Full Length Research Paper

Empirical study of motivation, challenges and strategies in the use of electronic information resources by postgraduate library users in South- east Nigerian Federal Universities

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It is one thing to acquire electronic information resources (EIRs) and quite another thing to use them. This paper explores several factors that motivate postgraduate researchers to use the e-resources available in their university libraries. The study reveals challenges that constitute inhibiting factors to EIRs use and strategies that will encourage maximum utilization are recommended. The research design adopted in this study is a descriptive survey. The sample size for the study is one hundred and twenty (120) respondents. The simple random sampling method was used to select five (5%) of the total population for the study. Two complementary instruments were used for collecting primary data; questionnaire and unstructured interview of Heads of ICT Unit of the university libraries. At varying percentages, the study reveals that PG students are motivated to use the EIRs in their university libraries because they found e-resources to be: More Informative; Easy access and use; Save time; more useful or Less expensive. The study also reveal that the challenges to use as: Insufficient computers with Internet facilities; Incessant power outage; Slow Internet connectivity; Lack of ICT skills; Difficulty in finding relevant information and inadequate IT Infrastructure. Strategies to improve motivation to use of EIRs, among others include: Increase ICT infrastructure/facilities; Have stable electrical backup Information Literacy Training for users.

Key words: Electronic Information Resources, motivation of EIRs use, PG library users, Nigerian Federal Universities.

INTRODUCTION

Inaccessibility of information has been identified as the bane of effective research in Nigerian universities. Most often many library users especially research students have expressed dissatisfaction over the inaccessibility of information resources of the library. The most frequent complaint includes non availability of such electronic information resources as Internet connectivity, online public access catalogue (OPAC) and other online databases. Although the e-resources have numerous advantages, problems in accessing and using web-based or electronic information resources are still noticed, particularly among postgraduate students. Monitoring and tracking the available resources and searching for needed papers and publications are major problems in the web-based information system.

With the use and applications of ICT in libraries and information resources centres, the information/library professionals are required to respond to the new

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environment for new roles and new careers in information acquisition, preservation and transfer. They need to be responsive to the growing information need. New kinds of competencies, skills and experiences are required to respond to the need of the time that extends beyond the traditional library setting. This poses a challenge to the librarians especially those in the academic community. In the same vein, postgraduate students who are involved in higher education (and research) programmes are also required to intensively orient themselves with the mechanisms and techniques of accessing and retrieving their desired information resources from the web-based information system in their institution's libraries.

Objectives of the study

The general purpose of this study is to investigate the motivation, challenges and strategies in use of electronic information resources by postgraduate library users in the Federal University Libraries in South east Nigeria. It has the following specific objectives:

i. To determine motivating factors in students' use of electronic information resources.
ii. To identify challenges faced in the use of electronic information resources
iii. To investigate recommendable strategies on how to improve availability and use of electronic information sources.

Research questions

i. What factors motivate use of electronic information resources by postgraduate students in the university library?
ii. What challenges are encountered in the utilization of electronic information resources?
iii. What strategies should be adopted for provision and effective utilization of electronic information resources in the university?

LITERATURE REVIEW

Literature review by researcher indicates that several studies on electronic information resources availability and access havebeen conducted by scholars within some federal universities in Western Nigeria such as: Kolawole and Omolara (2010); Halima (2011), Isah (2010); Olatokunbo and Asiru (2011). But none of such research has been carried out in the Eastern part of the country. This is the gap the researcher intends to fill.

In spite of the perceived availability of electronic information resources in the universities and their benefits to university education, their effective utilization by postgraduate library users in Nigeria appears to be hampered

by varying factors. The above situation establishes some doubts about the library's disposition in providing effective access to electronic information resources to the researchers and other users. The problem of this study therefore, is to find out the challenges of availability of electronic information resources and their utilization by postgraduate students of the federal universities in South-East Nigeria.

Postgraduate students, in their various levels of studies and research, have information needs, their field of work notwithstanding. Many of them however do not use e-resources. It is in view of this, that it is necessary to ensure maximum utilization of these sources. Ojo and Akande (2005) conducted a study and drew a conclusion from their findings that the level of usage of the electronic information resources among students is very low. Regarding the use of electronic information resources (EIRs), particularly for the unskilled users, (Fatoki, 2004) asserted that attitude towards a particular phenomenon can enhance or mar human approach to such phenol-menon.

