International Journal of Education, Learning and Development
Vol. 5, No.2 pp.41-67, April 2017
Published by European Centre for Research Training and Development UK (www.eajournals.org)

USE OF ELECTRONIC INFORMATION RESOURCE DATABASES AMONG LECTURERS AND POSTGRADUATE STUDENTS IN UNIVERSITY LIBRARIES IN SOUTH-SOUTH NIGERIA

Pereware. A. Tiemo
The University Library, Niger Delta University,
Wilberforce Island, Yenagoa, Bayelsa State.
Pere_tiemo@yahoo.com

ABSTRACT: *The purpose of this study is to find out the utilization of electronic information resource databases in University libraries in South-South, Nigeria. 6 (six) research questions and 4 (four) hypotheses were formulated to guide the study. The survey design was employed. The population of the study was made up of 1,421 lecturers and 922 postgraduate students. Data collection was done through the use of questionnaire titled Utilization of Electronic Information Resource Databases in University Libraries (UEIRDUL).The research questions were analyzed using percentages, while z-test proportion of difference of significance was used to test the hypotheses at 0.05 level of significance. It was found that lecturers and postgraduate students in the federal and state university libraries use different types of EIR database. The level of usage of EIR databases by lecturers and postgraduate students in the federal and state university libraries in South-South, Nigeria was generally high as most of them indicated that they use these resources frequently for their academic activities. The proportion of lecturers and postgraduate students in the federal and state universities that use the EIR databases for different purposes do not differ significantly. It was recommended among others that librarians in both universities should identify non users of the EIR databases and effective steps should be taken to encourage them to use the databases.*

KEYWORDS: Utilization, EIR databases, Libraries, Universities in South-South, Nigeria.

INTRODUCTION

The application of information and communication technology (ICT) and it related facilities in higher institutions of learning and organizations in the past decades have brought several information products and services for our daily activities. Electronic Information Resources Databases (EIR Databases) are among the recent technological innovations in libraries. It is an invaluable resources for teaching, learning, research and community development in any academic environment because it provide up to date information resources to students in order to make them more interactive in class or discuss freely in group work and for their lectures to be more interesting. In addition to this, they also have the choice of information resources that makes teaching staff and students papers well researched. According to Olasore and Adekunmisi (2015) electronic information resources are materials that are provided in online that can be access and used electronically.

E-resources databases are resources in which information is stored electronically and can be accessed through online networks. E-resources is a very broad term that includes CD-ROMs, OPACs, Online database that consist of e-journals, e-books, web publishing and internet resources etc. In this context EIR databases means any electronic resources that are delivered online, be it in text, graphical or time based, numerical, as a commercial or non-commercial resource that are available online.(Chandra, Sankaranarayanan & Nagarajan, 2014)

A synthesis of definitions shows that EIR databases consist of online information resources such as the e-books, e-dictionaries, e-journals, e-reports, e-magazines, e-newspapers and other e-resources that are up loaded in a website, accessed by a computer connected to internet and used either by printing the resources or online directly for various activities such teaching, learning, research and community development. Some of these databases are Ebscohost, Medline, Health Internetwork Access to Research Initiative (HINARI), The Essential Electronic Agricultural Library (TEEAL), Directory of Open Access Journals, MIT open course ware etc.

These resources are categorized into two: fee and non-fee based. The fee based databases are those that most academic and research libraries purchase through subscription in order to provide to students, lecturers and administrative staff with online information resources while the non-fee base databases are those provided online after one year of publication for free or made free immediately after publication online. This paper therefore present an empirical perspective of the use of electronic information resource databases among lecturers and postgraduate students in university libraries in South-South Nigeria.

Research Questions

The following research questions were formulated to guide the research:

1. What are the types of EIR database being utilized by lecturers in federal and state university libraries in South- South, Nigeria?
2. What are the types of EIR database being utilized by postgraduate students in federal and state university libraries in South- South, Nigeria?
3. How often do lecturers utilize the EIR databases in teaching and research in federal and state university libraries in South-South, Nigeria?
4. How often do postgraduate students utilize the EIR databases in learning and research in federal and state university libraries in South-South, Nigeria?
5. What are the purposes for which lecturers utilize the EIR databases in federal and state university libraries in South-South, Nigeria?
6. What are the purposes for which postgraduate students utilize the EIR databases in federal and state university libraries in South-South, Nigeria?

Hypotheses

The study tested the following null hypotheses:

1. There is no significant difference between the proportions of lecturers in the federal and state universities that utilize the EIR databases.
2. There is no significant difference between the proportions of postgraduate students in the federal and state universities that utilize the EIR databases.

3. There is no significant difference between the percentage of lecturers in the federal and state universities that use the EIR databases for different purposes.
4. There is no significant difference between the percentage of postgraduate students in the federal and state universities that use the EIR databases for different purposes.

REVIEW OF RELATED LITERATURE

Utilization of EIR Databases by Lecturers and Postgraduate Students.

Electronic information resources are becoming important these days as they provide up- date information resources that can be accessed by users irrespective of their geographical boundaries for teaching, learning and research. Many studies have been conducted on EIR databases usage, in a study carried out by Kwado (2015) the study revealed that majority of the students consult JSTOR, AGORA, Emerald and ScienceDirect. EIRs databases in University Ghana library. The study further revealed the usage of databases was encouraging. They further suggested that librarian and faculty members should promote the use of databases to students.

Similarly, Kofi (2014) observed that there is an increase in the use of EIR databases in universities in developing nations and it was also found that the commonly used resources are Elsevier, EBSCO host resources, AGORA, Thomson, JSTOR, Scopus, Questia, Proquest, Emerald, DATAD Science Direct and Springer Link, DOAJ, OARE, HINARI, TEEAL, Ebrary, AJOL and MIT Open Course Ware EIRs databases than print resources in teaching, learning and research work among academic staff in private Universities in Ghana.

Gupta (2013) said that Universities in developing nations are relying on open access resources that are non-fee based databases. They should build their collection by subscribing to other databases were lecturers and students can have wide range of EIR databases for their academic activities. The reasons why open access resources are highly used is because universities have free access when connected to the web. Universities in Africa and other developing nations are still struggling to bridge the digital gap, however several international and national organizations provide access to free or discounted databases through programmes like HINARI, OARE, AGORA.

Tajafari (2014) conducted a study on accessibility and use of electronic journals at Iranian University Libraries. Among the result of the study revealed that Elsevier Science, Spring-Verlag and Wiley-Blackwell are among the major databases accepted been used by respondents used for the study. Kwafoa, Osman, and Afful-Arthur (2014) carried out a study on assessment of the use of electronic resources among administrators and faculty in the University of Cape Coast. Among the objectives of the study was to investigate the faculty usage of EIR databases for their academic work. The study showed that the following databases were highly used Emerald, Ebsco host, Hinari, Sage Journals and Jstor.

Frequency of Use of EIR Databases by Lecturers and Postgraduate Students in Universities

Students' e-information seeking behaviour at KSCE, Kiit University, India, was conducted by Swain and Panda (2013) the aims of the study was to investigate the frequency of usage of electronic information resource databases among the students. The study revealed that sixty one (61) accepted using it daily, twelve (12) respondents accepted using weekly, six (6) respondents

accepted using it fortnightly, five (5) respondents accepted using it once a month and three (3) respondents accepted using it rarely. In a study conducted by Manda (2005) on electronic resources usage in academic and research institutions in Tanzania, it was revealed that the frequency of use of the various databases were as follows: Ebsco host had one respondents, Blackwell had four respondents and AJOL had seven respondents that accepted using it daily. Emerald had four respondents, OUP had four respondents and AJOL had six respondents that accepted using it three times per week. OUP had four respondents, Ebsco host had five respondents, Blackwell had six respondents and AJOL had six respondents that accepted using it once per week. OUP had eight respondents, Emerald had four respondents and Blackwell had three respondents that accepted using these databases once per month.

Zainab, Huzaimah and Ang (2006) in their study found out that ninety respondents who answered the question of frequency of use were heavy users of electronic journals, thirty nine (39) users access it weekly, those who access it daily had fifteen (15) users and monthly twelve (12) users. It was shown that faculty members tend to use the e-databases more frequently. Khan and Ahmed (2009) study also revealed the use of e-databases by research scholars at Aligarh Muslim University and Banaras Hindu University as follows 55.69 % of researchers at Aligarh Muslim University and 47.84% at Banaras Hindu University use e-journals daily, while 20.33% of researchers of Aligarh Muslim University and 26.72 % of Banaras Hindu University use e-journals 2-3 times in a week. 18.70% researchers in Aligarh Muslim University and 20.69% Banaras Hindu University researchers use e-journals on a weekly basis. Only a small number 5.28 % at Aligarh Muslim University and 4.75% at Banaras Hindu University use them occasionally, i.e. less often than once a week. This study did not reveal the frequency of use of the various types of EIRs. It only revealed the use of EIRs generally.

