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February 2016

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Akporhonor, Blessings Amina Dr(mrs) and Akpojotor, Lucky Oji Mr, "Challenges Confronting Postgraduate Library and Information Science Student in the Use of Electronic Resources in Southern Nigeria" (2016). *Library Philosophy and Practice (e-journal)*. 1319.
<http://digitalcommons.unl.edu/libphilprac/1319>

**CHALLENGES CONFRONTING POSTGRADUATE LIBRARY AND
INFORMATION SCIENCE STUDENT IN THE USE OF ELECTRONIC
RESOURCES IN SOUTHERN NIGERIA**

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Abstract

The study aims at identifying the challenging confronting postgraduate library and information science student in the use of electronic resources in Southern-Nigeria. The descriptive survey design was adopted for this study. The census sampling technique was adopted for this study. Thus, the entire population of three hundred and seventy (375) postgraduate students of library and information science student in Southern Nigeria was used as the respondents for this study. The questionnaire was the instrument used for data collection. The simple percentage statistical tool was used to answer the research question. The finding revealed that poor internet connectivity epileptic power supply, information overload, high cost of access, download delay and difficulty in accessing some websites are some of the problems militating against the use of electronic information resources by postgraduate students of library and information science student on Southern Nigeria. Based on the findings, the study recommended that power supply should be improved upon, internet providers should improve their network services, cost of accessing electronic information resources should be subsidize to a minimum so as to make them affordable.

Introduction

Electronic information sources are a wide range of products going from electronic periodical to CD-ROMs, from mailing list to databases, all of them having a common feature of being used and sometime modified by a computer (Thanuskodi, 2012).

The electronic resources are systems in which information is stored electrically and made accessible through electronic systems in which information is stored electrically and made accessible through electronic and computer network. These resources include online public access catalogue (OPAC), CD-ROMS, (Compact Disc-Read Only Memory), Online-databases, e-journals, e-books, internet resources etc. Multiple accesses speed, richer in content, reuse, timeliness, anywhere access is some of the features of e-resources (Prangya and Rabinda, 2013). Postgraduate students use electronic resources is a resource for several purposes, it is expected that as students of higher institutions: generally, academic purpose is what comes to mind. The use of electronic information resources by postgraduate students in Nigerian Library and Information Science Schools comes with a couple of challenges. According to Adomi (2005) the nation's poor telecommunication infrastructure has been a subject of debate to researchers and higher institutions. In the factor of poor telecoms infrastructure poor skill in navigating electronic resources, cost and restricted access to electronic information resources by postgraduate students in Nigeria. Prangya and Rabindra (2013) found that lack of

training; poor infrastructure and high cost of usage are the obstacles to proper and full utilization of electronic resources.

Objective of the Study

1. Challenges encountered by postgraduate library and information science in the use of information resources in Southern Nigeria.

Research Question

What are the challenges encountered by postgraduate students of library and information science in the use of electronic information resources in Nigeria.

Literature Review

Researchers examined the domain of open and distance education programs in Nigeria. The introduction of ICT usage, integration and diffusion has initiated a new age in educational methodologies. Thus, it has radically changed traditional methods of teaching and learning and students. The discussions were made in terms of (a) the contexts of distance education in Nigeria (b) the role of ICT in distance education (c) the challenges facing ICT usage, integration and diffusion and (d) the need to consider and to promote long-term policies outcomes when evaluating distance education programs. The study was carried out using a qualitative research method. The use of document materials and observation were an essential part of the instruments for data gathering. The study find that the high hope and enthusiasm for open and distance education interfered with, as the nation is faced with inadequacies in essential services and infrastructure; electricity, postal and telecommunication

services and so on (Ololube, Ubogu and Ossai, 2008). This finding is in line with the findings of Ejedafuru (2010) when he pointed out that none of the libraries he studied were fully using ICT for resources sharing. Much remain to be done by Nigerian libraries to enhance resource sharing services. The four reference librarian unanimously agreed that the reason for the failure of resources sharing in their libraries were poor communication infrastructure, negative attitude to automation, not being technically ready, lack of co-operative spirit, inadequate photocopy services, slow document delivery system, inadequate funds, lack of policy and lack of union catalog.

