

USE OF LIBRARY E-RESOURCES AND USER'S SATISFACTION BY UNDERGRADUATES OF NATIONAL OPEN UNIVERSITY OF NIGERIA, LAGOS STUDY CENTRE.

by

Isah Seidu Osimetha

Library Unit, National Open University of Nigeria, Wuse II Study Centre, Abuja.

E-Mail: iosimetha@noun.edu.ng

Mobile Phone No.: +2348037153159

Abstract

The major purpose of this study was to ascertain use of library electronic resources and users' satisfaction by undergraduates of National Open University of Nigeria, Lagos Study Centre. In carrying out this study, three (3) research questions were posed. The study adopted a survey design. Multistage sampling technique was used since the population was large. The study sample population comprised of 722 undergraduates of National Open University of Nigeria (NOUN), Lagos study Centre. The instrument used for data collection was a structured questionnaire. The research questions were answered using SPSS to determine frequencies, percentages, cross tabulations. The 1 (one) hypothesis of this research were measured using linear regression analysis and multiple regression analysis. The major findings of the study revealed: Inaccessibility to some electronic resources, incessant power supply, poor internet access, inadequate computer facilities to access information. Based on these findings, the following recommendations were made. Library management should make sure students are given adequate orientation to increased use of the library electronic resources. For users' to be satisfied, there is need for appreciable level of power supply, improved infrastructure, improved Internet facilities among others.

Keywords: Academic Library, library e-resources, Use of Library e-resources, User's satisfaction with library e-resources

Introduction

Academic libraries are institutions that are established to take care of the information need of students, lecturers, researchers and other community of scholars. The reason for setting up the library is to provide information service to its users. Academic library has a critical role to play in supporting the core mission of these higher institutions of learning which are teaching, learning and research. System of library is changing as libraries; especially academic libraries are now embracing electronic library system thereby encouraging the use of electronic library resources.

Electronic resources can be defined as the electronic representation of information which can be accessed via electronic system and computer network (Johnson, Evensen, Gelfand, Lammers, Sipe & Zilper, 2012). They further stated that electronic resources can be seen as the most recent development in information technology and that they are available in various forms like e-books, digital libraries, online journal magazine, e-learning tutors and online test because of the effective presentation with multimedia tools, these e-resources have become the source of information. Electronic resources deliver the collection of information as full text (aggregated) databases, e-journals, e-books, CD-ROMs, image collections, multimedia in the form of CD, tape, internet, web technology, etc.

User satisfaction is the state that results after a library user has either favorably or positively experienced a service or product. It can be quantified and basically represents the degree to which a library has met a user's needs and expectations. Satisfaction is based on the concept of disconfirmation, which represents the gap that exists between customer

expectations and service performance. This gap, in turn, can develop from a user's perception of the relationship between expectations and performance. The concept of satisfaction is similar to an escalator. As user's get better treatment which, in turn, leads to a higher level of satisfaction, they raise their level of expectations, demand better treatment, and motivate libraries to strive even harder. While this situation presents library staff with a challenge, it can also create a win/win situation in which libraries gain valuable support from their constituents. While satisfaction is a concept that is based upon past performance, it also involves a forward looking component. Libraries can use instruments that define what their users want or record user experiences and levels of satisfaction. Whereas information provision and usage in academic libraries was previously based upon the collection of physical library materials, it is now increasingly the case that academic libraries are moving into the virtual arena.

The usage of electronic resources in recent years has yielded positive results in the area of teaching and research and that through the use of electronic resources, researchers, academic and students now have access to global information resources, particularly the Internet for their scholarly intercourse (Egberongbe, 2011; Ellis & Oldman, 2005). It is pertinent to note that when undergraduates make adequate use of library e-resources for academic and research purposes, they may derive satisfaction especially when the e-resources are timely, accurate, make use of them efficiently and effectively. Be that as it may, it has been observed that undergraduates in Nigerian universities are confronted with various challenges relating to inadequate telecommunications infrastructure, high cost of subscription, Lack of awareness of library e-resources, Inaccessibility to some electronic resources, incessant power supply, poor internet access, poor user skills, inadequate computer facilities to access information amongst others in the use of e-resources. Consequently, this study explores awareness, use, and users' satisfaction with library electronic resources among undergraduates of National Open University of Nigeria (NOUN), Lagos Study Centre.

