

Undergraduates' perception of accessibility of electronic information resources in university libraries in Nasarawa State

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Abstract

This study explored undergraduates' perception of accessibility and utilization of electronic university in university libraries in Nasarawa State. The study was guided by two objectives and two research questions. A questionnaire was used as the instrument for data collection. Checklist was also used to ascertain the availability of the electronic information resources in the libraries understudied. The study adopted survey research design with a population of 4289 registered 300 Level student library users. The population consisted of 3819 undergraduate students of Federal University, Lafia, 146 Nasarawa State University, Keffi and 324 undergraduates of Bingham University. 300 Level student was used, been that they have stayed long in the school system and have already familiarize themselves with the electronic information resources available in the library. The descriptive statistics of percentage, frequency, mean and standard deviations was used to answer research question while chi-square was used to test hypothesis at 0.05 level of significance. The findings of the study revealed that there are several available electronic information resources such as e-books, e-journals, e-newspapers, e-magazines, e-preprints, CD-ROM, e-projects, e-lecture notes, e-research reports, online databases, and internet services in the two universities libraries sample. The findings revealed that the available electronic information resources, though accessible, but were not sufficient for adequate use by the respondents. Considerably, majority of the respondents have a positive perception of electronic information resources and services. Based on the result of findings, that increase in accessibility and utilization of electronic information resources by undergraduate's student in the three surveyed universities will lead to increase in learning, research and be beneficial to undergraduate, researchers, university community and librarians. Based on the result of findings, it is therefore concluded that undergraduate perception on accessibility and utilization of electronic information resources in the three surveyed universities is to a high extent and will increase if the challenges identified by the target area are looked into and also if the listed electronic information resources are made available to the library patrons, it was recommended that a well-articulated and sustained effort is required to provide information and communication technology (ICT) facilities (Internet) in the university libraries to make information accessible to the students thereby continually meeting their information need and use.

Keywords: Undergraduate's, accessibility and electronic information resources

Introduction

Libraries are repositories of information, information that is stored in books, and other medias are organized in a logical manner that will facilitate users finding it repeatedly. Libraries have the longest tradition of organizing information for the purpose of retrieval. When materials are organized into collections, their physical entities have to be arranged. They may be placed on shelves in some more meaningful order or in an arranged format; most resources are

however, arranged by classification. The value of information resources in any given library depends on the degree of order in which it is organized and taken care of. Unlike the google and other online information providers, libraries are guaranteed, the information that you saw today will still be there next week, and there is guarantee that the material will be organized in a logical manner that will facilitate your finding it again. A library is not just a place or a building filled with

books and other reading material. It is also a place where information sources are organized so that users can find the information that they need. When information sources are organized carefully and access to textual and non-textual material in paper-based and digital collections is easy, maximum utilization by users can be ensured. A library can be defined as an intellectual and resourceful source of information gathered for easy access to defined community users for reading, reference and borrowing. A library can also be referred to as a store house of knowledge. A library can also be referred to as a store house of knowledge. According to Bello (2018), library can be seen as a reservoir of knowledge where information materials needed are kept for easy access. A library as the heartbeat of any university is established to provide information resources and services to support academic activities of its users which includes, students, lecturers, non-teaching staff and the university community as a whole. The university library plays a key role in providing information resources to support teaching, learning and research, the resources can either be in electronic format which are e-books, e-journals, e-projects, e-documents, e-news, audio visual resources, e-indexing and abstracting-maps, e-manuscript, e-thesis and so many others or non-electronic format which majorly resources in printed forms.. Ankrah and Atuase (2018) stress that the primary objective of a library is to select, acquire, process, store and make accessible for users essential and relevant information resources for easy retrieval. These information resources are meant for the judicious utilization by library users. The utilization of electronic information resources is a function of how the resources are organised and made available for use in the university

library since is the heart of any institution of learning. Reitz (as cited by Nwamnebe, 2014) reveals that a university library has a function, and this is to meet the information, research, and curriculum needs of its students, faculty, and staff.