Dilek-Kayaoglu, (2008), Madhusudhan, (2008); Muller and Chandrasekhara, (2006) found that the major problems in the use of e-resources was a lack of subscription in particular fields of study; lack of user orientation or training, low bandwidth, a lack of printing facilities; terminals and trained staff. The study conducted by Shukla and Mishra (2011) found that the majority of research scholars treated the problem of low internet connectivity as the major infrastructural problem in accessing e-resources. The study conducted by Madhusudhan (2010) in India, showed that for the majority of respondents, the most common problem was that of slow access speed. Responded stated that it took too long to view or download pages and they found it difficult to get relevant information. Some respondents were of the opinion that too much information was retrieved and that they could not make use of e-resources effectively due to the lack of proper IT knowledge. Another study conducted by Mulla (2011) in India revealed that the majority of academics faced a

problem of lack of timing or that lack of training was the main problem while using e-resources. Others were troubled by hardware and software problems respectively.

Bhatt and Rana (2011) identified that the most common problems with e-resources were low speed connectivity, lack of awareness about statutory provision for accessing e-resources by the institutions, technical problems (software and hardware), unavailability of sufficient e-resources, doubts in permanency, high purchase price, lack of legal provision, Bashurun, Isah and Adisa (2011) showed that the use of e-resources by academic staff in Unilorin, was not at the expected level that would effectively enhance the learning and resource process as stated in the mission statement of the university, low usage was reported for e-books, bibliographic databases and e-journals in their study.

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mass of irrelevant information; therefore the need to filter the results from search were some of the basic problems encountered while using e-resources.

Other problem observed in the study were download delay, failure to find information, lack of search skills, high cost of access, power outages, unavailability of some websites, inaccessibility of some websites and difficulties in navigating through e-resources. Ingutia-Oyieke and Dick (2010) conducted a study in private University of eastern Africa Baraton (UEAB).

The physical barriers they identified were mainly related to ICT infrastructure and the use of e-resources. Problems relating o ICT infrastructures in Africa included frequent power outages on campus. Resulting to serious repercussion for the LAN, often causing it to breakdown instances of power outages resulting in damage to computers in the library had been reported and frequent periods of equipment downtime as a result of the power outages.

A study conducted by Khan, Khan and Bhatt, (2011) aim to investigate the attitudes of students at the Islamic University of Bahawalpur, Pakistan towards learning through the internet. Findings showed that the respondents were dissatisfied with the internet service provision, slow speed of the internet connection and inadequate number of computers in computer laboratory. Dhanavandam, Esmaic and Nagarajan (2012) have analyses to find out which library processes have been automated in Ghana's three older public university libraries. The study find out that even though the university libraries realize the importance of library automation, they are hampered by lack of funds, lack of support from the university

administrations and lack of skilled staff to embark on automation of all process. Haneefa (2007) presented the results of an investigation in the study “Use of ICT Based Resources and Services in Special Libraries in Kerala, India.

The email service was used by the largest percentage of the users. www was being used by 60 percent of the library users. A good number of users were not satisfied with the application of ICT in the libraries and indicated inadequate ICT infrastructure as their reason for dissatisfaction. Users proposed a variety of measures of formal orientation and training in ICT based. In the study conducted by Obuh (2009), it was observed that there is a general endorsement by respondents that issues like large mass of irrelevant information they need to filter the results from search are some of the basic problems encountered while using electronic resources, these corroborates Eliopoulos and Golieb (2003) that the major problem with search engines is that search queries turn up the too many results, erring on the side of recall rather than precision. Other problems are download delay, failure to find information, inadequate/lack of search skills, high cost of access, power outages, unavailability/disappearance of some websites, inaccessibility of some websites and difficulties in navigating through electronic journals/resources and so on. According to Delane and Mclean (1992) inspite of the popularity of the internet, people may resist using it due to the slow response time and people complain that the information generated by the web is not what they need. Furthermore, Branch, Kim and Koeneke (2000) posit that profuse amounts of information are put in the internet everyday and

in many cases, there is no editor, reviewer, or any other kind of review mechanism to determine the credibility, quality, accuracy or timeliness of the material.

Climah and Nwokocha (2013) empirical study of motivation, challenges and strategies in the use of electronic information resources by postgraduate library users in Southeast Nigerian federal universities posited in their study depicts that 22 (18%) respondents from the four university 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 respondents. 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 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 skills posed a challenge in the use of 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 postgraduate students is very

low. Also ten (10) of the respondents also indicated difficulty in funding the relevant information.