Statement of the Problem

Observation has shown that electronic resources are of great importance to the academic and research needs of undergraduates, since they are available in various formats in libraries but undergraduates especially those of National Open University of Nigeria, Lagos Study Centre seem not to be utilizing these e-resources available to them, could it be that usage is hindered, if usage is not hindered then could it be that users are not satisfied with the e-resources in the library. Therefore, the crux of this study is to investigate the use and users' satisfaction with library electronic resources by undergraduates of National Open University of Nigeria, Lagos Study Centre.

Objectives of the Study

The main objective of this study is to determine the influence of use of library e-resources on users' satisfaction by undergraduates of National Open University of Nigeria (NOUN), Lagos Study Centre. To achieve this, the following specific objectives, are set to;

1. determine the level of use of library electronic resources in NOUN;
2. find out the level of users' satisfaction with library electronic resources in NOUN;
3. identify the challenges facing the use of library e-resources by undergraduates in NOUN.

Research Questions

This research work answered the following questions:

1. What is the level of use of library e-resources in NOUN?

2. What is the level of users satisfaction with library e-resources in NOUN?
3. What are the challenges of the use of library e-resources in NOUN?

Hypotheses

A null hypothesis was tested in the Study at 0.05 level of significance:

H₀₁ Use of library e-resources has no significant influence on users' satisfaction in NOUN.

Significance of the Study

This study would help librarians, library management, higher institution of learning, Government at all levels and other stakeholders to know the trend on awareness, use of library electronic resources, the purpose of use of library e-electronic, users' satisfaction with library e-resources and the challenges of using library electronic resources. This would afterwards help the stakeholders to see the need for innovations on use of library e-resources especially on orientation and re-orientation, training and re-training that could enhance the use of library electronic resources.

Scope of the Study

This study focuses on the use and users' satisfaction of library e-resources by undergraduates of National Open University of Nigeria (NOUN), Lagos Study Centre as a case study. This study is limited to library electronic resources and not printed information resources. Lagos Study Centre was sufficient enough for this study because of the size and location of the Centre. Unlike other Centres, Lagos Study Centre is located at the heart of the Lagos state which makes it easier for students to access and use the electronic resources the Centre library provides.

Literature Review

Library of Congress (2008) defines Electronic resources as "any work encoded and made available for access through the use of a computer" (p. 2). It includes electronic data available by remote access and direct access (fixed media, i. e discs/disks, cassettes, cartridges). It also refers to any electronic resource, remote or direct access, which the library provides access to through official contractual, licensed, or other agreements. Electronic resources are also referred to as digital materials - materials available in a digital or electronic format, i. e CD-ROM, DVD, e-journals, and web sites (Johnson *et al*, 2012).

According to Omoike (2013), electronic resources comprise set of instructional materials such as audio and video cassettes, CD ROM, television and radio broadcast as well as multimedia components such as computer and satellites. Undergraduates' students make use of e-books, e-journals, electronic reference materials like e-encyclopedias, e-thesis/dissertation, CD-ROM Databases, e-mail and e-news. Electronic resources have become very important in academic work. Teaching, learning and research have been made easier through the use of these resources. Electronic resources are vital to students learning and research as students have greater access to vast amount of information that is not easily available on print media. These resources can only be accessed using computers and other ICT devices. Online databases are typical e-resources that provide access to information resources, some of these databases are subscribed to by the library and some are free. These include: AGORA, EBSCOHOST, HINARI, MEDLINE, OARE, etc. through these online databases, students and researchers get access to e-books, e-journals, electronic reference materials like encyclopedias in various disciplines. Compact Disk Read Only Memory (CD-ROM) databases provide access to relevant databases without Internet connectivity. This type of electronic resources is cost effective when compared with online databases that rely on the internet for access. Advancement in technology has opened new prospects for

information creation, duplication, storage, access, distribution, and presentation. This has resulted in information products being made available in CD-ROM. The rate at which information sources are being created and converted into electronic format is noteworthy. NOUN Library has a repository of Compact Disk Read Only Memory (CD-ROM) databases from all its collections for use by its students especially the undergraduates which is domiciled in the e-library and this can be accessed with the use of computer systems or other gadgets like smartphones, iPad among others.

