeria. *British Journal of Education*, 4 (13), 77-89. Retrieved from <http://www.eajournals.org>
- [37] Tiemo, P. A. & Ateboh, B. A. (2015). *Challenges to the development of information and communication technology in university libraries in Nigeria*. In Nnadi, C. Imhanlahimi, E.O., and Chikwendu, A. V. C (Ed.) Higher education in Nigeria: perspectives and reforms. Onitsha: Global Academic Group Online Academic Resources, 57-76
- [38] To gia, A. & Tsigilis, N. (2009). *Awareness and use of electronic information resources by education graduate students: preliminary results from Aristotle University of Thessaloniki*. Paper presented at the International Conference on Qualitative and Quantitative Methods in Libraries [QQML], Chania Crete Greece, 26-29 May. Retrieved from <http://www.isast.org/proceedingsQQML2009>
- [39] Yebowaah, F. A. & Plockey, F. D. D. (2017). Awareness and use of electronic resources in university libraries: A case study of University for Development Studies Library. *Library Philosophy and Practice*. Retrieved from <http://digitalcommons.unl.edu/libphilprac>.