# Effect of Information Literacy Skills on Use Of Electronic Library Resources By Lecturers In Universities In North Central Nigeria

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**Abstract**
*This study examined the effect of information literacy skills on use of electronic library resources by lecturers in universities in North Central Nigeria. Descriptive survey research design was adopted for this study, cluster sampling technique was used to select nine (9) out of 23 universities in the North Central Zone of Nigeria, each cluster containing three teams each represented federal, state and private owned universities. The population of the study was 6267 lecturers in the universities in North central Nigeria. Neyman's allocation formula was employed selecting the sample size for each selected university giving a total of 404 respondents. Questionnaire was administered as instrument for data collection. Simple percentage statistical tool was used to answer the research questions while the hypothesis was tested using Statistical Package for the Social Sciences (SPSS) at 0.05 significance level. The study showed that the respondents possessed high levels of information literacy skills electronic resources such as e-journals, e-books, and internet resources were available in this institutions and highly utilized. Hypothesis tested revealed that there exists strong positive correlation between information literacy skills and utilization of electronic resources it was also revealed descriptively that information literacy skills had great positive effect on the utilization of electronic resources thus the study recommends continual improvement on information literacy skill of lecturers, as well as seminar, workshop should be organized by the schools for lecturers so as to improve information literacy skills.*

**Keywords**: Information literacy; Electronic resources; Skills; University lecturers

## 1.1 Introduction

University libraries are referred to as academic libraries which play a vital role in execution of academic activities in the universities. They are saddled with the responsibility of providing information resources and services for teaching, learning and research in line with the objectives of their parent institutions. In view of this Uzuegbu, (2012) noted that the critical functions of the university libraries are the provision of information to their clientele which are made

up of faculty members, students and researchers. The introduction of Information and Communication Technology (ICT) in libraries has given rise to improved library services. Popular among these is the electronic library (e-library) services.

According to Arms (2007) an e-library is an organised collection of multimedia and other types of resources which are available in computer process able form. The acquisition, storage, preservation and retrieval of the resources are carried out through the use of digital technology. Access to the entire information collection is globally available directly or indirectly across a network which also supports users in dealing with information objects and helps in the organization and presentation of the objects via electronic/digital means.

Adigwe (2010) defined information literacy as the ability to locate, evaluate and use effectively the needed information. Information literacy has its roots in library user education, where librarians induct new users about the services offered by the library and teach them something about finding and evaluating information. The relevance of research among academics in any university system depends largely on the quality and quantity of information resources at the institution's disposal and their use for teaching, research and community activities by faculty members in the Nigerian university system. The effectiveness of academics in any university system depends on the ability to exploit available information resources either in print or electronic formats. The need for faculty members in Nigerian universities to function effectively also calls for adequate information literacy skills. Thus, libraries exist in universities to meet the information needs of students, members of academic staff and other researchers in the community, where such universities exist. To actualise this objective, academic libraries acquire and organise both printed and electronic

information resources for use by their clientele.

According to Orgem (2012), Lecturers need library resources because they are repositories of knowledge that provide the vital underpinning for national development. Similarly, Orgem (2012) citing Ranganathan to have observed that the University or college teacher who thinks of education only in terms of his particular course aims and who confines himself to the use of lecture notes, textbooks and assigned readings all of his own choosing, has tradition and experience to assume his success. The collegiate teacher must suggest, provoke and guide reading and has to create interest where it does not exist. The lecturer can thus promote use of information sources in the library through teaching and research while the librarian will also do this through use of the library instruction.

## 1.2 Statement of the Problem

The major responsibilities of university lecturers in universities in North central Nigeria are to teach, carryout research and participate in community services. To effectively perform these functions, the lecturers require the most current information resource to back up their knowledge. Consequently, university librarians are expected to provide e- information resources to support these activities, in addition to their traditional collections. In the same direction, the lecturers are expected to be knowledgeable enough to effectively utilize these e-resources to meet their information needs.