Kaur and Verma (2009) conducted a study on use and impact of electronic journals in the Indian Institute of Technology, Delhi, India. On extent of EIR databases usage out of 825 respondents, 232 (28.12 %) did not answer the question. 11 undergraduates (5.64 %) use EIR databases daily, 30 (15.38 %) 2/3 times a week, 28 (14.36 %) once a week, and 126 (64.62 %) occasionally. Thus, the maximum number of undergraduates used EIR databases occasionally. Similarly, 41 (19.34 %) postgraduates used EIR databases daily, 83 (39.15 %) 2/3 times a week 31 (14.62 %) once a week and 57 (26.89 %) occasionally. The results show that maximum number of postgraduates used EIR databases 2/3 times a week. Further, as many as 41 (31.78 %) research scholars used EIR databases daily 38 (29.46 %) 2/3 times a week, 15 (11.63 %) once a week and 35 (27.13 %) occasionally. Lastly, as many as 4 (7.02 %) faculty members used EIR databases daily, 46 (80.70 %) 2/3 times a week, and 7 (12.18%) once a week.

In a similar study conducted by Swain and Panda (2009) on access and use of electronic resources in business school libraries, a study of librarians' opinion. The findings showed the frequency of utilization of EIR databases in daily, 2-3 times a week, monthly and no usage. Faculty members 13 (52%), 5 (20%). 1 (4%). 6 (24%), Lecturers 11 (44%), 6 (24%), 8 (32%) and Students 15 (60%), 3 (62%), 1 (4%), 6 (24%) respectively in business school libraries. It was observed that lecturers frequency of utilization starts from monthly. None of them accepted accessing and utilizing the EIRs daily and weekly for learning and research work. Oduwole and Oyewumi (2010) conducted a study on accessibility and use of web-based electronic resources by physicians in a psychiatric

institution in Nigeria by psychiatric medical doctors, which includes consultants and resident doctors the population was twenty eight. The questionnaire was used in gathering information. It was revealed that majority of the respondents used the Medline and Fronter e-resource databases once a week and twice a week.

Among the objectives of the study of Ekwelem, Okafor and Ukwoma (2009) was to determine the frequency of EIR databases usage among students in university of Nigeria Nsukka. The findings showed that 136 (25.5%) respondents use it very often, 168 (31.5%) respondents use it often, 170 (31.8%) respondents use it sometimes and 60 (11.2%) respondents use it not very often. This shows that majority of the respondents used the EIR databases often. Online journals and databases: a study of use and awareness among academics at main library, I.T., B.H.U was conducted by Upadhyay and Chakraborty (2008) the study showed that only 21.87% respondents' access online journals and databases every day, 25% access 2-3 times a week, 31.25% once a week and 21.87% indicated occasionally. Omotayo (2010) reported on access, use, and attitudes of academics toward electronic journals: a case study of Obafemi Awolowo University, Ile-Ife. The frequency of use showed that 22 (8.98%) of the respondents use the e-journal daily, 67 (37.35%) of the respondents use the weekly, 102 (41.63%) of the respondents use the e-journal monthly, 34 (13.88%) of the respondents use the e-journal b-monthly, 20 (8.16%) of the respondents use the e-journal occasionally.

Shukkla and Mishra (2011) conducted a study on use of electronic information resources by research scholars in Institute of Technology, Banaras Hindu University, India. Among the aims of the study was to find out the frequency of usage of EIR databases among the scholars. The finding shows that 38 (76%) respondent accepted using it daily, 11 (22%) respondent accepted using it 2-3 weekly and 01(0.2%) respondent accepted using it monthly. Similarly Malemia (2014) conducted a study on the use of electronic journal articles by academics at Mzuzu University, Malawi. One hundred and six four staff was used for the study and the instrument used for data collection was the questionnaire. The study shows that majority of the staff use the EIR databases daily, twice a week, once a month.

Purposes for which Lecturers and Postgraduate Students Utilize the EIR Databases in Universities

Previous work showed that there are various purposes in which lecturers and postgraduate students utilize electronic information resources in universities. Ndinoshiho (2010) conducted a study on the use of electronic information services by undergraduate nursing students at the University of Namibia's Northern Campus. The study used a descriptive survey design. The questionnaire was used in eliciting information from nursing students at the Main Campus of the University of Namibia in Windhoek. Out of 163 questionnaires distributed, a total of 132 were completed, representing a good response rate of 81 percent. The data collected were analysed using SPSS version 15.0 for Windows 2006. The finding revealed that the EIR databases were used predominantly for educational purposes. Majority of the respondents 87.3% indicated that they used it for class assignments, while 54.2% reported that they used it to read newspapers, and 28.8% said they used it for other purposes. 10.1% used it for administrative purposes and 83.3% use the e-database to find information for class assignment.

Manda (2005) studied the electronic resources usage in academic and research institutions in Tanzania. Among the objective of the study was to find out the purposes of using EIR databases. It was revealed that 2 undergraduates, 13 graduates and 18 lecturers accepted using it for literature search. One graduate and 17 lecturers accepted that they used it as teaching/lecturing material. Three undergraduates and 15 graduates accepted that they use it for assignment. Zainab, Huzaimah and Ang (2006) conducted a study on the use of e-journal using 330 registered student of University of Malaya, the result showed that 30(27.3%) respondents search for new information, access to full text article had 26 (23.6%) respondents, reading of abstract had 20 (18.2%) respondents and checking for bibliography citation had 8 (7.3%) respondents. Romero-Otero, Iglesias-Fernández and Giménez-Toledo (2013) conducted a study on Use, acceptance and expectations for the e-book in a research library. 62 academic researchers were used for the study. The online questionnaire was used in gathering information. The finding shows that majority of the academic researchers' use the e-resources for research work, writing of articles and for lecture preparation.Shukkla and Mishra (2011) studied the use of electronic information resources by research scholars in Institute of Technology, Banaras Hindu University, India. Among the aims of the study was to find out the purposes of usage of EIR databases among the scholars. The study showed that 44 (88%) of the scholars accepted that they use it for research, 19 (38%) of the scholars accepted that they use it for publishing articles, 15 (30%) of the scholars accepted that they use it for searching for relevant information and 11 (22%) of the scholars accepted that they use it for updating their knowledge. It could be seen that majority of the scholars use the resources for research. Hadjnicola and Soterious (2005) claimed that research output has a significant impact on promotion, increase in salaries and decision making.

Adeniran (2013) conducted a research on usage of electronic resources by undergraduates at the Redeemer's University, Nigeria. Among the objective of the study was to determine the purposes of usage of electronic resources by students. The survey research method was adopted for this study, the questionnaire was used in gathering data from 256 respondent. The result for the purposes for which they use the EIR databases showed that 147 (12.8%) indicated that they used them for current awareness purpose. 232 (20.3%) agreed they used them to acquire information, 250 (21.8%) indicated that they used electronic resources for assignment and 140 (12.2%) of them indicated that they used electronic resources for acquisition of knowledge. A study conducted by Ojo (2014) on awareness and use of electronic information resources in Pan African University. The study revealed that majority of the postgraduate students use the EIR databases for group discussion, conferences, for recreation and leisure, sharing of knowledge through social networking sites and writing of their theses work. That the internet has made it possible for all students in all categories to search for online database resources. Ekwelem, Ukoma and Okafor (2009) research on students' utilization of electronic information sources at the University of Nigeria, Nsukka. The survey approach was used for this study with data being collected through a questionnaire. 600 questionnaire were distributed but 568 was found useful. Questions on purposes usage of EIR databases were among the question asked in the questionnaire. It revealed that class assignment had 162 (28.5%), newsgroup had 24 (4.2%) general information 279 (38.5%), e-conferencing 6 (1.3%), e-learning 44 (9.2%) this show that very few used EIR databases for the purpose of e-conferencing.