Developments in information and communication technologies (ICTs) have affected every sphere of activity in university libraries Ankrah and Atuase (2018). Academic libraries owe it a key duty to keep pace with technological advancement in order to cope with users' continual sophisticated information requirements. University libraries in the 21st century may not function properly without the existence of electronic resources. Tyckoson (2011) affirms that libraries and information center that fail to adopt appropriate information technology in their services may cease to function and perhaps, close down. Essentially, ICTs are the standpoints that provide access to electronic resources. Electronic information resources are collections of digital formats that are accessed via the use of an electronic device, they are also referred to as published information resources in electronic versions. Electronic information resources can be seen as the electronic representation of information that is available in various forms of electronic resources Aina 2014 stressed that electronic information resources are information resources provided in electronic forms which includes resources available on computer based electronic network. Electronic information resources are materials in digital format accessible only electronically. According to Thanuskodi, (2012), electronic information resource includes documents in electronic format such as electronic books that can be accessed through the internet browser, a computer or other electronic devices, e-journals can be defined as any serials

produced, published, and distributed nationally and internationally via electronic networks. e newspapers which can be consulted by users, by zooming and can also be saved for further reading, e-magazines deals with product advertisement, educational, cultural, political and social issues which has attractive quality of pictures and graphs than other resources.

Accessibility is the practice of making, websites and other sources of information usable by as many people as possible. We traditionally think of this as being about people with disabilities, but the practice of making sites accessible also benefits other groups such as those using mobile devices, or those with slow network connections. According to Wikipedia (2020), accessibility can be viewed as the ability to access and benefit from some system or entity, it focuses on enabling access for people with disabilities or enabling access through the use of assistive technology. According to Aina (2014), accessibility is a general term used to describe the degree to which resources, service, products are utilized by many people as possible

Electronic information resources are collection of digital formats that are accessed via the use of an electronic device, they are also referred to as published information resources in electronic version. Electronic information resources can be seen as the electronic representation of information that are available in various forms of e resources. Aina (2014) stressed that electronic information resources are information resources provided in electronic forms which includes resources available on computer based electronic network. Electronic information resources are those resources in electronic or digital formats which includes: electronic- textbooks, electronic- journals, electronic and many

more. It expected that users possess information literacy skills in the use of resources especially free online resources (Manda and Mukangera, 2007). It is imperative that users acquire necessary information literacy skills to enable them sieve through the ocean of information overload available both locally and internationally. Although, there exist some factors that deter effective use of the library and its resources, such as non-conducive environment, inaccessibility of information resources, presence of outdated and irrelevant resources, staff unprofessional attitude towards users, cumbersome roles and regulations, among others.

Electronic information resources have been made available for its users in different forms and format, but it seems the electronic information resources are not been properly accessed and utilized. Therefore, to justify any university library effective accessibility and utilization of electronic information resources is necessary. That is why the study seeks to find out, the rate at which the each of the listed electronic information resources are been utilized, to look into the various challenges students face in the course of using the electronic resources and also to proffer relevant solutions to the challenges being encountered by students. According to Omosekejimi, Eghoworo and Ogo (2015), this rapid emergence and development of electronic information resources therefore makes it possible to envision different ways of organizing the collections and services of the library as traditionally provided. Undergraduate's studies have been made with a view to proffering solutions to problems encountered in the use of electronic information resources. However, little or no efforts have been recorded in identification of influence and the usage of electronic information resources among

undergraduate. This study is expected to reveal the undergraduates' students' perception of accessibility and utilization of electronic university, Nigeria.

Statement of the problem

The thrust of every library is to acquire information resources including electronic information resources for research and study purpose. When these electronic information resources are accessed and utilized it improves the quantity and quality of research output by the undergraduate student in public university in Nasarawa state. Despite the enormous role electronic information resources plays in students' academic activities. It has been observed by the researcher that undergraduate students are not utilizing the electronic information resources effectively. Therefore, the study finds out the undergraduates' students' perception on accessibility and utilization of electronic university .