RESEARCH METHOD

The research design adopted in this study is a descriptive survey. This method is considered appropriate because of its flexibility which permits the use of a variety of data collecting techniques such as questionnaire, interview and observation. Uhegbu (2009) notes that "survey research is mainly an examination of current practices or approaches relating to an aspect of a social system and an attempt to relate certain results to particular cause, with a view to making effective moves for future improvement".

Population of the Study

The population for this study consists of library staff and post-graduate library users in four federal universities of South-East Nigeria. These include: University of Nigeria Nsukka (UNN), Federal University of Technology Owerri (FUTO), Nnamdi Azikiwe University Awka (NAUA) and Michael Okpara University of Agriculture, Umudike (MOUAU). The total number of library staff in these universities is 323, thus: 144 staff in UNN library, 104 in FUTO, 42 in NAUA and 33 in MOUAU, making a total of 323 staff. Postgraduate students from the institutions are 2073: UNN -1115; FUTO – 406; NAUA -312 and MOUAU – 240 (Table 1).

Sample size and sampling technique

The sample size for the study is one hundred and twenty (120) respondents. The simple random sampling method was used to select five (5%) of the total population for the study. Osuala (2005) stated that simple random sampling method is the method that ensures that each element in the sample has equal chance of being selected. There is no preferential choice of any element because each has the same probability of being included. This sample technique was used only for selecting the postgraduate students from each of the institutions. The sample was drawn as follows: UNN – 30; FUTO – 30; NAUA – 30; MOUAU – 30.

The researcher's choice in this case is purposive because no other persons in the library are most qualified for data on the available electronic information resources than the digital librarians

Table 1. Population of library staff and postgraduate students.

Category of respondents	No of staff and PG students in the universities				
	UNN	FUTO	NAUA	MOUAU	Total
Library staff	144	104	42	33	323
Postgraduate Students	1,115	406	312	240	2,073
Heads of ICT Units	1	1	1	1	4
Total	1,260	511	355	274	2,400

Table 2. Distribution of the library staff involved in e-resources and postgraduate students sampled for the study.

Category of respondents	No of staff and PG students in the universities				
	UNN	FUTO	NAUA	MOUAU	Total
Digital librarians/ heads of ICT Unit	1	1	1	1	4
Postgraduate students	30	30	30	30	**120**
Total	31	31	31	31	124

who are heads of ICT unit of the libraries under study. So the Digital Librarians and/ or Heads of ICT Unit of the universities' libraries are four (4); thus, a total of one hundred and twenty four (124). Table 2 illustrates the sample size.

Instruments for data collection

Two complementary instruments were used for collecting primary data; questionnaire and unstructured interview of Heads of ICT Unit of the university libraries. The questionnaire for heads of ICT units was open-ended because they were required to indicate electronic information resources available in their libraries. It was entitled: Questionnaire for Digital Librarians and Heads of ICT Units (QDLHIU). The second questionnaire entitled: Postgraduate Library Users Questionnaire (PLUQ) was designed by the researcher in order to obtain answers for the five research questions directed to postgraduate students.

RESULT AND DISCUSSION OF FINDINGS

Research Question 1: What factors motivate you to use electronic information resources in the university library?

Table 3 revealed that some of postgraduate students found electronic information resources more informative in all the universities being studied. Figures and percentage respondents from each university are as follows: UNN – 6 (20%); FUTO – 10 (33%); NAUA – 7 (23%); and MOUAU – 8 (27%). Postgraduate students indicated that the reason for using e-resources in their institutions is because of easy access and use as follows: UNN and FUTO – 4 (13%); NAUA and MOUAU – 5 (17%). Indication that e-resources save time is as follows: UNN –7 (23%); FUTO – 5 (7%); NAUA – 6 (20%); and

MOUAU – 4 (13%). The number and percentage that indicated e-resources were more useful to them are: UNN – 8 (27%); FUTO – 7 (23%); NAUA – 7 (23%); and MOUAU – (23%). Those who answered that they found using e-resources less expansive are as follows: UNN – (17%); FUTO – 4 (13%); NAUA – 5 (17%); and MOUAU – 6 (20%).