Use of Library Electronic Resources

Electronic resources mostly needed by distance learners for their academic purpose are available on the internet (Thanuskodi, 2010) and in online journals and databases. This is evident from the findings by Dhanavandan, Mohammed and Nagarajan (2012) who concluded that 38 (44%) of the students used e-resources for studying, and 14 (16%) of users used them for updating their knowledge. A study by Aramide and Bolarinwa (2010) also revealed that distance students regularly used audiovisuals and electronic resources. They used them for carrying out their assignments. Dadzie (2005) conducted a study on “electronic resources: access and usage”. The “study found that usage of some internet resources were very high, whilst the use of scholarly databases was quite low. The low patronage was ascribed to inadequate information about the existence of these library resources” (Dadzie, 2005:290). Dadzie’s findings are concerning especially with regard to NOUN since the University subscribes to various online databases such as EBSCO Host, Emerald, Jstor publication, and HINARI, just to mention a few, and at quite exorbitant subscription fees which therefore need to be used. It is based on this that if students do not use these databases optimally, then many of the resources go to waste. The use of electronics resources affords researchers and students the opportunity to have access to global information resources, especially the Internet for their scholarly work. According to Emwata&Nwalo (2013), the use of electronics resources has given rise to new modes of organizing the educational environment in tertiary institutions and has introduced a new concept of teaching-learning process. Undergraduate students make use of electronic resources for many purposes. They use e-resources mostly for academic purpose that is, to study and prepare for examinations, to do class assignment, and carry out research, retrieving current literature for studies, and to communicate and collaborate with peers and teachers via the Internet on e-mail or by following blog discussions. E-books and e-journal articles are used to acquire knowledge and carry out research by students (Omoike, 2013; Ajayi, Shorunke&Aboyade, 2014). Course materials are provided on CD-ROM for students’ use which affords students to peruse as convenient. All these resources have really influenced learning and improved the quality of education as this is evident in distance learning.

Use of Library e-resources and Users’ Satisfaction

User satisfaction is also assumed to be positively related to the user’s degree of library use. With respect to users’ orientation, quality in the library sector is defined as permanent users’ satisfaction. Academic libraries should try hard to survive and grow their user base focusing on meeting their users’ expectations. Jayasundara (2008) in his paper notes that user expectation and satisfaction studies have become one of the most popular studies in the area of service quality in many academic libraries. The user expectations and satisfaction has been used to determine the service quality which is seen as vital for service organizations to position themselves strongly in a competitive environment (Jayasundara, 2008). Users’ satisfaction of library e-resources is based on the level of how the library meets their information needs, the relevance of the materials, availability of resources, accessibility of resources and how they can use such various library resources. Users’ dissatisfaction on

the other hand is influenced by the means of accessing information of which accessibility will be difficult and its utilization impaired. Satisfaction is to have pleasure, contentment from the information one needs. Arif and Mahmood (2010) examined the satisfaction level of users with the central library collection and services at AllamaIqbal Open University (AIOU), Islamabad, Pakistan. A semi-structured questionnaire was used as a data collection tool from the subjects of the study. The result indicated that a majority (52%) of the respondents frequently visited the library, followed by 47% respondents who occasionally visited the library. The respondents expressed dissatisfaction with the present library collection, online databases, virtual reference services, interlibrary loan, photocopy facilities, and journals related to subjects. Nevertheless, they were satisfied with the location and the physical setup of the library. The study found that the majority of the respondents used library resources for teaching and research. About 54% of the respondents suggested that the library should provide information literacy programs. They also suggested that competent and qualified library staff should be appointed at senior positions in the central library.

Research Methodology

The design for this study was survey design. This has helped the researcher to determine users' satisfaction with use of library electronic resources by undergraduates in National Open University of Nigeria (NOUN), Lagos Study Centre. The research design was used to obtain answers to the research questions, hypothesis. Challenges faced by the study and interpretation of the result.

The population was the undergraduates of National Open University of Nigeria (NOUN), Lagos Study Centre. Multistage sampling technique was adopted because of the large size of the population. The main instrument employed in this study is a self-structured questionnaire. The questionnaire was personally administered and retrieved with the aid of research assistant from Lagos Study Centre.