Objectives of the study

The objective of this study is to find out the undergraduates' perception on accessibility and utilization of electronic university . The Specific objectives of the study were to:

1. Identify the electronic information resources available for accessibility by undergraduates in university libraries in Nasarawa State
2. Find out undergraduates' perception on the accessible electronic information resources in university libraries in Nasarawa State.

Research questions

The following questions are answered in the study:

1. What are the electronic information resources accessible by undergraduates in university libraries in Nasarawa State?

2. What are the undergraduates' perception of the accessible of electronic information resources in university libraries in Nasarawa State?

Literature review

University libraries are library established in the university environment in other to support teaching, learning and research. A university library serves as a backbone of any institution of learning. University libraries have for centuries played critical essential role in supporting research in all subject and disciplines within their host universities. University library provides well stocked current research materials and trained personnel to organize available information materials and assist faculties and students in retrieval and use of these resources.

According to Alhassan (2015), university libraries have been part and parcel of human civilization because the art of writing and preservation of knowledge is an integral part of human culture and civilization. University libraries have gone through tremendous developments and transformation over the years.

Electronic information resources (EIRs) are those information resources in electronic format which includes electronic databases. According to Sivathaasan (2013), electronic information resources are the source of information that can be accessed via Internet. EIRs are available in various forms like e-books, digital libraries, online journal, magazine, e-learning tutors, on line test e-journals, e-discussions, e-news, data archives and e-mail on line chatting and deliver a collection of data, be it text, image collection, other multimedia products like numerical, graphical mode. Electronic information resources are valuable research tools that complement the print-based

resources in a traditional library, electronic information resources advantages include access to information that might be restricted to the user due to geographical location or finance, access to more current information and provision of extensive links to additional resources or related content.

This subheading was design to review empirical studies relating to this research work. So as to state their similarities and identifying their gaps in which this current research stands to fill.

Oyelade, Enyeribe, and Ezinwayi (2022) studied the availability, accessibility and utilization of electronic information resources by undergraduates of Ladoke Akintola University of Technology, Ogbomosho, Oyo State, Nigeria. Survey research design was adopted for this study. A population of six thousand three hundred and forty (6340) undergraduates were involved in the study. A total number of Three hundred and seventeen 317 undergraduates were drawn as sample size through stratified sampling techniques. Questionnaire was the main instrument used for data collection. Two hundred and seventy 274 four dally filed questionnaires were received, given an overall response rate of 86.49%. Data were collected and analyzed using descriptive and correlation analyses. Pearson's correlation coefficient was the statistical analysis adopted to test the hypothesis under study at 0.05 level of significance. The finding of this study revealed that availability, accessibility and utilization of electronic information resources significantly influenced the utilization of electronic information resources in LAUTECH Library

Kabiru and Usman (2020) investigated the level of accessibility and utilization of electronic information resources in Agricultural Research Institutes in Kaduna state. The major objective of the

study is to ascertain the access, purposes and extent of utilization of EIRs for research activities in IAR, NAPRI and NAERLS. The study adopted descriptive cross-sectional survey on a sampled 187 researchers from the population of 373 research scientists using Israel, Glenn (2003) table of determining sample size. Data were collected using questionnaire and analyzed using descriptive and inferential statistics. The study used Unified Theory of Acceptance and Use of Information Technology (UTAUT) model to assess the success of introduction of technology to research activities in Agricultural Research Institutes. The findings revealed a high level accessibility of electronic information resources and high extent rate of utilization for research activities. Research scientists access relevant EIRs on the Internet through passwords obtained from the institutes' libraries and Agricultural CD-ROM for their research activities. e-books and e-journals, on-line databases and CD-ROM/DVD are used for Laboratory and/or Field Research purposes to ensure qualitative research

Obande and Abdulsalami (2020) investigated the availability, awareness, and use of electronic resources by Students in Federal University, Lafia, and Nasarawa State University, Keffi. The specific objectives of the study were to find out the availability and use of electronic information resources in the two universities in Nasarawa State; the extent of awareness of the available electronic information resources; and factors that hinder the students' awareness of electronic information resources by university students in Nasarawa State