Aina (2014) Awareness, accessibility and use of electronic database among academic staff of Babcock University business school revealed that only 40 (47.1%) and above of respondents had fully accessibility to academic journal, Ebsco host and JSTOR databases. AJOR, Electronic Resources for Research Methods and International Research Journals were averagely accessible to the respondents 30 (35.3%), 36 (42.4%) 38 (44.7%) respectively. It was also revealed that the following databases were not accessible to respondents with Bookboon 19 (22.4%). Dissertation and Theses 19 (22.4%), DOAJ 55 (64.7%), HINARI 20 (20.5%), SAGE 22 (27.1%), World Bank Open Knowledge Repository 31 (36.5%) and National Virtual Library databases 25 (29.4%). This implies that despite the fact that these resources were subscribed to and respondents were aware of them still they are not all fully accessible due to one challenge or the other such as inadequate internet facility and electricity supply. Omeluzor Madukoma, Barmidele and Ogbuiyi (2014) opined that lack of personal computer and erratic power supply among others are major constraints that inhibit use of electronic information resources by postgraduates in Nigeria universities which invariably affects their research output. Bakare, Owolabi, Bamigboye and Bankole (2013) found that limited time and lack of effective information retrieval skills are the main barriers to using e-sources. They also noted that faster access to information was noted as the main advantage of electronic sources. Obuh (2009) assert that speed, accessibility and search-ability

were seen as the main advantages while the main disadvantages were lack of access, lack of coverage and low readability. Fatoki (2004) as cited by Okiki and Asiru (2011) submits that “academic libraries work together with other members of their institutional communities to participate, support and achieve the educational mission of their institutions by teaching were core competencies of information literacy-abilities involved in identifying need, accessing needed information, evaluating, managing and applying information and understanding the legal, social and ethical aspects of information use.

Libraries all over the world make available wide variety of electronic information sources (EIS) for use by postgraduates, researchers and staff in their respective institutions. These EIS form an essential part of the reference services provided by the academic libraries. The cost incurred in acquiring and maintaining both the material and human resources required to provide electronic information sources are enormous and very expensive. It is in view of this, that it is necessary to ensure maximum utilization of these sources, hence the need to appraise the factors contributing to the effective use or otherwise of the sources.

Okiki and Asiru (2011) in their study found that slow internet connectivity was ranked 1528 (69.87%) highest among the problems encountered by the respondents. This was followed by incessant power outage which was ranked at 910 (41.61%) while lack of IT skill was ranked lowest at 77 (3.52%) Aramide and Bolarinwa (2010) propounded that poor power supply, poor infrastructure, lack of skill and high cost are the major constrains to the use of audio visual and electronic

resources by students. Amalahu, Oluwasina and Laoye (2009) found that problems encountered when looking for information from the library of the e-learning centre includes:

- Lack of textbooks on home economics, sciences and counselling psychology.
- Lack of knowledge
- Noise from both library staff and students
- Lack of air conditioning in the reading rooms
- Crowding during exam period
- Slow speed of the internet
- Lack of proficiency in the use of computer
- Opening hours not adequate.

Online searching skills are essential for students in order to obtain required information while utilizing different databases and search engines. Through advance searching skills it is possible to obtain relevant piece of information without waste of time. In the study conducted by Khan, Bhatti and Khan (2011) respondents were asked to mention the problems they face during online searching. Majority of the respondents was found unaware about advance searching techniques no=38, unawareness about the use of a Boolean logic = 24 unable to select copy and paste text from pdf file no=23, cannot save pdf file no=27, lack of knowledge about databases related to subject no=19, feel problems in formulating search query or keywords no=14, lack of knowledge about browsing e-journals, no =- 12 and about access journals no=4. Despite the availability of these resources and their benefits to

university education, their effective uses in Africa are being hampered by varying factors.

Studies have revealed that these factors include poor funding of universities, high cost of IT equipment, high rate of foreign exchange, poor telecommunication infrastructures and so on. (Fatoki, 2004, Adeoti-Adekoye, 1997). Attitude towards a particular phenomenon can enhance or mar human approach to such phenomenon. Positive attitude are widely recognized as a necessary condition for effective use and integration of information technology in teaching and learning.

Methodology

The study adopted a descriptive survey using questionnaire to collect data. A total of three hundred and seventy five respondents comprise of all postgraduate master students in library and information science in eight universities (federal and state) offering library and information science at the postgraduate level in Southern Nigeria as shown in table 1 was the population of the study.

Table 1: Population and Sample of the Study

Name of University	Population	Zones
University of Nigeria, Nsukka	50	South-East
Nnamdi Azikiwe University, Awka	48	
Imo State University, Owerri	30	
Abia State University, Uturu	29	
University of Ibadan	137	South-West
University Calabar, Calabar	24	South-South
University of Uyo, Uyo	20	
Delta State University, Abraka	37	
Total	375	

2013/2014 Academic Session retrieved from Universities departmental Office

The purposive sampling technique was used for this study. This technique also known as judgmental, selective or subjective sampling is that sampling

technique where the units that are investigated as based on the judgement of the researcher (Egbule and Okobia, 2001). Therefore the sample size is 375.