Ogunyade and Oyibo (2003) studied the use of CD-ROM MEDLINE by Medical Students of the College of Medicine, University of Lagos, Nigeria. The Medical Library of the College of Medicine, University of Lagos, was used for the study. 340 questionnaires were administered and 250 were duly completed. The result showed that students used MEDLINE on CD-ROM for preparing for examination had 22%, personal interest had 20%, research had 24%, patient care had 6% and preparation of assignments or clinical cases had 26%. Sangowusi (2003) conducted a study patterning the problems of accessing scholarly publications by Nigerian scientists: a study of the University of Ibadan. The study aimed at investigating the impact of EIR databases on scholarly publication of scientists in Nigerian universities. The descriptive type of study was used and the random sampling was used in choosing the sample size 200. The instrument for data collection was the questionnaire. 128 were returned and all were found usable. The findings shows that 121 (94.5%) respondents accepted that the EIR databases increase their communication pattern. 122 (95.3%) respondents accepted that it improved their quality of work.125 (97.7%) respondents accepted that it widened their scholarly publications. 106 (82.85%) accepted that it produced more work in less time 124 (96.8%) respondents accepted that it made it easier to find relevant information. Sansnee and Wallin (2002) conducted a study on use of formal and informal methods to gain information among faculty at an Australian regional university. The result of the study showed that faculty members use the e- resources databases in preparing for seminars, e-conference, writing of books and scholarly Web sites publications.

Damilola (2013) researched on Use of Electronic Resources by Distance Students in Nigeria: The Case of the National Open University, Lagos and Ibadan Study Centers. Among the objective of the study was to find out the purposes which respondents used the EIR databases for. The study adopted the survey method and the use of self-designed questionnaire in gathering information from respondents. The finding shows that majority of the respondents 76 (30.4%) in the two study centers make use of the available electronic information resources mostly for knowledge acquisition and learning purposes. This was followed by information exchange which constituted 73 (29.2%) of the respondents. 16 (6.4%) respondents utilize these electronic information resources for thesis/dissertation write up. The findings revealed that the most significant use of electronic information resources by the distance learners in both the Lagos and lbadan study centers of the National Open University was for knowledge acquisition and learning purposes as well as information exchange. It could be seen that a number of studies have been carried out on EIR databases, no in-depth study has been carried out on use of EIR databases among lecturers and postgraduate students in University libraries in South-South, Nigeria. The present study is an attempt to find the types of EIR databases used, frequency of usage and purposes of using EIR databases.

METHODOLOGY

The survey design was used for the study. The population of the study was made up of 1,421 lecturers, 922 postgraduate students. 1,005 lecturers were from federal universities and 416 lecturers from state universities, while out of the 922 postgraduate students, 582 were from federal universities and 340 were from state universities. The population for this study was taken from the library users' register of the various universities in the four (4) federal and three (3) state universities in South- South, Nigeria. The entire population was used for the study in order to have

adequate representation of the views of the entire members of the population. Data collection from respondents was done through questionnaire developed by the researcher titled: Utilization of Electronic Information Resource Databases in University Libraries (UEIRDUL). Research question1 - 6 were analyzed using percentage while the hypotheses was tested using z- test of proportion of difference at 0.05 level of significance.

Data Analysis.

Two thousand three hundred and forty three (2,343) copies of the questionnaire were administered to lecturers and postgraduate students' and1,537 were returned. 1500 were found useful for the study. Out of the 1,500, lectures in the federal universities were 620 and in the state universities were 311, postgraduate students in the federal universities were 345 and in the state universities were 224.

Research Question 1: What are the types of EIR databases being utilized by lecturers in federal and state university libraries?

Table 1: Number and Percentage of Lecturers in Federal and State Universities that Utilize the various Types of EIR Databases.

	Federal universities (N 620)		**State universities (N 311)**	
EIR Databases	**No. that are used**	**% that are used**	**No. that are used**	**% that are used**
AGORA	167	73	86	28
HINARI	180	71	91	29
EBSCO Host Resources	201	68	87	28
AJOL	185	70	22	7
OARE	176	72	85	27
DATAD	45	93	-	-
TEEAL	161	74	62	20
INASP	97	84	-	-
MIT Open Course Ware	100	84	-	-
DOAJ	94	84	83	27
JSTOR	98	84	44	14
Other types of EIR database				
World Public Library	50	92	-	_
Lexisnexis	38	94	-	-
Questia	28	95	-	-
Ebrary	43	93	45	14
The Observatory	43	93	-	-
Egranary	40	94	-	-
Oxford online journal	-	-	39	13
Biomed central	-	-	34	11
Aluka publications	-	-	28	9

From table 1, it was observed that, of the 20 types of EIR database listed 17 were used by lecturers in the federal universities and 12 in the state universities. The 17 types used by lecturers in the

federal universities were AGORA 167 (27%), HINARI 180(29), EBSCO Host Resources 201 (32%), AJOL 185 (30%), OARE 176 (28%), DATAD 45 (7%), TEEAL 161 (26%), INASP 97 (16%), MIT Open Course Ware 97(15%), DOAJ 92(15%), JSTOR 98 (16%), Lexisnexis 38(6%), World Public Library 50 (8%), Ebrary 43 (7%), The Observatory 43 (7%), Egranary 40(6%) and , Questia 28 (5%), lecturers accepted using these types of EIR database.

The 12 types of EIR database used by lecturers in the state universities were; AGORA 86 (28%), HINARI 91 (29%), EBSCO Host Resources 87 (28%), OARE 85 (27%), TEEAL 62 (20%), DOAJ 83 (27%), JSTOR 44(14%), Ebrary 45(14%), Oxford online journal 39(13%), Biomed central 34 (11%), Aluka publications 32 (10%) and AJOL 22 (7%). It could be deduced that higher percentage of lecturers in the federal universities used the EIR databases than those in the state universities and the most highly used types of EIR database in the federal universities are EBSCO Host Resources, AJOL, HINARI, OARE, TEEAL and AGORA, while in the state universities are HINARI, EBSCO Host Resources, AGORA, OARE, DOAJ and TEEAL.

It could be said that the types of EIR database used among lecturers in the federal universities were more than those used by lecturers in the state universities. It was also seen that the most used types of EIR database in both federal and state universities were EBSCO Host Resources, HINARI, OARE, TEEAL, AGORA and DOJA. It could be seen that lecturers in both category of universities, the Free based EIR databases were mainly used than the Fee based EIR databases.

Research Question 2: What are the types of EIR database being utilized by postgraduate students in federal and state university libraries in South-South Nigeria?

To determine the types of EIR databases being utilized by postgraduate students in Federal and State University libraries in South-South Nigeria, they were requested to indicate the types of EIR database they used. There were 345 postgraduate students in the federal universities and 224 in state universities. The responses are presented in table 2.

Table 2. Number and Percentage of Postgraduate Students in Federal and State Universities that Utilize the various Types of EIR Databases.

	Federal universities (N345)		**State universities (N224)**	
EIR databases	**No. that are used**	**% that are used**	**No. that are used**	**% that are used**
AGORA	138	40	73	33
HINARI	121	35	48	21
EBSCO Host Resources	154	45	87	39
AJOL	138	40	13	6
OARE	91	26	79	35
DATAD	9	3	-	-
TEEAL	115	33	39	17
INASP	68	20	-	-
MIT Open Course Ware	86	25	-	-
DOAJ	90	26	83	37
JSTOR	85	25	64	29
Other types of EIR database.				
World Public Library	34	10	-	
Lexisnexis	29	8	-	
Questia	37	11	-	
Ebrary	18	15	45	20
The Observatory	34	10	-	
Egranary	33	10	-	
Oxford online journal	-	-	13	6
Biomed central	-	-	12	5
Aluka publications	-	-	9	4

The results in table 2, indicate that, of the 20 types of EIR databases listed, 16 were used by postgraduate students in the federal universities and 12 in the state universities. The 16 types used by postgraduate students in the federal universities, starting from the highest to the lowest are as follows: EBSCO Host Resources 154 (45%) AJOL 138 (40%), AGORA 138(40%), HINARI 121(35%), TEEAL 115 (33%), OARE 91 (26%), DOAJ 90(26%), MIT Open Course Ware 86(25%), JSTOR 85 (25%), INASP 68(20%), Questia 37 (11%), World Public Library 34 (10%), The Observatory 34 (10%), Egranary 33 (10%), Lexisnexis 26 (8%), Ebrary 18 (15%) and DATAD 9(3%), The 12 types of EIR database used by postgraduate students in the State universities, starting from the highest to the lowest are as follows: EBSCO Host Resources 87 (39%), DOAJ 83 (37%), OARE 79 (35%), AGORA 73 (33%), JSTOR 64(29%), HINARI 48

(21%), TEEAL 39 (17%), (13%) Ebrary 15(7%), AJOL13 (6%), Oxford online journal 13(6%), Biomed central 12(5%) and Aluka publications 9(4%).