Unfortunately, however, it is observed by this researcher that many lecturers in universities in North Central Zone of Nigeria have been encountering problems in a bid to access and utilise e-resources to support their functions. The question is what could be responsible for this situation? Could this be due to inadequate computer skills/knowledge of utilising the available e-resources? Wasike

(2013) in relation to this question noted that provision of electronic information resources in academic libraries is not smooth sailing as it is faced by several challenges such as lack of user skills and computer literacy skills. In the light of the emerging emphasis upon electronic information sources utilization for effective performance within higher institutions of learning, it becomes imperative to determine the extents of availability of e-resources and lecturers capability to use them, lecturers in universities covered by this study. These are the purposes for which this researcher decided to carry out this study titled "information literacy skills as correlates of use of electronic library resources by lecturers in universities in North Central Nigeria. The aim of this study is to determine how the information literacy skills correlate with use of e-library resources by lecturers in universities in North Central Nigeria.

**Research Questions**
Thus is study is aimed at answering the following research question:
1. What are the level of information literacy skills among lecturers in the universities of North Central Nigeria?
2. What are the types of electronic library resources available in the universities of North Central Nigeria?
3. What is the extent to which e-resources are used by lecturers in university libraries in North Central Nigeria?
4. What is the perceived effect of information literacy skills on the use of electronic resources by lecturers in universities in North Central Nigeria?

**2.1 Review of Related Literature**
According to Idiodi (2010), information literacy skills acquisition is an aspect of information literacy and may be seen as the process of gaining the tools that assist the development of information literacy in an individual. Information literacy implies the intellectual capabilities involved in using information, as distinct from the technical know-how required for using information technologies that hold or deliver data. This latter ability can be characterized as information technology literacy. Hargittai (2008), in his study of online skills, defines skill as the ability to complete a task and the amount of time spent for completing it. Academics with low information literacy skill may spend too much time retrieving information owing to problems they may encounter when seeking information especially in electronic information resources. To retrieve information in the open web, not only formal information skills are needed but substantial information skills.

Information literacy can enhance the accessibility and usage of e-resources. However, for effective access to, and usage of, e-resources individual and infrastructural factors must be considered as well. The present study set out to identify these factors, assess their impact and determine how to adjust their influence on accessibility and usage of e-resources. Various types of e-resources are used in education, including e-books, e-journals, web based resources, e-databases, data archives, manuscripts, maps, magazines, theses, newspapers, e-mail, research reports and online catalogues (Quadri, 2012; Sharma, 2009).

Abdulwahab, Amusan and Umma (2009) studied the effects of information literacy skills on the use of e-library resources among students of the University of Ilorin, Kwara State, Nigeria and found that students are aware of the e-library resources but do not use them due to lack of necessary skills and the library does not have specific information literacy standard for its students and most of them do not use IT in accessing information. Okello-Obura and Magara (2008), in a similar study opined that despite the high computer literacy level of undergraduate students there

is need to make information literacy course mandatory on all students, send e-mail, newsletters and give out prizes as strategies of improving awareness of the electronic sources in order to increase usage of this resources.

In a recent study Ekong and Ekong (2018) studies the impact of information literacy skills on the use of e-library resources among tertiary institution students in Akwa Ibom State. Three major tertiary institutions in Akwa Ibom State were selected for this study, this includes AkwaIbom State Polytechnic (AKSP), Akwa Ibom State University (AKSU) and University of Uyo (UNIUYO). Survey design was used for this research. A total of 500 questionnaires were administered, out of which, 450 (90.0%) were returned and 384 (76.8%) were usable while 66 (13.2%) were either improperly filled or misused and as such discarded. The findings of this study showed a general low level use of the university libraries in Nigeria which confirms reports which reveals that library use for all of the academic library experiences was generally low, the study also revealed that most of the respondents lacked the necessary computer literacy skills in using e-library resources and other internet technologies which has affected the use of e-library resources, finally it was revealed that students make better grades when they use computers, e-library resources and other IT technologies when doing their assignments and researches thereby improving their academic performance.

Bar-Ilan, Peritz, and Wolman (2013), conducted a survey on the use of electronic databases and electronic journals accessed through the web by the academic staff of Israeli universities. The findings showed that the most active users of electronic journals are the younger members of the teaching and research staff. The above study relates to the current study in the following ways, scope-wise, purpose and method of data collection there is a direct relation which the current study will adopt. However, the study differs in terms of the population of the study, area of the study and sample and sampling technique. The study was limited to academic staff in a single university which the current study intends to improve on by focusing on lecturers from over 20 universities to have a wider view of the problems and peculiarity in the use of e-resources in the various universities.