Pilot Study

A pilot study was conducted among NOUN students in McCarthy study Centre, Lagos State. Fifty copies of the questionnaire were administered on a work day to undergraduates at the Centre Library. The respondents at the pilot stage were encouraged to provide feedback on the ambiguity (if any) and structure of the questions. Fifty copies of the questionnaire were returned. All the questionnaire (100%) responses were processed and analysed using Cronbach analysis. Cronbach reliability test conducted to determine the reliability of main constructs in the questionnaire "Use of library e-resources" and "Users' satisfaction" gave the results 0.92 and 0.74 respectively representing their reliability.

Presentation and Analysis of Data

Table 1. Respondents by Gender.

Gender	Frequency	Percentage (%)
Male	358	49.6
Female	364	50.4
Total	722	100

Gender composition of respondents as shown in Table 1 indicates that the majority 364(50.4%) of Undergraduates were females, while the male constituted the minority 358 (49.6%). This indicates that there were more female participants than male participants in

this study. This could mean that women did not have equal opportunities of undertaking full-time studies like their male counterparts presumably because of their role of childbearing as well as attending to other household chores. It could also mean that there are more female than male in Nigeria.

Table 3. Level of use of library e-resources in NOUN

E-Resources	E-Thesis	Online D/bases	CD-ROM	(online) catalog	E-Journals	E-Past Question Papers	e-Ref Materials	E-Books	Search Engines	E-Courseware
Utilized	330 (51.3%)	340 (52.2%)	358 (55.6%)	534 (78.1%)	404 (58.2%)	514 (78.6%)	488 (73.1%)	508 (72.8%)	426 (63.9%)	408 (61.6%)
Not Utilized	314 (48.8%)	312 (47.9%)	286 (44.4%)	150 (21.9%)	290 (41.8%)	140 (21.4%)	180 (26.9%)	190 (27.2%)	242 (36.2%)	254 (38.4%)
Percentage (%)	100	100	100	100	100	100	100	100	100	100
Total	644	652	644	684	694	654	668	698	668	662

Table 3 shows that average of 64.5% of the respondents utilized the ten (10) library electronic resources while average of 35.5% of the respondents do not utilize the library e-resources. This shows that majority of the undergraduates of NOUN, Lagos Study Centre utilized the library e-resources but seldom utilize electronic thesis/dissertation and online databases.

Table 4. Level of Users Satisfaction with library e-resources in NOUN

E-Resources	Currency	Timeliness	Approach	Format	Access of Lib e-res	Avail of Lib e-res	Quality/Relevance	Accuracy	Ease of Use
Satisfied	506 (77.9%)	538 (81%)	518 (79%)	534 (81.4%)	508 (78.7%)	512 (78.8%)	562 (81.7%)	566 (84.7%)	540 (80.1%)
Not Satisfied	144 (22.2%)	126 (19.0%)	138 (21.0%)	122 (18.6%)	98 (15.0%)	138 (21.4%)	126 (18.3%)	102 (15.3%)	134 (19.9%)
Percentage (%)	100	100	100	100	100	100	100	100	100
Total	644	652	644	684	694	654	668	698	668

Table 4 shows that average of 80.4% of the respondents were satisfied with the nine (9) electronic resources while average of 19.6% of the respondents were not satisfied with the library electronic resources. This also implies that undergraduates of NOUN, Lagos Study Centre were satisfied with library electronic resources. This disagrees with the findings of Arif and Mahmood (2010) who examined the satisfaction level of users with the central library collection and services at Allama Iqbal Open University (AIU), Islamabad, Pakistan. The respondents expressed dissatisfaction with the present library collection, online databases, virtual reference services, interlibrary loan, photocopy facilities, and journals

related to subjects. Nevertheless, they were satisfied with the location and the physical setup of the library.