The data collected for the study were analysed using descriptive and inferential statistics. Simple percentage was used to analyze the respondents' characteristics and the research question.

A total of 375 copies of the questionnaire were distributed and 329 (87%) copies of the questionnaire were retrieved. The response rate of (87%) is considered adequate for the study because the standard and acceptable rate for most studies is 60%.

Session 2: Analysis of the Respondents Bio-data

Table 2: Gender Distribution of the Respondents

Gender	Frequency	Percentage
Male	193	58.7
Female	136	41.3
Total	329	100

Table 2 shows that there are more male postgraduate library and information science students than their female counterparts.

Table 3: University/Library School of the Respondents

University/Library School of the respondents	Frequency	Percentage
University of Uyo, Uyo	18	5.5
Nnamdi Azikiwe University, Awka	37	11.2
University of Calabar, Calabar	22	6.7
University of Nigeria, Nsukka	50	15.2
University of Ibadan, Ibadan	117	35.6
Delta State University, Abraka	36	10.9
Abia State University, Abia	26	7.9
Imo State University, Owerri	23	7.0
Total	329	100

Table 3 shows that there are more postgraduate library and information science students in the University of Ibadan 117 (35.6%), this is followed by

University of Nigeria, Nsukka 50 (15.2%) and Nnamdi Azikiwe University, Awka 37 (11.2%).

Table 4: Age Distribution of the Respondents

Age	Frequency	Percentage
Below 23 years	22	6.7
26-29 years	91	27.7
30-34 years	138	41.9
35-39 yeas	70	21.3
40 years and above	8	2.4
Total	329	100

Table 4 shows that there are more postgraduate library and information science students 138 (4.9%) within the ages of 30-34 years. This is followed by those within the ages of 26-29 years, 91 (27.7%) and 35-39 years, 70 (21.3%).

Research Question

Challenges encountered by postgraduate student in the use of electronic information

S/N	University/Library School of the respondents	Frequency	Percentage
1	Poor network	4.61	0.87
2.	Epileptic electricity supply	4.69	0.73
3.	Information overload	4.57	0.80
4.	High cost of access	4.51	0.83
5.	Lack of search skills	2.48	1.34
6.	Download delay	4.17	1.08
7.	Difficulty in accessing some websites	4.22	1.05
	Total	4.18	0.96

From table 4, with an average calculated mean of 5 and standard deviation of 0.96, it shows that the postgraduate library and information science students encountered challenges to a very large extent. This is because both the aggregate calculated statistics mean are greater than the criterion mean of 3.00. They encountered challenges such as poor network (mean=4.61), epileptic electricity

supply (mean=4.69) information overload (mean=4.57) and high cost of access (mean = 4.51). However, they are undecided about lack of search skill (mean = 2.48) as a challenge encountered. This implies that the postgraduate library and information science students in Southern Nigeria encountered numerous challenges when accessing and using electronic information resources. The finding of this study conform with that of Obuh (2009) survey in Nigeria, where it is was observed that there is a general endorsement by respondents of issues on problems like large mass of irrelevant information, download delay, failure to find information, lack of search skills, high cost of access, power outages, unavailability of some websites, inaccessibility of some websites and difficulties in navigating through e-resources.

Similarly, Aina (2014) study on awareness, accessibility and use of electronic databases among academic staff of Babcock university business school propounded that despite the fact that electronic information resources are subscribed respondents are unaware of them still they are not fully accessible due to one challenge or the other such as inadequate internet facility and electricity supply.

Omeluzor et al (2014) opined that lack of personal computer and erratic power supply among others are major constraints that inhibit the use of electronic information resources by postgraduate in Nigeria universities which invariably affects their research output.

Conclusion and Recommendation

The study concludes that inspite of the comparativeness of electronic information resources in empowering the information and academic need of

postgraduate library and information science students in Southern Nigeria certain impediments to the use of electronic resources were identified.

Some of the impediments are epileptic electricity supply, poor network, information overload, high cost of access, download delay, difficulty in accessing some websites. Therefore, if the identified impediment or challenges are not addressed there may be information gap and postgraduate library and information science student in southern Nigeria may suffer set back.

It is thus recommended that the cost of accessing electronic information resources should be subsidized or reduced for instance the cost of internet charge should be subsidized to a minimum or affordable price.

Electricity supply should be restored to the university campuses and environs in order for postgraduate library and information science student to make maximum use of electronic information facilities. Subscription or internet providers should develop their network to be adequate.

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