## 3.1 Research Methodology

The study adopted descriptive survey design. The population of the study consists of 6,267 all lecturers in Federal, State and Privately owned universities in North Central Nigeria.

Cluster sampling technique was used to select nine (9) out of 23 universities in the North Central Zone of Nigeria, each cluster is designed based on the ownership of the universities that is, Federal, State and Private, three universities were selected from each cluster so as to have a uniform distribution of sampled universities, the selected universities are University of Jos; Federal University of Agriculture, Makurdi; Federal University of Technology, Minna; Kogi State university Ayimgba; Kwara State University; Nassarawa State University; Salem University Lokoja; Alhikma University Ilorin and Africa University Abuja respectively. In selecting the sample size for each university Neyman's allocation formula for proportionate stratified random sampling technique Stat-trek, 2012 was used.

$$n_h = \frac{n \times (N_h \times S_h)}{[\sum N_i \times S_i]}$$

Where; (nh) is the sample size for stratum h; (n) is the total sample size; (Nh) is the population size for stratum h; (Sh) is the standard deviation of stratum h (Neyman, 1994).

Using the above stated formula respondents (Lecturers) were selected from each of the selected university in all clusters, this equalled a total of 404 respondents. The selected samples are described in the table below:

**Table 1: Determination of Sample Strata Size Using Neyman's Allocation formula**

| S/N | Universities | Population | Selected Sample Size |
|-----|--------------|------------|---------------------|
| 1 | University of Jos, Jos | 1,471 | 78 |
| 2 | Federal University of Agriculture, Makurdi | 374 | 68 |
| 3 | Federal University of Technology, Minna | 753 | 94 |
| 4 | Ibrahim Badamasi Babangida University Lapai | 186 | 44 |
| 5 | Kogi State University Ayimgba | 205 | 40 |
| 6 | Kwara State University Malete | 190 | 38 |
| 7 | Salem University Lokoja | 85 | 20 |
| 8 | Alhikma University, Ilorin | 111 | 22 |
| 9 | Africa University of Science and Technology, Abuja | 82 | 17 |
| | **Total** | **6267** | **404** |

**4.1 Results**

Out of the four hundred and four (404) questionnaires administered to respondents 376 representing 93.1% were returned and found useful for the study.

**Research Question 1:** *What are the level of information literacy skills among lecturers in the universities of North Central Nigeria?*

**Table 2: The level of information literacy skills of lecturers**

| S/N | Information literacy skills of lecturers | VH | % | H | % | L | % | VL | % |
|-----|------------------------------------------|----|----|---|----|---|----|----|----|
| 1 | Identification of needed information resources | 245 | 65.2 | 97 | 25.8 | 34 | 9.0 | 0 | 0.0 |
| 2 | Evaluation of relevant information resources | 189 | 50.3 | 162 | 43.1 | 23 | 6.1 | 2 | 0.5 |
| 3 | Access to information resources online data base | 137 | 36.4 | 90 | 23.9 | 115 | 30.6 | 34 | 9.0 |
| 4 | Organization and utilization of information resources | 234 | 62.2 | 132 | 35.1 | 10 | 2.7 | 0 | 0.0 |
| 5 | Categorize of existing information resources | 157 | 41.8 | 122 | 32.4 | 75 | 19.9 | 22 | 5.9 |
| 6 | Differentiate between specific and general information resources | 199 | 52.9 | 95 | 25.3 | 54 | 14.4 | 28 | 7.4 |
| 7 | Building of strategies for locating of information resources | 123 | 32.7 | 176 | 46.8 | 54 | 14.4 | 23 | 6.1 |

*Key = Very Highly (VH)   Highly (H)   Low (L) and   Very Low (VL).*

Results from table 2 above showed that most of the respondents possessed high level of information literacy skills as shown by more than 60% of the respondents in all cases of seven important literacy skills listed above, however a substantial percentage of the respondents (39.6%) showed low level of access to information resources online databases.