It could be seen that higher percentage of postgraduate students in the federal universities used the EIR databases than those in the state universities and the most highly used types of EIR database among postgraduate students in the federal universities are EBSCO Host Resources, HINARI, AGORA, TEEAL, OARE, TEEAL, DOAJ, MIT Open Course Ware and JSTOR, while in the State Universities are EBSCO Host Resources, DOAJ, OARE, AGORA and JSTOR.
This revealed that the types of EIR database used among postgraduate students in the federal universities are more than those used by postgraduate students in the state Universities in South-South, Nigeria. It could be seen that the commonly and highly used types of EIR database in both federal and state universities postgraduate students are EBSCO Host Resources, HINARI, OARE, TEEAL, AGORA, DOJA, MIT Open Course Ware and JSTOR. It could be also said that postgraduate students in both category of universities the Free based EIR databases were mainly used than the Fee based EIR databases

Research Question 3:
How often do lecturers utilize the EIR databases in learning and research in federal and state university libraries?

To determine how often lecturers in the federal and state universities in South-South, Nigeria use the EIR databases in learning and teaching, they were requested to indicate their frequency of usage of the various resources. There were 620 lecturers in the federal universities and 311 in state universities. Their responses are presented in table 3.

Table 3. Frequency of Use of EIR Databases by Lecturers in Federal and State University.

EIR databases	Federal Universities													State Universities											
	1		2		3		4		5		6		Total	1		2		3		4		5		6		Total
	N	%	N	%	N	%	N	%	N	%	N	%		N	%	N	%	N	%	N	%	N	%	N	%	
AGORA	-	-	21	13	59	35	19	11	46	28	22	13	167	-	-	8	9	4	5	27	31	34	39	15	17	86
HINARI	-	-	23	14	29	16	46	26	59	32	23	13	180			6	2	26	27	26	27	20	22	13	14	91
Ebsco Host Resources	-	-	-	-	126	63	40	20	16	8	19	9	201			10	12	4	5	32	37	26	30	15	17	87
AJOL	-	-	-	-	78	42	48	26	37	20	22	12	185	-		-	-	-	-	10	46	8	36	4	18	22
OARE	-	-	4	2	52	30	33	19	68	39	19	11	176	-	-	4	5	16	19	14	16	39	46	12	14	85
DATAD	-	-	4	9	5	11	17	38	13	29	6	13	45	-	-	-	-	-	-	-	-	-	-	-	-	-
TEEAL	9	6	12	8	35	22	52	32	35	22	18	11	161	-	-	-	-	14	23	23	37	13	21	12	19	62
INASP	-	-	3	3	28	29	2	2	50	52	14	14	97		-	-	-	-	-	-	-	-	-	-	-	-
MIT Open Course Ware	-	-	15	15	13	13	39	39	13	13	20	20	100	-	-	-	-	-	-	-	-	-	-	-	-	-
DOAJ	-	-	-	-	20	21	38	40	25	27	11	12	94	-	-	-	-	19	23	30	36	23	28	11	13	83

JSTOR	-	-	-	-	29	30	9	9	45	46	15	15	98	-	-	10	22	5	11	11	25	8	18	10	23	44
World Public Library	-	-	-	-	15	30	9	18	23	46	3	6	50	-	-	-	-	-	-	-	-	-	-	-	-	-
Lexisnexis	-	-	7	18	14	37	10	26	7	18	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-	-
Questia	-	-	-	-	3	11	4	14	13	46	8	29	28	-	-	-	-	-	-	-	-	-	-	-	-	-
Ebrary	-	-	-	-	13	30	14	33	16	37	-	-	43	-	-	1	2	12	27	16	36	10	22	6	13	45
The Observatory	-	-	-	-	7	16	28	65	5	12	3	7	43	-	-	-	-	-	-	-	-	-	-	-	-	-
Egranary	-	-	-	-	10	25	8	20	18	45	4	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford online journal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	18	8	21	12	31	6	15	6	15	39
Biomed central	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	8	24	10	29	9	27	5	15	34
Aluka publications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	6	19	19	59	6	19	32

*1 = once in several months (>3months); 2 = once in 2-3 months; 3= 2-3 times a month; 4=once a month; 5=2-3 times a week; 6 = Daily

Table 3, revealed that of the 20 EIR databases listed, the frequency of usage of EIR databases by lecturers in federal universities were as follows: AGORA 57(36%) lecturers accepted using it 2-3 times a month and 44 (28%) accepted using it 2-3 times a week; HINARI 59 (36%) accepted using it 2-3 times a week and 36(22%) lecturers accepted using it once a month; EBSCO Host Resource 128 (63%) lecturers accepted using it 2-3 times a month and 40(20%) accepted using it once a month. AJOL 78 (42%) lecturers accepted using it 2-3 times a month and 48 (26%) lecturers accepted using it once a month. OARE 68 (39%) accepted using it 2-3 times a week and 52 (30%) lecturers accepted using it 2-3 times a month. DATAD 17 (38%) accepted using it once a month and 13 (29%) accepted using it 2-3 times a week; TEEAL 52 (32%) accepted using it once a month; INASP 50 (52%) lecturers accepted using it 2-3 times a week; MIT Open Course Ware 39(42%) accepted using it once a month; DOAJ 38(40%) lecturers accepted using it once a month; JSTOR 45(46%) lecturers accepted using it 2-3 times a week; World Public Library 23 (46%) lecturers accepted using it 2-3 times a week; Lexisnexis 14 (37%) lecturers accepted using it 2-3 times a month; Questia 13(46%) lecturers accepted using it 2-3 times a week; Ebrary 16(37%) lecturers accepted using it 2-3 times a week and Egranary 18 (45%) lecturers accepted using it 2-3 times a week. None of the lecturers accepted using Oxford online journals, Biomed central and Aluka publications.

The frequency of usage of EIR databases by lecturers in state universities were: AGORA 27(31%) lecturers accepted using it once a month and 34 (39%) accepted using it 2-3 times a week; HINAR 26 (27%) accepted using it 2-3 times a week and 36(22%) lecturers accepted using it once a month; EBSCO Host Resource 32 (27%) lecturers accepted using it once a month and 26(30%) accepted using it once a month. AJOL 10 (46%) accepted using it once a month and 8 (36%) lecturers accepted using it 2-3 times a week; OARE 39 (46%) accepted using it 2-3 times a week and 16 (19%) lecturers accepted using it 2-3 times a month; TEEAL 23 (37%) accepted using it once a month; DOAJ 30 (36%) accepted using it once a month; JSTOR 11(25%) lecturers accepted using it once a month; Ebrary 16(36%) lecturers accepted using it once a month, Oxford online journal 12(31%) lecturers use it 2-3 times a month; Biomed central 10(29%) lecturers accepted using it once a month and Aluka Publications 19(59%) lecturers accepted using it 2-3 times a week.

It can be deduced from the analysis that greater proportion of lecturers in federal and state universities in South-South, Nigeria often use these resources, 2-3 times a week; 2-3 times a month and once a month.

Research Question 6.

How often do postgraduate students utilize the EIR databases in learning and research in federal and state university libraries in South-South, Nigeria?

To determine how often postgraduate students in the federal and state universities in South South, Nigeria use the EIR databases in learning and teaching, they were requested to indicate their frequency of usage of the various resources. There were 345 postgraduate students in the federal universities and 224 in the state universities. Their responses are presented in table 4.

Table 4. Frequency of Use of EIR Databases by Postgraduate Students in Federal and State Universities.