Table 5.Challenges of the use of library e-resources in NOUN

Challenges	Agree	Disagree	Percent	Total
Incomplete and inaccurate information	288 (43.1%)	380 (56.9%)	100	668
Lack of assistance from library personnel	326 (48.4%)	348 (51.6%)	100	674
Lack/Inadequate of skills in search for needed information	352 (51.7%)	330 (48.4%)	100	682
Information Overload	360 (53.6%)	312 (46.4%)	100	672
Difficulties in locating relevant e-resources	362 (54.3%)	304 (45.6%)	100	666
Poor infrastructure	382 (57.3%)	290 (43.2%)	100	672
Inaccessibility to some electronic resources	376 (55.7%)	300 (44.4%)	100	676
Incessant power supply	372 (55.6%)	294 (44.1%)	100	666
Lack of awareness	388 (56.6%)	298 (43.4%)	100	686
Poor internet access	384 (57.4%)	284 (42.5%)	100	668
Inadequate computer facilities to access information	444 (64.3%)	246 (35.7%)	100	690

Table 5 shows that average of 54.4% of the respondents agree with the eleven (11) challenges in the library while 45.65% of the respondents disagree with the challenges. This implies that a lot needed to be done to improve the quality of service in the library.

Summary, Conclusion and Recommendations

The study was carried out using National Open University of Nigeria, Lagos Study Centre as a case study. The Lagos Study Centre has more female undergraduates than their male counterparts. And majority of the students are adults and there are more respondents in 400l and 200l than in 100l and 300l. From all indications, school of Art and Social Sciences recorded more respondents than school of Management science and school of Education.

The study investigated use and users' satisfaction of library electronic resources in National Open University of Nigeria, Lagos Study Centre. It was carried out the level of use of library electronic resources, users' satisfaction with library electronic resources and the challenges to the use of library e-resources. The survey research design was adopted for the study. The population comprised 17,394 Undergraduates from National Open University of Nigeria, Lagos Study Centre. Multistage sampling technique was used to get the sample for this study. It has sample size of 960 Undergraduates. The sample size was determined with the aid of a table of calculated sample size developed by Krejcie and Morgan (1970) (See Appendix I).An instrument titled Use and Users' Satisfaction of Library Electronic Resources (UUSLER) questionnaire was used for data collection. The instrument was pre-tested for reliability using the Cronbach's Alpha reliability technique. The result of the Cronbach's Alpha test for the two constructs were Use of Library e-resources (0.92) and Users' satisfaction of library e-resources (0.74). A total of 960 copies of questionnaire were

administered, 722 copies of the questionnaire were returned given average response rate of 75.21%.

The collected data were analyzed using descriptive and inferential statistics i.e. simple percentage was used to analyzed demographic findings; mean and standard deviation was used to analyze research questions while correlation co-efficient and regression analysis with the use of SPSS version 2.0 were used to analyze the research Hypotheses.

Conclusion

The findings revealed that substantial percentages of the undergraduates only not make use of library electronic resources such as e-courseware, Internet search engines, e-books, e-reference materials, and e-past question papers, they as well derive satisfaction with using those e-resources especially with regards to ease of use, accuracy, quality/relevance, availability and accessibility of library e-resources to mention but few. With this in mind, one could conclude that generally, use of library electronic resources has significantly influence users' satisfaction in National Open University of Nigeria (NOUN), Lagos Study Centre. This is not without some challenges as the level of use of some of the library e- resources are low such as electronic thesis and dissertation, Online Database, CD-ROM, Library online Catalogue and e-journals. This has affected the level of users' satisfaction with those e-resources.

Recommendations

Arising from the research findings, the following recommendations are therefore presented:

1. The findings indicate that there was large percentage of undergraduates with low level of use of some of the e-resources such as e-thesis/dissertation, online databases, CD-ROM, Library online catalogue and e-journals. Library management should make sure students are given adequate orientation on the use of library resources in order to increase the library use.
2. Undergraduates low level of use of the library e-resources may affect their level of users' satisfaction because use and users' satisfaction are complimentary each other. Therefore, academic libraries management should identify ways that will make library staff to have effective and continuance commitment to their responsibilities especially in the area of library use.
3. For users' to derive satisfaction from the Use of library e-resources, there is need for ease of use of the e-resources, timeliness, accuracy, currency and the format with which the e-resources are produced has to meet reasonable standard.
4. For users' to be satisfied, there is need for appreciable level of power supply, improved infrastructure, improved Internet facilities among others.
5. Management of Academic libraries should provide clear library policies/framework that would bring about increased in library use and users' satisfaction.

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