Research Question 2: *What are the types of electronic library resources available in the universities of North Central Nigeria?*

*Table 3: Electronic information resources available in the universities*

| E-resources | Frequency | Percentages |
|---|---|---|
| E-journals | 239 | 31.7 |
| Ebooks | 141 | 18.7 |
| Internet resources | 297 | 39.3 |
| EIR Databases | 78 | 10.3 |

Table 3 presents the results of respondents on various information resources they are aware are available in their universities library. Of the four electronic information resources listed above 297 respondents represented by 39.3% of the total option were aware of the availability of internet resources available in their universities library this was followed by 239 respondents represented by 31.7% of the total option were aware of the availability of e-journals in their universities libraries, 141 respondents represented by 18.7% of the total option were also aware of the availability of e-books in their university library, however 78 respondents represented by 10.3% of the total option were aware of EIR databases in their universities library. These revealed high awareness of electronic information resources such as Internet resources, e-journals and e-books except EIR databases with very low level of awareness amongst the respondents.

Research Question 3: *What is the extent to which e-resources are used by lecturers in university libraries in North Central Nigeria?*

**Table 4: Extent of utilization of electronic resources**

| Items | Variables | Frequency | Percentages (%) |
|---|---|---|---|
| Frequency of usage | Very Often | 228 | 60.6 |
| | Often | 93 | 24.1 |
| | Rarely | 55 | 14.6 |
| | Not at all | 0.0 | 0.0 |
| Purpose of usage | Research | 278 | 30.5 |
| | Lecture notes | 324 | 35.6 |
| | General information | 134 | 14.7 |
| | Literature review | 175 | 19.2 |

Table 4 showed the extent of use of electronic information resources available in their universities library, the results showed that most of the electronic information resources available were very often used as indicated by 60.6% of the respondents and often used as shown by 24.1% of the total respondents, this electronic information resources were mostly used for lecture notes and for research purposes as shown by 324 and 278 of total respondents represented by 35.6% and 30.5% of the total options respectively, they were also used for literature review and general information shown by 175 and 134 respondents indicated by 19.2% and 14.7% of the total options respectively. 14.6% of the total respondents rarely used the available electronic information resources, however none of the respondents indicate none use of the available electronic information resources. The results revealed high usage of the available electronic information resources.

Research Question 4: *What is the perceived effect of information literacy skills on the use of electronic resources by lecturers in universities in North Central Nigeria?*

Table 5: Perceived Effect of information literacy on the utilization of electronic resources

| S/N | STATEMENTS | SA | % | A | % | D | % | SD | % |
|-----|-----------|-----|------|-----|------|----|------|----|-----|
| 1 | Information literacy skill has enabled me access needed electronic resources with ease recognizing the nature of information needed | 199 | 52.9 | 144 | 38.3 | 25 | 6.6 | 8 | 2.1 |
| 2 | Information literacy skill has improved my potentials of i dentifying relevant electronic sources critically and efficiently | 298 | 79.3 | 61 | 16.2 | 17 | 4.5 | 0 | 0.0 |
| 3 | Information literacy skill has assisted me in developing effective search Strategies | 256 | 68.1 | 98 | 26.1 | 18 | 4.8 | 4 | 1.1 |
| 4 | An information literacy skill has facilitated my access to electronic sources of Information. | 221 | 58.8 | 132 | 35.1 | 23 | 6.1 | 0 | 0.0 |
| 5 | Information literacy skill has enable me to evaluate ele ctronic i nformation sources critically | 217 | 57.7 | 138 | 36.7 | 21 | 5.6 | 0 | 0.0 |
| 6 | Information literacy skill has enable me to organize ele ctronic i nformation for practical application | 233 | 62.0 | 133 | 35.4 | 19 | 5.1 | 9 | 2.4 |
| 7 | Information literacy skill has enable me to i ntegrate new i nformation from electronic sources into an existing body of knowledge | 112 | 29.8 | 178 | 47.3 | 52 | 13.8 | 34 | 9.0 |
| 8 | Using electronic information sources in Critical thinking and problem solving | 279 | 74.2 | 57 | 15.2 | 21 | 5.6 | 19 | 5.1 |

Results from table 5 above revealed that more than 75% of the respondents either strongly agreed or agreed with the effects information literacy skills on the use of electronic information resources stated in the table above. This thus shows that information literacy skills have had great positive effect on the use of electronic information resources.