EIRS	Federal universities													State universities											
	1		**2**		**3**		**4**		**5**		**6**		**Total**	**1**		**2**		**3**		**4**		**5**		**6**		**Total**
Frequency	N	%	N	%	N	%	N	%	N	%	N	%		N	%	N	%	N	%	N	%	N	%	N	%	
AGORA	-	-	-	-	69	50	12	9	49	34	8	6	138	-	-	-	-	18	25	11	15	24	33	20	27	73
HINARI	-	-	-	-	65	54	1	1	42	35	13	11	121	-	-	10	21	12	25	5	10	13	27	8	17	48
EBSCO H Resources	-	-	-	-	70	46	28	18	36	23	20	13	154	-	-	-	-	-	-	18	21	42	48	27	31	87
AJOL	-	-	-	-	19	14	24	17	47	34	48	35	138	-	-	-	-	2	15	3	23	5	39	3	23	13
OARE	-	-	-	-	7	8	20	22	46	51	18	20	91	-	-	-	-	12	15	17	22	36	46	14	18	79
DATAD	-	-	-	-	-	-	5	56	4	44	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-
TEEAL	-	-	-	-	53	46	6	5	30	26	26	23	115	-	-	-	-	13	33	4	10	18	46	4	10	39
INASP	-	-	-	-	9	13	9	13	22	32	28	41	68	-	-	-	-	-	-	-	-	-	-	-	-	-
MIT Open C Wear	-	-	-	-	29	34	5	6	34	40	18	21	86	-	-	-	-	-	-	-	-	-	-	-	-	-
DOAJ	-	-	-	-	52	58	8	9	25	28	5	6	90	-	-	-	-	29	35	33	40	10	12	11	13	83
JSTOR	-	-	-	-	50	60	4	5	14	16	17	20	85	-	-	-	-	-	-	7	20	22	63	6	17	35
World Pub Library	-	-	-	-	3	9	11	32	9	27	11	32	34	-	-	-	-	-	-	-	-	-	-	-	-	-
Lexisnexis	-	-	-	-	6	21	3	10	12	41	8	28	29	-	-	-	-	-	-	-	-	-	-	-	-	-
Questia	-	-	-	-	8	22	15	41	4	11	10	27	37	-	-	-	-	-	-	-	-	-	-	-	-	-
Ebrary	-	-	-	-	-	-	6	33	7	39	5	28	18	-	-	-	-	-	-	26	58	14	31	5	11	45
The Observatory	-	-	-	-	13	38	12	35	6	18	3	9	34	-	-	-	-	-	-	-	-	-	-	-	-	-
Egranary	-	-	1	3	12	36	6	18	8	24	6	18	33	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford online journal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	4	31	2	15	6	46	13
Biomed central	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	2	17	7	58	2	17	12
Aluka publications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	11	1	11	3	33	4	44	9

*1 = once in several months (>3months); 2 = once in 2-3 months; 3= 2-3 times a month; 4=once a month; 5=2-3 times a week; 6 = Daily.

A cursory look at table 4, revealed that all of the 20 EIR databases listed, the frequency of usage of these information resources among postgraduate students in federal and state university libraries in South South, Nigeria are presented according to order of ranking and greater proportion.

The frequency of usage in the federal universities were as follows: AGORA 67(52%) postgraduate students accepted using it 2-3 times a month and 47 (36%) accepted using it 2-3 times a week; HINARI 74 (57%) accepted using it 2-3 times a month and 42(32%) postgraduate students accepted using it 2-3 times a week; EBSCO Host Resource 70(46%) postgraduate students accepted using it 2-3 times a month and 36(23%) accepted using it 2-3 times a week. AJOL 48 (35%) postgraduate students accepted using it daily and 47 (34%) postgraduate students accepted using it 2-3 times a week. OARE 46 (51%) accepted using it 2-3 times a week and 18 (20%) postgraduate students accepted using it daily. DATAD 13 (62%) accepted using it once a month and 8 (38%) accepted using it 2-3 times a week; TEEAL 53 (43%) accepted using it 2-3 times a month and 26 (21%) postgraduate students accepted using it daily ; INASP 28 (41%) postgraduate students accepted using it daily and 22 (32%) accepted using it 2-3 times a week ; MIT Open Course Ware 34(40%) accepted using it 2-3 times a week and 29(34%) accepted using it 2-3 times a month; DOAJ 52(58%) postgraduate students accepted using it 2-3 times a month and 25(28%) 2-3 times a week; JSTOR 50(60%) postgraduate students accepted using it 2-3 times a month and 17 (20%) postgraduate students accepted using it daily; World Public Library 11 (32%) postgraduate students accepted using it once a month and 11(32%) also accepted using it daily; Lexisnexis 12 (46%) postgraduate students accepted using it 2-3 times a week and 8(31%) accepted using it daily; Questia 15(41%) postgraduate students accepted using it once a month and 10 (27%) accepted using it daily; Ebrary 7(39%) postgraduate students accepted using it 2-3 times a week and 6(33%) accepted using it once a month. The observatory 13(38%) accepted using it 2-3 times a month and 12 (35%) accepted using it once a month. Egranary 12(35%) postgraduate students accepted using it 2-3 times a month and 8 (24%) accepted using it 2-3 times a week.

The frequency of usage in the state universities were as following: AGORA 24(33%) postgraduate students accepted using it 2-3 times a week and 20 (27%) accepted using it daily; HINARI 13 (27%) accepted using it 2-3 times a week and 12(25%) postgraduate students accepted using it 2-3 times a month; EBSCO Host Resource 42(48%) postgraduate students accepted using it 2-3 times a week and 27(31%) accepted using it daily. AJOL 5(39%) postgraduate students accepted using it 2-3 times a week. OARE 36 (46%) accepted using it 2-3 times a week and 17 (22%) postgraduate students accepted using it once a month. TEEAL 18 (46%) accepted using it 2-3 times a week and 13 (33%) postgraduate students accepted using it 2-3 times a month; DOAJ 33(40%) postgraduate students accepted using it once a month and 29(35%) 2-3 times a month; JSTOR 22(63%) postgraduate students accepted using it 2-3 times a week; Ebrary 6(40%) postgraduate students accepted using it once a month and 6(33%) accepted using it once a month. Oxford online journals 6 (46%) postgraduate students accepted using it daily and 4(31%) postgraduate students accepted using it once a month, Biomed central 7(58%) postgraduate students accepted using it 2-3 times a week; Aluka publications 4(44%) postgraduate students accepted using it daily.

It could be seen that in the federal universities: AGORA, HINARI, Ebsco Host Resources, TEEAL, DOAJ, JSTOR, Egranary were used 2-3 times a month, DATAD, World Public Library and Questia were used once a month, OARE, MIT Open Course Ware, Lexisnexis and Ebrary were used 2-3 times a week, AJOL and INASP were used daily, while in the state universities it was observed that AGORA, Ebsco Host Resources, AJOL, OARE, TEEAL,

JSTOR and Biomed central were observed used 2-3 times a week this was followed by Ebrary and DOAJ that were used among the postgraduate students once a month. Oxford Online Journal and Aluka were said to have been used daily.

Research Question 5: What are the purposes for which lecturers utilize the EIR databases in federal and state libraries?

Table 5 showed the numbers and percentages of lecturers that use the EIR databases for various purposes.

Table 5. Number and Percentage of Lecturers in the Federal and State Universities that Use the EIR Databases for Different Purposes.

Purposes for which EIR databases are used	**Federal universities (N 620)**		**State universities (N 311)**	
	No. that are used	**% that are used**	**No. that are used**	**% that are used**
Writing of journal articles	620	100	311	100
Preparing for seminars	489	79	116	37
Preparing for conferences	602	97	239	77
Preparing for workshops	458	74	78	25
Group discussion	9	1	11	4
To write my thesis	36	6	28	9
To write my dissertation	16	3	18	6
To update my knowledge	532	86	251	81
To share knowledge	233	38	220	71
Preparing lectures	265	43	243	78
For teaching	269	43	244	78
To write my assignments	30	5	34	11
Preparing for examinations	26	4	35	11
Writing of books	170	27	88	28
For recreation and leisure	168	27	178	57

Table 5 showed that for federal universities, all the lecturers (100%) use EIR databases for writing of journal articles. Other purposes for which lecturers reasonably use EIR databases, in order of frequency are: preparing for conference (97%), to update knowledge (86%), preparing for seminars (79%) and preparation for workshops (74%). The purposes for which lecturers in federal universities least use the EIR databases is group discussion which has only 1% the respondents that indicated using it. Other purposes for which the lecturers least use that

databases are for writing of dissertation (3%), preparing for examinations (4%) writing of assignment (5%) and writing of thesis (6%).

In the state universities all the lecturers (100%) use the EIR databases for writing journal articles. Other purpose for which lecturers reasonable use EIR databases, in order of frequency are: to update their knowledge (81%), for teaching (78%), preparing for lectures (78%); preparing for conference (77%) and for recreation and leisure (57%). The purposes for which lecturers in state universities least use the EIR databases is for group discussion where 4% of the respondents indicated using it. Other purposes for which the lecturers least use the databases are for writing their dissertation (6%), preparing for examinations (11%) and writing of assignments (11%).

