Relationship between Utilisation of Electronic Books and Users' Satisfaction in University Libraries in North East Zone, Nigeria

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Abstract - **Electronic books (e-books) are vital information resources in every university library as they are utilised by users in search of information for conducting research activities, teaching, learning and assignment. This study investigated the relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria. Correlational research method was used. The population of the study comprised of five thousand three hundred and seventy nine (5,379) registered library users spread across the five sampled university libraries under study. Stratified random sampling technique was used in drawing the samples and the sample size for this study was one thousand three hundred and seventy two (1,372) registered library users drawn using Krejcie and Morgan (2006) table. Questionnaire was used as the research instrument. Data collected were analysed using descriptive statistics to answer the two research questions, while, inferential statistics of Pearson Product Moment Correlation Coefficient (PPMC) was used to test the formulated null hypothesis at 0.05 level of significance. Findings from the study revealed that users' utilisation of e-books and users' satisfaction with utilisation of e-books for research, learning, assignment and information in university libraries in North East Nigeria were generally moderate. The study also established that there was significant relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria. The study recommended teaching of information literacy for library users, acquisition of adequate and relevant e-books in the university libraries as well as discouraging users from using information obtained from online sources such as Google and other search engines as they are mostly ineffective for their research activities, teaching, learning and assignment.**
Keywords: **Utilisation, Electronic Books, Users, Satisfaction, University Libraries, North East, Nigeria**

I. INTRODUCTION

University libraries are established with the purpose of supporting the teaching, learning, research, and information needs of the parent institutions. In order to support these activities, provision of information resources both in print and electronic formats has become central, which would enable users utilise these resources effectively to meet their information demands. A university library is expected to provide materials for courses, research projects and institutional academic activities to satisfy the needs of the well definedspecialised clientele like faculty, students, researchers and administrators. Traditionally, information resources were in printed formats such as books, journals, indexes, abstract and magazines among others. But, technological advancement haveleadto the development of electronic information resources such as e-journals, e-books, online databases, CD-ROM databases, internet, e-thesis/dissertations, e-magazines and institutional databases among others. The digital environment has led to the changes in the creation, storage, access and delivery of information. Librarians have had to learn new knowledge and skills in order to meet ever expanding user needs for new information services using Information Communication Technologies (ICTs) and e-resources (Zinn &Langdown, 2011).

Electronic books (e-books) are defined as the electronic versions of books that are generally accessible via the Internet or the electronic version of traditional print books that can be read by using a personal computer or an e-book reader. Zinn and Langdown (2011) noted that there are two main types of electronic books (e-books): those which are born digital – that is, materials which may have originated from a digital source (for example some electronic records) – and those which have been digitised, that is the process of creating digital files by scanning or converting analogue materials. E-books help to move the library into the new century of digital Library 2.0 and virtual library capability, cheaper; space saving, offers 24/7 access and availability, remote access, full-text search capability, as well as copying and pasting. E-books provide multiple users access and searching and browsing capabilities because librarians are able to provide their patrons with more content with less shelf space. E-books help librarians connect to information that is needed without having to search the shelves or request searches or even provide inter-library loan service.

Utilisation of e-books entails the process ofsearching, browsing, examining, and visiting e-books for the purpose of deriving maximum satisfaction by the library users. The importance of e-book collections continues to grow in the higher education environment (Sandy and Natasha, 2011). Ball (2009) noted that e-books have become very important in the academic sphere and are part of a "professional media mix". The last few years has seen books, journals and databases converge into a major electronic medium. Veldsman (2008) believed that e-books are not aimed at librarians as librarians are but the conduits of information to the academic researchers. Users' satisfaction could be viewed as the extent to which library services and resources meet the information needs and demands of library users. Veldsman (2008) described the attitude towards e-books as

requiring a paradigm shift from scepticism to acceptance. Importantly, the author talked about e-books for use rather than reading. In the author's view, e-books are resources for professionals and academics that use the information to produce research. According to Rowlands, *et al*., (2008) the time spent reading is very short which has developed into a new reading behaviour. The authors further emphasised that, as information is nowadays born digital, it could appear that this behaviour had become the norm amongst all users. Ezeala (2009) studied the effectiveness of library resources in Agricultural Research Institutes in Nigeria and found that more than three quarter of the respondents find the libraries ineffective, as they indicated dissatisfaction with electronic resources and their library's collection. It is on this basis that this study determined the relationship between utilisation of electronic books and users' satisfaction in university libraries in North East Zone, Nigeria