## 4.2 Discussion of Findings
**Research Question 1:** *What are the level of information literacy skills among lecturers in the universities of North Central Nigeria?*

Results from this study revealed that respondents possessed high level of information literacy skills listed, that is Identification of needed information resources, Evaluation of relevant information resources, Access to information resources online database, Organization and utilization of information resources, Categorize of existing information resources, Differentiate between specific and general information resources, Building of strategies for locating of information resources this was in agreement with the findings of Okiki and Iyabo (2013) who in their study of the impact of information literacy skills on academic staff research productivity in Nigerian Federal Universities indicated high level of information literacy skills based on the overall mean scores of information literacy skills listed i.e. ability to recognise a need for information resources, ability to distinguish potential information resources, ability to construct strategies for locating information, ability to compare and evaluate information obtained from different sources, ability to locate and access information resources, ability to organize, apply and communicate information, ability to synthesize and build on existing information, this information literacy skill were mostly acquired through attending workshops/seminars, self-taught, assistance from other colleagues, trial and error, guidance from library staff and faculty/departmental training.

**Research Question 2:** *What are the types of electronic library resources available in the universities of North Central Nigeria?*

Results from this study showed that most of the respondents were aware of the availability of electronic information resources such as internet resources, e-journals and e-books except EIR databases which showed very low level of awareness this was an assertion to the study of Nkoyo, (2016) who assessed the availability and utilization of electronic resources by postgraduate students in a Nigerian University Library revealed that respondents were more aware of the availability of e-journal, internet resources and e-books only databases showed low level of awareness, according to his findings, the popularity of e-journal among the respondents may have been influenced by research activities and also presence of Internet and WIFI within and around the University Library enable users to access internet resources more conveniently without visiting the electronic library thus creating low awareness of databases among respondents.

**Research Question 3:** *What is the extent to which e-resources are used by lecturers in university libraries in North Central Nigeria?*

The results from this study revealed high usage of the available electronic information resources, it was revealed that most of the electronic information resources available were often used, this electronic information resources were mostly used for lecture notes and for research purposes, they were also used for literature review and general information shown by. A few percentage of the respondents rarely used the

available electronic information resources, however none of the respondents indicate none use of the available electronic information resources. This was in agreement with the study of Quadri, Adetimirin & Idowu (2014) who studied the availability and utilization of library electronic resources by undergraduates students in private universities in Ogun state, Nigeria and revealed high level of internet utilization and e-journals amongst respondents, the study showed that this resources were mostly used for assignment, research projects etc.

**Research Question 4:***What is the perceived effect of information literacy skills on the use of electronic resources by lecturers in universities in North Central Nigeria?*

This research also identified the effect of information literacy skills on the use of electronic resources, results from this finding indicated that information literacy skills had great positive effect on the use of electronic information resources. This is an assertion to the study of Ekong & Ekong (2018) who studied the impact of information literacy skills on the use of e-library resources among tertiary institution students in Akwa Ibom state revealed that the quality and volume of academic work is largely influenced by the knowledge and skills possessed in the use of e-library resources. It therefore concluded that students in tertiary institutions need to update their information literacy skills. Okiki and Iyabo (2013) studied the impact of information literacy skills on academic staff research productivity in Nigerian Federal Universities findings from this study showed that information literacy skills helped respondents to recognize a need for information resources, distinguish, potential information and deploy the resources appropriately thus greatly affecting their research productivity.

**Conclusion**

This study presented a survey on effect of information literacy skills and utilization of electronic information resource in universities in North Central Nigeria. It was discovered most of the respondents to a large extent possessed high levels of information literacy skills, it was also observed by the researcher that to a large extent the universities had major electronic resources such as e-journals, e-books, and internet resources, this available electronic resources were highly utilized by lecturers mostly for research purposes and lecture notes. The researcher also revealed descriptively that information literacy skills had great positive effect on the utilization of electronic resources, it was also statistically shown that there exists strong positive correlation between information literacy skills and utilization of electronic resources. It is thus concluded that information literacy skill are essential for effective service delivery of lecturers in universities sin North Central Nigeria.

**Recommendations**
Based on the findings of this study, the following recommendations were made;
1. Lecturers should be encouraged to continually improve on their information literacy skill set.
2. The university management should create avenue such as seminar, workshop for lecturers so as to improve information literacy skills.
3. The university management should devise various methods for teaching and assessing the information literacy skills of lecturers.
4. The universities curriculum should be revised so to accommodate courses where information literacy skills should be taught at both undergraduate and Master's levels.

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