It could be observed that greater proportion of lecturers in the federal and state universities use the EIR databases for the following purposes: writing of journal articles, preparing for seminars, preparing for conference, preparing for workshops, for teaching, preparing for lectures and writing of books, while the lecturers least use the EIR databases for group discussion, writing of their dissertation, preparing for examinations and writing of assignments.

Research Question 6: What are the purposes for which postgraduate students utilize the EIR databases in federal and state libraries?

Table 6. Number and Percentage of Postgraduate Students in the Federal and State Universities that Use the EIR Databases for Different Purposes.

Purposes for which EIR databases are used	**Federal universities (N 345)**		**State universities (N 224)**	
	No. that are used	**% that are used**	**No. that are used**	**% that are used**
Writing of journal articles	87	25	70	31
Preparing for seminars	322	93	152	68
Preparing for conferences	141	41	48	21
Preparing for workshops	32	9	18	8
Group discussion	209	61	115	51
To write my thesis	213	62	130	58
To write my dissertation	132	38	94	42
To update my knowledge	189	55	96	45
To share knowledge	200	58	107	48
Preparing lectures	20	6	41	18
For teaching	20	6	23	10
To write my assignments	335	97	119	55
Preparing for examinations	262	76	173	49
Writing of books	-	-	-	-
For recreation and leisure	162	47	116	52

Table 6, the result showed that in federal universities the postgraduate students (97%) use EIR databases to write their assignments. Other purposes for which postgraduate students reasonably use EIR databases, in order of popularity are: preparing for seminars (93%),preparing for examinations (76%), writing of thesis (62%), for group discussion (61%), sharing of knowledge (58%), update of their knowledge (58%), for recreation and leisure (47%) and preparing for conferences (41%). The purposes for which postgraduate students in federal university least use EIR databases are preparing for lecture (6%) and for teaching (6%). Other purposes for which the postgraduate students least use the databases are: group discussion (9%), writing of journal articles (25%) and writing of their dissertation (38%).

In the state universities (68%) postgraduate students use EIR databases to prepare their seminars. Other purposes for which postgraduate students reasonably use EIR databases, in order of popularity are: to write their thesis (58%), to write their assignments (55%), for recreation and leisure (52%), and group discussion (51%), preparing for examination (49%), sharing of knowledge (48%), to update their knowledge (45%) and to write their dissertation (42%). The purposes for which postgraduate students in state universities least use EIR databases are writing of journal articles (31%) preparing for conferences (21%), preparing for lectures (18%), for teaching (10%) and preparing for workshop (8%). It could be observed that greater proportion of postgraduate students in the federal and state universities use the EIR databases for the following purposes: to write assignment, preparing for seminars, preparing for examinations, to write thesis, group discussion, share knowledge, update knowledge, for recreation and leisure, preparing for conferences and to write my dissertation .

Null Hypothesis 1

There is no significant difference between the proportions of lecturers in the federal and state universities that utilize the EIR databases.

Table 7: Z test Analysis of Test of Difference between the Proportion of Lecturers in the Federal and State Universities that Utilize the EIR Databases.

EIR databases	Federal universities	State universities	Total	Df	Cal. X^2	Crit. X^2	Decision
AGORA	167	86	253	929	0.23	1.96	Not Sig
HINARI	180	91	271	929	0.12	1.96	Not Sig
EBSCO Host Resources	201	87	288	929	0.14	1.96	Not Sig
AJOL	185	22	207	929	0.15	1.96	Not Sig
OARE	176	85	261	929	0.44	1.96	Not Sig
DATAD	45	0	45	929	0.12	1.96	Not Sig
TEEAL	161	62	223	929	1.29	1.96	Not Sig
INASP	97	0	97	929	1.58	1.96	Not Sig
MIT Open Course Ware	100	0	100	929	1.67	1.96	Not Sig
DOAJ	94	83	177	929	0.72	1.96	Not Sig
JSTOR	98	44	142	929	0.66	1.96	Not Sig
World Public Library	50	0	50	929	0.17	1.96	Not Sig
Lexisnexis	38	0	38	929	0.38	1.96	Not Sig
Questia	28	0	28	929	0.12	1.96	Not Sig
Ebrary	43	45	88	929	1.12	1.96	Not Sig
The Observatory	43	0	43	929	0.11	1.96	Not Sig
Egranary	40	0	40	929	0.11	1.96	Not Sig
Oxford online journal	0	39	39	929	0.43	1.96	Not Sig
Biomed central	0	34	34	929	0.29	1.96	Not Sig
Aluka publications	0	28	28	929	0.12	1.96	Not Sig
Total	**1746**	**704**	**2452**		**10.06**	**39.2**	**NS**

Table 7 indicates that at 0.05 level of significance and 929 df, the calculated X^2 10.06 is less than the critical X^2 39.2. Therefore, the first null hypothesis is upheld. The proportions of lecturers in the federal and state universities that utilize the EIR databases do not differ significantly.

Null Hypothesis 2

There is no significant difference between the proportions of postgraduate students in the federal and state universities that utilize the EIR databases.

Table 8: Z-Test Analysis of Test of Difference between the Proportion of the Postgraduate Students in the Federal and State Universities that Utilize the EIR Databases.

EIR databases	**Federal Universities**	**State universities**	**Total**	**Df**	**Cal. X^2**	**Crit. X^2**	**Decision**
AGORA	138	77	215	567	1.79	1.96	Not Sig
HINARI	121	47	168	567	1.34	1.96	Not Sig
EBSCO Host Resources	154	92	246	567	1.11	1.96	Not Sig
AJOL	138	13	151	567	2.11	1.96	Sig
OARE	91	83	174	567	1.10	1.96	Not Sig
DATAD	9	0	9	567	0.90	1.96	Not Sig
TEEAL	115	40	155	567	1.21	1.96	Not Sig
INASP	68	0	68	567	0.45	1.96	Not Sig
MIT Open Course Ware	86	0	86	567	0.78	1.96	Not Sig
DOAJ	90	88	178	567	0.03	1.96	Not Sig
JSTOR	85	64	49	567	0.98	1.96	Not Sig
World Public Library	34	0	34	567	1.85	1.96	Not Sig
Lexisnexis	29	0	29	567	0.43	1.96	Not Sig
Questia	37	0	37	567	0.78	1.96	Not Sig
Ebrary	18	46	63	567	0.96	1.96	Not Sig
The Observatory	34	0	34	567	0.71	1.96	Not Sig
Egranary	33	0	33	567	0.54	1.96	Not Sig
Oxford online journal	0	13	13	567	0.23	1.96	Not Sig
Biomed central	0	12	12	567	0.06	1.96	Not Sig
Aluka publications	0	9	9	567	0.03	1.96	Not Sig
Total	**1280**	**584**	**1864**		**17.38**	**39.2**	**NS**

Table 8 reveals that at 0.05 level of significance and 567df, the calculated X^2 17.38 is less than the critical X^2 39.2 Therefore, the second null hypothesis is upheld. The proportions of postgraduate students in the federal and state universities that utilize the EIR databases do not differ significantly.

Null Hypothesis 3

There is no significant difference between the proportion of lecturers in the federal and state universities that use the EIR databases for different purposes.

Table 9: Z Test Analysis on The Purposes for Utilizing EIR Databases by Lecturers in Federal and State University Libraries.

Purpose For Utilizing EIR Databases	Federal Universities	State Universities	Total	Df	Cal. X^2	Crit. X^2	Decision
Writing Of Journal Articles	620	311	931	929	0.00	1.96	Not Sig
Preparing For Seminars	489	116	605	929	0.84	1.96	Not Sig
Preparing For Conferences	602	239	841	929	0.56	1.96	Not Sig
Preparing For Workshops	458	78	536	929	2.10	1.96	Sig
Group Discussion	9	11	20	929	0.22	1.96	Not Sig
To Write My Thesis	35	28	63	929	0.45	1.96	Not Sig
To Write My Dissertation	15	18	33	929	0.32	1.96	Not Sig
To Update My Knowledge	532	251	783	929	0.89	1.96	Not Sig
To Share Knowledge	300	220	520	929	0.76	1.96	Not Sig
Preparing Lectures	300	243	543	929	0.69	1.96	Not Sig
For Teaching	300	244	544	929	0.72	1.96	Not Sig
To Write My Assignments	30	34	64	929	0.34	1.96	Not Sig
Preparing For Examinations	26	35	61	929	0.22	1.96	Not Sig
Writing Of Books	100	88	188	929	0.65	1.96	Not Sig
For Recreation And Leisure	100	178	278	929	0.69	1.96	Not Sig
Total	3916	2094	6010		9.45	39.2	NS

Table 9 indicates that at 0.05 level of significance and 929 df, the calculated $X^2$9.45 is lesser than the critical X^2 39.2. Therefore, the third null hypothesis is upheld. The proportion of lecturers in the federal and state universities that use the EIR databases for different purposes do not differ significantly.