II. STATEMENT OF PROBLEM

Information resources especially e-books are essential in any library taking cognizance of the digital era. They are the tools used by users in order to obtain information for various purposes, conduct effective research activities, carry out quality teaching and learning as well as complete assignment by faculty, students and researchers. Vasishta (2013) posited that the use of e-resources such as e-books can revolutionise teaching and learning and could bring advances that could improve education dramatically. However, preliminary investigation conducted by the researchers in the university libraries under study revealed that e-books are available to some extent in some of the libraries, but, users still search for information from Google and other search engines in order to carry out research, teaching and learning activities as well as carryout academic assignments. Consequently, their academic performances are hampered perhaps due to the poor quality of the information they obtain from these sources. Could this be attributed to low usage of the e-books and other e-resources available? Do the e-books available not satisfying the users? Is there any relationship between utilisation of e-books and users' satisfaction in university libraries under study? This is the thrust for which this research was conducted in order to determine the relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria.

III. OBJECTIVE OF THE STUDY

The objectives of the study were to determine the:
1. extent of users' utilisation of e-books in university libraries in North East Zone, Nigeria;
2. extent of users' satisfaction with utilisation of e-books in university libraries in North East Zone, Nigeria
3. relationship betweenutilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria;

IV. RESEARCH QUESTION

The following research questions were answered in the course of the study
1. What is the extent of users' utilisation of e-books in university libraries in North East Zone, Nigeria?
2. What is the extent of users' satisfaction with utilisation of e-books in university libraries in North East Zone, Nigeria?

V. HYPOTHESIS

H_{01}- There is no significant relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria.

VI. SIGNIFICANCE OF THE STUDY

This study will be significant to management of university libraries, library users, researchers and students. Findings of this study will enable management of university libraries in North East Nigeria to know the extent of utilisation and satisfaction of e-books by their users. This would enable them use the recommendations from this study to find solutions to the libraries' weaknesses in their e-books subscriptions. If the recommendations from this study are effectively implemented, the library users would be the major beneficiaries as they would have quality e-books that would help them in searching information for research, teaching, learning and assignments. Researchers and students of Library and Information Science can use this study when conducting further researches because; it will create awareness on the availability of e-books and extent of utilisation and satisfaction of e-books in university libraries in North East Nigeria.

VII. RESEARCH METHODOLOGY

The method adopted for this study was correlational research method to determine the relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria. The population of the study comprised five thousand three hundred and seventy nine (5,379) registered library users spread across the five sampled university libraries under study (Library Users' Registers, 2015). The universities include University of Maiduguri, Abubakar Tafawa Balewa University Bauchi, Adamawa State University Mubi, Gombe State University Gombe, and American University of Nigeria Yola. Stratified random sampling technique was used in drawing the samples and the sample size for this study was one thousand three hundred and seventy two (1,372) registered library users drawn using Krejcie and Morgan (2006) table. Questionnaire was used as the research instrument. Data collected were analysed using descriptive statistics to answer the two research questions, while, inferential statistics of Pearson Product Moment Correlation

Coefficient (PPMC) was used to test the formulated null hypothesis at 0.05 level of significance.