Thirty one (31) 26% of research scholars preferred to use e-resources because they were more informative. Eighteen (18)15% of respondents used e-resources for their easy access and use. Twenty-two (22)19% indicated that they used the e-resources because they save time. Twenty-nine (29) 24% of respondents agreed that the e-resources were more useful to them. While 20 (16%) of respondents indicated that the EIRs were less expensive for them.

The results from Table 4 revealed that e-resources were preferred by respondents because they were more useful, time saving, easy to use, more informative and less expensive.

Research Question 2: What challenges do you encounter in the use of electronic Information resources?

Table 5 depicts that 22 (18%) respondents from the four universities agreed that there are insufficient computers with Internet facilities in their libraries. 29 (24%) indicated that incessant power outage was a key barrier to access electronic resources. Slow Internet connectivity was identified as another challenge by 17 (15%) of respon-dents. 16 (13%) of the postgraduate library users agreed that they lacked ICT skills which hindered their access to the available e-resources. 12 (10%) of respondents

Table 3. Motivating factors (Reasons for using electronic resources).

S/No	Motivation	UNN		FUTO		NAUA		MOUAU		Total F	%
		F	(%)	F	(%)	F	(%)	F	(%)		
1	More Informative	6	20	10	33	7	23	8	27	31	26
2	Easy access and use	4	13	4	13	5	17	5	17	18	15
3	Saves time	7	23	5	7	6	20	4	13	22	19
4	More useful	8	27	7	23	7	23	7	23	29	24
5	Less expensive	5	17	4	13	5	17	6	20	20	16
	Total	30	100	30	30	30	30	30	100	120	100

Table 4. Challenges to EIRs use.

S/No	Challenges	UNN		FUTO		NAUA		MOUAU		Total F	%
		F	(%)	F	(%)	F	(%)	F	(%)		
1	Insufficient computers with Internet facilities	5	17	8	27	4	13	5	17	22	18
2	Incessant power outage	10	33	7	23	6	20	6	20	29	24
3	Slow Internet connectivity	4	13	3	10	5	17	5	17	17	15
4	Lack of ICT skills	3	10	4	13	5	17	4	13	16	13
5	Difficulty in finding relevant information	3	10	2	7	4	13	3	10	12	10
6	Inadequate IT Infrastructure	5	17	6	20	6	20	7	23	24	20
	Total	30	100	30	100	30	100	30	100	120	100

Table 5. Strategies for enhancing provision and use of e-resources.

S/No	Ways to improve availability/use of EIRs	UNN		FUTO		NAUA		MOUAU		Total F	Percentage
		F	(%)	F	(%)	F	(%)	F	(%)		
1	Provision of more computer systems	4	13	5	17	5	17	6	20	20	16.66
2	Improve Internet Connectivity (bandwidth)	5	17	3	10	5	17	4	13	17	14.17
3	Increase ICT infrastructure/facilities	4	13	2	0.7	4	13	5	17	15	12.5
4	Have stable electrical backup	6	43	5	22	5	20	5	17	21	17.5
5	Create awareness on available e-resources	6	33	5	17	4	13	3	10	18	15
6	Subscribe to more online resources	3	10	5	17	2	0.7	4	13	14	11.67
7	Information Literacy Training for users	2	0.7	5	17	5	17	3	10	15	12.5
	Total	30	100	30	100	30	100	30	100	120	100.00

pointed out that they had difficulty in finding relevant information from the e-resources. Whereas 24 (20%) complained of inadequate IT infrastructure as a major inhibiting factor to availability and utilization of electronic information resources.

One can deduce from the above analysis that large number (29) of postgraduate students complained that power failure is a major challenge in accessing the available e-resources in the institutions. This was followed by those (24) of the PG students who indicated that IT infrastructure were inadequate. Those who agreed that lack of ICT skill posed a challenge in the use of the e-resources made up of 13% of the respondents. This finding agrees with Ojo and Akande (2005) who

concluded in their study that the level of usage of the electronic information resources among students is very low. Ten (10%) of the respondents also indicated difficulty in finding the relevant information.

Research Question 3: What strategies do you suggest your institution should adopt for provision and effective utilization of electronic information resources?