Null Hypothesis 4

There is no significant difference between the proportion of postgraduate students in the federal and state universities that use the EIR databases for different purposes.

Table 10: Z Test Analysis of the Proportion of Postgraduate Students in Federal and State University that Use the EIR Databases for Different Purposes.

Purpose for utilizing EIR Databases	**Federal universities**	**State universities**	**Total**	**Df**	**Cal. X^2**	**Crit. X^2**	**Decision**
Writing of journal articles	133	69	202	567	0.82	1.96	Not Sig
Preparing for seminars	322	95	417	567	1.38	1.96	Not Sig
Preparing for conferences	141	48	189	567	2.45	1.96	Sig
Preparing for workshops	32	18	50	567	0.10	1.96	Not Sig
Group discussion	20	115	324	567	1.78	1.96	Not Sig
To write my thesis	213	130	343	567	0.23	1.96	Not Sig
To write my dissertation	132	94	226	567	0.59	1.96	Not Sig

To update my knowledge	189	96	285	567	0.19	1.96	Not Sig
To share knowledge	201	107	308	567	0.18	1.96	Not Sig
Preparing lectures	20	41	61	567	0.61	1.96	Not Sig
For teaching	20	23	43	567	0.27	1.96	Not Sig
To write my assignments	335	119	454	567	0.76	1.96	Not Sig
Preparing for examinations	262	173	435	567	0.65	1.96	Not Sig
Writing of books	0	0	0	567	0	1.96	Not Sig
For recreation and leisure	162	116	278		0.56	1.96	Not Sig
Total	**2371**	**1244**	**3515**		**10.57**	**39.2**	**NS**

Table 10 indicates that at 0.05 level of significance and 567df, the calculated X^2 10.57 is less than the critical X^2 39.2. Therefore, the fourth null hypothesis is upheld. The proportion of postgraduate students in the federal and state universities that use the EIR databases for different purposes do not differ significantly.

DISCUSSION OF RESULTS

Types of EIR Database being utilized by lecturers and postgraduate students in learning and research in federal and state university libraries in South-South, Nigeria.

The finding from this study revealed that lecturers in the federal universities in South-South, Nigeria use 17 different types of EIR database namely, AGORA, HINARI, EBSCO Host Resources, AJOL, OARE, DATAD, TEEAL, INASP, MIT Open Course Ware, DOAJ, JSTOR, Lexisnexis, World Public Library, Ebrary, The Observatory, Egranary and Questia. Lecturers in the state universities in South-South, Nigeria use 12 different types of EIR databases namely, AGORA, HINARI, EBSCO Host Resources, OARE, TEEAL, DOAJ, JSTOR, Ebrary, Oxford online journal, Biomed central, Aluka publications and AJOL. The possible reasons for this could be that lecturers are becoming aware of types of databases that cover their curricula and other academic activities.

It was also revealed that postgraduate students in the federal universities in South-South, Nigeria use 17 different types of EIR database namely, EBSCO Host Resources, AJOL, HINARI, AGORA , TEEAL, OARE, DOAJ, MIT Open Course Ware, JSTOR, Questia, World Public Library, Egranary, The Observatory, DATAD, Lexisnexis and Ebrary, While postgraduate students in the state universities used 12 different types of EIR namely, Host Resources, DOAJ, OARE, AGORA, JSTOR, HINARI, TEEAL, Ebrary, AJOL, Oxford online journal, Biomed central and Aluka publications. The possible reason for this is that students have availed themselves with these resources in order to pursue their academic work or activities. This findings corroborates Paines and Kwachi (2013) and Kofi (2014) that the available EIR databases that are commonly used in universities in developing countries like Nigeria are EBSCO host resources, AGORA, JSTOR, Questia, DATAD, DOAJ, OARE, HINARI, TEEAL, Ebrary, AJOL and MIT Open Course Ware databases in teaching, learning and research work in universities. The reason why the findings of this study is in line with Paines and Kwachi (2013) and Kofi (2014) could be that universities in developing nations rely more on open access resources. Gupta (2013) advised that they should build their collection by subscribing to other online databases were lecturers and students can have wide range of online databases to consult for their academic activities.

Frequency of Utilization of EIR Databases Among Lecturers and Postgraduate Students in Learning and Research in Federal and State University Libraries in South-South, Nigeria.

The study shows that majority of the lecturers in federal universities in South-South Nigeria, often utilize EIR databases 2-3 times a week namely: HINAR, OARE, INASP, JSTOR and World Public Library. 2-3 times a month namely: Agora, Ebsco host resources and AJOL. Once a month namely: TEEAL and MIT Open Course Ware. Conversely, the lecturers in state universities in South-South Nigeria, often utilize EIR databases 2-3 times a week namely: AGORA and OARE. 2-3 times a month namely: once a month namely: HINARI, Ebsco host resources, AJOL, TEEAL and DOAJ. This result is consistent with majority of the finding of the studies conducted by Oduwole and Oyewumi (2010) who reported in their study that researchers use the EIR databases weekly, twice a week. Zainab, Huzaimah and Ang (2006) findings agreed that researchers use the EIR databases weekly for their various academic activities. Khan and Ahmed (2009) also found out that scholars use the EIR databases 2-3 times a week. The finding of Shukkla and Mishra (2011) did revealed that research scholars use the EIR databases daily and 2-3 times a week, Malemia (2014) also reported that staff frequently use the EIR databases daily, twice a week, once a month.

Another finding of this study revealed that majority of the postgraduate students in the federal universities in South-South often utilize the EIR databases 2-3 times a month namely: AGORA, HINARI, Ebsco Host Resources, TEEAL, DOAJ, JSTOR, Egranary. Once a month namely: DATAD, World Public Library and Questia, followed by 2-3 times a week namely: OARE**,** MIT Open Course Ware, Lexisnexis and Ebrary. However, the postgraduate students in the state universities in South-South Nigeria often utilize the EIRs 2-3 times a week namely: AGORA, Ebsco Host Resources, AJOL, OARE, TEEAL, JSTOR and Biomed central. Once a month namely: Ebrary and DOAJ, followed by daily namely: Oxford Online Journal and Aluka. This finding is in consonance with the findings of Kaur and Verma (2009) who observed that postgraduate students use the EIRs 2-3 times a week. Swain and Panda (2013) study revealed that students use the EIRs daily, weekly and once a month. Upadhyay and Chakraborty (2008) also noted that students use the EIRs daily, weekly, 2- 3 a week and once a month. The high frequency of usage of these EIR databases could be a as a result of use of modern ICT related facilities among lecturers and students such as laptops, smart phones and tablets connected to internet. It could also be said that the EIR databases are fast means of retrieving current information for scholarly output.

Purposes for which Lecturers and Postgraduate Students Utilize the EIR Databases in Federal and State University libraries in South-South Nigeria.

The study revealed that greater proportion of the lecturers in the federal and state universities in South-South Nigeria, utilize the EIR databases for the same purposes, which are as follows: writing of journal articles, preparing for seminars, preparing for conference, preparing for workshops, for teaching, preparing for lectures and writing of books. This result agrees with Manda (2005) and Shukka and Nishra (2011) that majority of the teaching staff used the e-resource databases for conference preparation, seminars, writing of books/articles, updating of knowledge and teaching/lecturing.

The study also revealed that greater proportion of postgraduate students in the federal and state universities in South-South Nigeria utilize the EIR databases for the same purposes which are as follows: to write assignment, preparing for seminars, preparing for examinations, to write thesis, group discussion, share knowledge, update knowledge, preparing for conferences and to write dissertation. This finding agrees with Sangowusi (2003) who noted that postgraduate

students use the EIR for scholarly publications. Damilola (2013) also noted that they use it for writing of theses/ dissertations. Dinoshiho (2010) also observed that they use it for preparing for assignments, Ekwelem Ukoma and Okafor (2009) stated that they use the EIR databases to prepare for conference. Ogunyade and Oyibo (2003) asserted that postgraduate students use the EIR databases for preparing their assignments and for examinations. Ojo (2014) stated that postgraduate students use the EIRs for group discussion, for recreation and leisure, sharing of knowledge and writing of their theses work.