VIII. DATA PRESENTATION AND RESULTS

One thousand three hundred and seventy two (1,372) copies of the questionnaire were administered, while, one thousand two hundred and sixty four (1,264) copies were filled, returned and found usable, making 92.1% return rate. The high response rate could be attributed to the fact that the respondents were all educated and the research assistants co-opted were all professionals working in the university libraries under study and were able to persuade the respondents in filling the copies of the questionnaire on wait and collect basis. Also, of the 1,264 respondents that participated in this study, 266(21.0%) were between the ages of 17-24, 331(26.2%) were between the ages of 25-34, 353(27.9%) were between the ages of 35-44, 314(24.9%) were between the ages of 45 years and above. University of Maiduguri recorded 226(17.9%) responses, Abubakar Tafawa Balewa University recorded 302(23.9%) responses, Adamawa State University recorded 254(20.1%) responses, Gombe State University recorded 265(21.0%) responses and American University of Nigeria recorded 217(17.1%) responses. There were 3239(25.6%) non degree students, 338(26.7%) undergraduate students, 267(21.1%) postgraduate students and 336(26.6%) academic staff of which 832(65.8%) were males and 432(34.2%) were females making a total number of 1,264 respondents.

A. Research Question One: What is the extent of users' utilisation of e-books in university libraries in North East Zone, Nigeria?

TABLE I EXTENT OF USERS' UTILISATION OF E-BOOKS

	Utilisation of e-books	High 4	Moderate 3	Low 2	Very Low 1
1.	What is the extent of your utilisation of e-books for information?	387(30.6%)	473(37.4%)	215(17.0%)	189(14.9%)
2.	What is the extent of your utilisation of e-books for research?	412(32.6%)	594(46.9%)	169(13.4%)	89(7.0%)
3.	What is the extent of your utilisation of e-books for assignment?	412(32.6%)	494(39.1%)	260(20.6%)	98(7.8%)
4.	What is the extent of your utilisation of e-books for teaching and learning?	229(18.1%)	221(17.5%)	421(33.3%)	393(31.1%)

Table I shows the extent of users' utilisation of e-books. Under the extent of users' utilisation of e-books for information, high recorded 387(30.6%), moderate recorded 473(37.4%), low recorded 215(17.0%) and very low recorded 189(14.9%). Under the extent of users' utilisation of e-books for research, high recorded 412(32.6%), moderate recorded 594(46.9%), low recorded 169(13.4%) and very low recorded 89(7.0%). Under the extent of users' utilisation of e-books for assignment, high recorded 412(32.6%), moderate recorded 494(39.1%), low recorded 260(20.6%) and very low recorded 98(7.8%). Under the extent of users' utilisation of e-books for teaching and learning, high recorded 229(18.1%), moderate recorded 221(17.5%), low recorded 421(33.3%) and very low recorded 393(31.1%) respectively.

B. Research Question Two: What is the extent of users' satisfaction with utilisation of e-books in university libraries in North East Zone, Nigeria?

TABLE II EXTENT OF USERS' SATISFACTION WITH UTILISATION OF E-BOOKS

	Satisfaction with utilisation of e-books	High 4	Moderate 3	Low 2	Very Low 1
1	What is the extent of your satisfaction with utilisation of e-books for information?	302(23.9%)	621(49.1%)	229(18.1%)	112(8.9%)
2	What is the extent of your satisfaction with utilisation of e-books for research?	302(23.9%)	532(42.1%)	329(26.0%)	101(7.9%)
3	What is the extent of your satisfaction with utilisation of e-books for teaching and learning?	54(4.3%)	102(8.1%)	470(37.2%)	638(50.5%)
4	What is the extent of your satisfaction with utilisation of e-books for assignment?	387(30.6%)	473(37.4%)	215(17.0%)	189(14.9)

Table II shows the extent of users' satisfaction with utilisation of e-books in the study area. Under the extent of users' satisfaction with utilisation of e-books for information, high recorded 302(23.9%), moderate recorded 621(18.1%), low recorded 229(18.1%) and very low recorded 112(8.9%). Under the extent of users' satisfaction with utilisation of e-books for research, high recorded 302(23.9%), moderate recorded 532(42.1%), low recorded 329(26.0%) and very low recorded 101(7.9%). Under the extent of users' satisfaction with utilisation of e-books for teaching and learning, high recorded 54(4.3%), moderate recorded 102(8.1%), low recorded 470(37.2%) and very low recorded 638(50.5%). Under the extent of users' satisfaction with utilisation of e-books for assignment, high recorded 387(30.6%), moderate recorded 473(37.4%), low recorded 215(17.0%) and very low recorded 189(14.9%) respectively.