Table 5 reveals that 20 (16.66%) respondents suggested ways of improving availability and use of e-resources to include provision of more computers in their university

libraries. Seventeen – 17 (14.17%) agreed that it necessary to improve Internet connectivity that is the bandwidth. Fifteen – 15 (12.5%) opined that ICT infrastructure and facilities are to be increased. Twenty-one – 21 (17.5%) think that having stable electrical backup will enhance utilization of the e-resources. In terms of awareness creation on available e-resources, eighteen – 18 (15%) respondents suggest it as better option. But 14 (11.67%) believe that subscription to more online resources is necessary to improve usability.

Finally, 15 (12.5%) agreed that information literacy training programme be adopted for users in order to enhance their searching skills and general e-resources use. In all, greater number (21) and percentage (17.5%) of postgraduate students suggested that the use of e-resources will be enhanced if there is stable electrical backup for the libraries.

Summary of findings

Factors motivating use of EIRs

Reasons for using the e-resources were identified with their percentage responses as follows: Thirty one (31) 26% of research scholars preferred to use e-resources because they were more informative. Eighteen (18) 15% of respondents used e-resources for their easy access and use. Twenty-two (22) 19% indicated that they used the e-resources because they saves time. Twenty-nine (29) 24% of respondents agreed that the e-resources were more useful to them. While 20 (16%) of respondents indicated that the EIRs were less expensive for them. The findings revealed that e-resources were preferred by respondents because they were more useful, time saving, easy to use, more informative and less expensive.

Challenges encountered in use or e-resources

Factors that challenged postgraduate library to have access to and use of EIRs in the university libraries in Nigeria were diverse in nature. They include: insufficient computers with internet facilities, incessant power outage, slow internet connectivity, difficulty in finding relevant information, and lack of ICT skills. This confirms (Fatoki, 2004) that attitude towards a particular phenolmenon can enhance or mar human approach to such phenomenon.

The result further shows that large number (29) (24%) of postgraduate students complained that power failure is a major challenge in accessing the available e-resources in the institutions. This was followed by those (24) (20%) of the PG students who indicated that IT infrastructure were inadequate. Those who agreed that lack of ICT skill posed a challenge in the use of the e-resources made up

13% of the respondents. This finding agrees with Ojo and Akande (2005) who concluded in their study that the level of usage of the electronic information resources among students is very low. Ten (10%) of the respondents also indicated difficulty in finding the relevant information.

Suggested strategies for enhancing EIRs usage

Seven strategies which will enhance efficient usage of electronic information resources in university libraries were suggested by postgraduate library users to include: Provision of more computer systems (13.33%); improve internet connectivity (bandwidth) (14.17%); increase of ICT infrastructure/facilities (8.33%); having stable electrical backup (25.83%); creating awareness on available e-resources (18.34%); subscribing to more online resources (9.17%); information literacy training for users (10.83%).

In the University of Nigerian Nsukka, however, no respondents selected "Provision of more computer systems, increase ICT infrastructure/facilities and subscribe to more online resources" as strategies being suggested. This implies that there were enough of these facilities both hardware and software at the university in question. In all, greater number (31) and percentage (25.83%) of postgraduate students suggested that the use of e-resources will be enhanced if there is stable electrical backup for the libraries.

Conclusion

Several electronic information resources were indicated as being available in the libraries of the four federal universities in South-East Nigeria. Some postgraduate students are aware but others are not aware of the available e-resources. Generally, this study revealed that the use of electronic information resources among postgraduate students is low. The study also reveals that awareness of the availability of electronic information resources services in the universities was not widespread among students and a significantly large percentage of students indicated they could not use EIRs in the universities due to either unawareness of their availability, lack of ICT skills or other factors. University of Nigeria Nsukka (UNN) has larger number of the EIRs than the rest of the Universities studied.

RECOMMENDATIONS

Based on the findings and conclusions of the study and in order to improve the motivation for effective use of electronic resources in the universities under study, the researcher recommends the followings:

1. There should be development of ICT infrastructures

and procurement of EIRs including library databases software by University librarians.

2. Librarians/ICT library staff should become role models and mentors to PG students in using EIRs.

3. High speed internet connectivity should be made available to postgraduate students; and establish computer rooms for them which will be conveniently located. Develop website for postgraduate students only.

4. Information literacy programmes, seminars and workshops and other innovative strategies like developing online tutorials should be incorporated into postgraduate curriculum.

5. University lecturers (particularly those teaching the postgraduate students) should give Internet related assignments; this will expose the students to EIRs and opportunity to explore more of the resources.

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