The significant differences in the hypotheses.

The study also revealed that the proportions of lecturers in the federal and state universities that utilize the EIR databases do not differ significantly.

The study also revealed that the proportions of postgraduate students in the federal and state universities that utilize the EIR databases do not differ significantly. Paines and Kwachi (2013) observed that e-resources are currently the most preferred materials among students, teaching and non-teaching staff. The present situation may be explained as a result of internet revolution that has ushered the use of e-resources for quick access to learning materials irrespective of their geographical boundaries.

The study also revealed that the proportion of lecturers in the federal and state universities that use the EIR databases for different purposes do not differ significantly. The reason why this hypothesis is upheld could be that lecturers in both universities used the resources for research. Hadjnicola and Soterious (2005) asserted that research output has a significant impact on promotion, increase in salaries and decision making. Lecturers in universities conduct research and publish the output of their research work which is used for the development of the society. The study also revealed that the proportion of postgraduate students in the federal and state universities that use the EIR databases for different purposes do not differ significantly. Ojo (2014) said that the internet revolution has made it possible for all students in all categories to search for online database resources. This could be the reason why there is no difference in the purpose for which students use EIR databases.

CONCLUSION

It could be concluded from the findings of this study that:

Lecturers and postgraduate students in the federal and state university libraries in South-South, Nigeria use different types of EIR database.The level of usage of EIR database by lecturers and postgraduate students in the federal and state university libraries was generally high as most of them indicated that they use these resources frequently for their academic activities.

The study also found that the purposes of usage of EIR databases by lecturers and postgraduate in the federal and state university libraries in South-South, Nigeria were writing of journal articles, preparing for seminars, preparing for conference, preparing for workshops, for teaching, preparing for lectures and writing of books, to write assignment, preparing for seminars, preparing for examinations, to write thesis, group discussion, share knowledge, update knowledge, for recreation and leisure, preparing for conferences and to write their dissertation.

The study also showed that the proportions of lecturers and postgraduate students in the federal and state universities that utilize the EIR databases do not differ significantly. This could be as a result of similar usage of these e-resources in both universities.The proportion of lecturers and postgraduate students in the federal and state universities that use the EIR databases for

different purposes do not differ significantly. It could be said that lecturers in both universities use these EIR databases for similar purposes such as teaching, learning and research work and also for promotion. Therefore the purpose for using EIR databases may not differ significantly in both universities.

RECOMMENDATIONS

Based on the results of this study, it was recommended that:

1. Fund should be provided by the university management for subscription of more scholarly EIR databases in order to build a strong collection of e-resources in the library.
2. Librarians in both universities should identify non users of the EIR databases and effective steps should be taken to encourage them to use the databases.
3. University libraries should organize ICT literacy skills programme for library users, this will encourage frequent usage of the databases.
4. Access to the EIR databases should not be limited only to the library, users should be able to have access to e-resources anywhere any time for their academic purposes.
5. Databases evaluation usage should be conducted among library users, this will help librarians to know the challenges of users and how to strengthen the EIR databases and services.

REFERENCE

Adeniran, P. (2013). Usage of electronic resources by undergraduates at the Redeemer's University, Nigeria. *International Journal of Library and Information Science.5 (10), 319-324.*

Chandra, K., Sankaranarayanan , D., & Nagarajan, M.(2014). A study on use pattern e-resources among Faculty Members in Arts and Science Colleges in Chennai. *Journal of Advances in Library and Information Science.* 3 (1) 1

Damilola, O. A. (2013). Use of electronic resources by distance students in Nigeria: the case of the National Open University, Lagos and Ibadan Study Centers. Retrieved on April, 2013 from *Library Philosophy and Practice* http://digitalcommons.unl.edu/libphilprac/915.

Ekwelem, V.O., Ukafor, V. N., & Ukwoma, S. C. (2009). Students' use of electronic information sources at the University of Nigeria, Nsukka. *Afri.J.Arch.& Inf.Sc,*19(1),89-97.

Gupta, P. P. (2014). Online learning and teaching in Universities in Istanbul University, Turkey. *Journal of Arts and Humanities,* 12(8), 28-35

Kaur, B., & Verma, R. (2009). Use and impact of electronic journals in the Indian Institute of Technology, Delhi, India. *The Electronic Library*, 27 (4), 611-622.

Khan, A.M., & Ahmed, N. (2009). Use of e-journals by research scholars at Aligarh Muslim University and Banaras Hindu University. *The Electronic Library*, 27 (4), 708-717.

Kofi, B. G. (2014). Academic staff skills and usage of online databases in universities in Ghana. Africa *Journal of Adult Education, 1*0(6),12-18

Kwadzo, G (2015). Awareness and usage of electronic databases by Geography and Resource Development Information Studies graduate students In the University of Ghana. *Library Philosophy and Practice*. Retrieved on 12th October 2016 from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3241&context=libphilprac

Kwafoa, P.N. Y., Osman, I. & Afful-Arthur, P. (2014). Assessment of the use of electronic resources among administrators and faculty in the university of cape coast. *Library Philosophy and Practice* retrieved on 12th September 2015 from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2805&context=libphilprac

Malemia, L. (2014). The use of electronic journal articles by academics at Mzuzu University, Malawi. *Library Philosophy and Practice (e-journal).* Retrieved 12th June, 2014 from http://digitalcommons.unl.edu/libphilprac/1097

Manda, P. A. (2005). Electronic resource usage in academic and research Institutions in Tanzania. *Information Development*, 21 (4), 269 – 28.

Ndinoshiho, J.M. (2010). The use of electronic information services by undergraduate nursing students at the University of Namibia`s north campus: A descriptive study. *Information Development*, 26 (1), 57-65.

Oduwole, A. A., & Oyewumi, O. (2010). Accessibility and use of web-based electronic resources by physicians in a psychiatric institution in Nigeria. *Program: Electronic Library and Information Systems*, 44 (2),109-121

Ogunyade, T. O., & Oyibo, W. A. (2003). Use of CD-ROM MEDLINE by medical students of the College of Medicine, University of Lagos, Nigeria. *Journal of Medical Internet Research.* 5(1), 7. Retrieved May 17th, 2011 http://www.ncbi.nlm.nih .gov/ pmc/articles/PMC1550553/

Ojo, A. A. (2014). Awareness and use of electronic information resources in Pan African University library. *Journal of Social Science and Research.,* 23(6), 20-31,

Omotayo, B.O. (2010). Access, use and attitudes of academics toward electronic journals: a case study of Obafemi Awolowo University, Ile-Ife. *Library Philosophy and Practice* Retrieved April 24th, 2013 from http://www.webpages.uidaho.edu/~mbolin/nnadozie.htm.

Paines, B . N., & Kwachi. O. P. (2013).Utilization of electronic databases among students in Kurukshetra University Library, India. *International Journal of Gender and development,* 15(12), 38-47.

Romero-Otero, I., Iglesias-Fernández, E., & Giménez-Toledo, E. (2013). Use, acceptance and expectations for the e-book in a research library. *International Journal of BID,* 31.

Sangowusi, F.O. (2003). Problems of accessing scholarly publications by Nigerian scientists: a study of the University of Ibadan .*Journal of Information Science,* 29 (2), 127–134.

Sansnee, J., & Wallin, M. (2002). Use of formal and informal methods to gain information among faculty at an Australian regional university. *Journal of Academic Librarianship*, 18(1/2), 68-73.

Shukkla, P., & Mishra, P. (2011). Use of e-resources by research scholars of Institute of Technology, Banaras Hindu University, India. *Researchers World-Journal of Arts, Science and Commerce*, 2(2), 184-194

Swain, D. K., & Panda, K.C. (2009). Use of electronic resources in business school libraries of an Indian state: A study of librarians' opinion. *The Electronic Library*, 27 (1), 74-85.

Tajafari, M. (2014). Accessibility and use of electronic journals at Iranian University Libraries. *Library Philosophy and Practice* retrieved on 12th September 2015 from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2922&context=libphilprac

Upadhyay, N., & Chakraborty, H. K. (2008). One journal and databases: a study of use and awareness among academics at main library, I. T., B. H. LL. *International CALIBER*, 648 – 655.

Zainaba, A. N., Huzaimah, A. R., & Ang, T. F. (2006). Using journal, use study feedback to improve accessibility. *Electronic library*, 25 (5), 558 – 574.