C. Hypothesis Testing - There is no significant relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria

Hypothesis was tested in this section using the Pearson Product Moment Correlation Coefficient at 0.05 level of significance.

TABLE III RELATIONSHIP BETWEEN UTILISATION OF E-BOOKS AND USERS' SATISFACTION

Variable	r	Utilisation of e-books	P-value	Users' satisfaction
Utilisation of e-books	0 .100[**]		0.000	
Users' satisfaction				

**. Correlation is significant at 0.05 level (2-tailed), *(p<0.05)*

The result in table 3 indicates a significant relationship between utilisation of e-books and users' satisfaction. This is because the probability value (P = 0.000) is less than critical value at 0.05 level of significance (P < 0 .05) at a correlation index r = (0.100), meaning that utilisation of e-books in university libraries in North East Zone, Nigeria is significantly related to users' satisfaction. Hence, the null-hypothesis which states that there is no significant relationship between utilisation of e-books and users' satisfaction is rejected.

IX. CONCLUSION AND RECOMMENDATION

This study has established that the users' utilisation of e-books and users' satisfaction with utilisation of e-books for research, learning and information in university libraries in North East Nigeria were generally moderate. The study also established that there was significant relationship between utilisation of e-books and users' satisfaction in university libraries in North East Zone, Nigeria. Based on these findings, the following are hereby recommended:

1. There is the need for university libraries in North East Nigeria to teach information literacy to library users so as to enable them know how to use library resources including e-books in searching information for their academic activities.
2. Management of university libraries must ensure acquisition of adequate and relevant e-books in the university libraries so that users would utilise them for information, research, teaching, learning and assignment and be satisfied.

3. University library users must be discouraged from using information obtained from online sources such as Google and other search engines as they are mostly ineffective for their research, teaching, learning and assignment activities.

REFERENCES

[1] Ball, R. (2009). E-books in practice: the librarian's perspective. *Learned Publishing. 22*(1). 18-22.

[2] Ezeala, L. O. (2009). Effectiveness of library resources in the libraries of agricultural research institutes in Nigeria. *Library Philosophy and Practice*. Retrieved from http://Www.Webpages.Uidaho.Edu/~Mbolin/Oluebube.Htm

[3] Rowlands, I., Nicholas, K., Williams, D., Huntington, B., Fieldhouse, I., Gunter, U. A., Whitey, I., Jamali, B. N., Dobrowolski, S. & Tenopir, C. (2008). The Google generation: the information behaviour of the researcher of the future. *Aslib Proceedings, 60*(4). 290-310.

[4] Sandy, Z. & Natasha L. (2011). E-book usage amongst academic librarians in South Africa. *South African Journal Library & Information Science. 20*(11). 77-82.

[5] Vasishta, S. (2013). Dissemination of electronic journals: A content analysis of the library websites of technical university libraries in North India, *Electronic Library. 31*(3). 278 – 289.

[6] Veldsman, S. (2008). *E-books: new pricing models and access. eIFL.net (electronic information for libraries general assembly 2008 program.* Retrieved from *http://www.eifl.net/cps/sections/services/knowledge/ga_all/ga2008/ga 2008-programe-docs-pub*.

[7] Zinn, S. &Langdown, N. (2011). E-book usage amongst academic librarians in South Africa. *South African Journal of Libraries & Information Science, 77*(1):.104-115.