Adeleke and Makinde (2020) investigated the access and use of electronic information resources (EIR) among undergraduate students of Lagos State University. The population of the study

comprised five thousand and three (5,003) registered users of the library's e-resources unit, and a sample size of three hundred and eighty-three (383) students was obtained using Taro Yamane formula. As survey research, a questionnaire was used for data collection while simple random sampling was used to distribute the questionnaires. The findings of the study revealed that undergraduate students used EIR for educational purposes

Song and Usman (2017) examined the relationships between accessibility and utilization of electronic information resources (EIRs) and its influence on research development of postgraduate students in Federal University, Dutse, Jigawa State – Nigeria using a correlation design. Questionnaire was adapted and used on a sampled 212 postgraduate students and returned rate of 197 (92.90%) was used for the analysis in this study. The study found out that the major mode of Adamawa State University, accessibility of EIRs by postgraduate students is through Mubi personal MODEM and/or commercial center's network (3.72 mean mark) few respondents' access EIRs from the e- library (1.28 mean mark).

Methods

The design for this study is a descriptive survey design, the sample size for the study was 366 respondents draw from population of 4289 undergraduate students using Taro-Yamane formula for sample size determination for the finite population. The sample was made up of undergraduate students from three universities spread across Nasarawa State. The sample size was considered adequate from a finite population for this study as provided by Taro-Yamane formula for sample size determination. The sample technique used in this study was Muti-stage sampling procedure.

This study employed the use of checklist and questionnaire as a method of data collection. The data was successfully collected with the help of research assistants. The sample was made up of undergraduate students from three universities spread across Nasarawa State. Proportionate Stratified random sampling was used to sample 3819 undergraduates' students from Federal University Lafia, 146 undergraduates' students' from Nasarawa State University, Keffi (NSUK), 324 undergraduates' students from Bingham University, Karu (BUK). The questionnaire was divided into five (5) sections: A, B, C, D and E. The section A was Check list of the questionnaire, it has a response option sof available/not available (A/NA), while B -E has a response option of Very High Extent (VHE), High extent (HE), Low Extent (D), Very low to ascertain information from the respondents. Three hundred and sixty-six (366) copies of the questionnaire were taken to the field and administered to respondents, and out of which 356 copies of the questionnaire were filled and returned for analysis. The return questionnaires were approximately 95%.

The descriptive statistics of frequency count, percentage, mean and standard deviations were used to answer research questions while chi-square test was used to test the hypothesis at 0.5 level of significant. The choice of percentage rating to answer research questions 1 was because of two categories of variables which had two options of available and not available(A/NA). Mean scores and standard deviation were used in answering the research questions. Mean score and standard deviation were calculated for each item of the instrument. The cutoff point of 2.50 was used for decision making. A mean score of items above 2.50 was considered as an agreement to the item. Therefore, any item

with a mean score of 2.50 and above in each of the cluster was considered High extend. weighted mean was used to further classifying the extent of the mean responses for cluster 1,2,3,4, and 5. Any mean score ranging from 3.50-4.00 was regarded as very high extent (4), any mean score ranging from 3.49-2.50 was regarded as high extent (3), any mean score ranging from 2.49-1.50 was regarded as low extent (2) and finally, any mean score ranging from 1.49 0.00 was regarded very low extent (1). Meanwhile, Chi square test of goodness of fit (c2) was used in testing the research hypotheses at 0.05 alpha level of significance, and the decision was based on P value and alpha values. When $P < 0.05$, the null hypothesis was considered significant, but if $P > 0.05$, the null hypothesis was accepted the result was not considered

significant. The chi-square test of goodness of fit (c2) was appropriate for this study because it is a non-parametric statistic for testing the hypotheses when we have only one set of variables with numbers of levels of categorical variable (e.g response option). This allows the researcher to determine whether or not significant of high extend exist between the observed and expected outcomes based on a given null hypothesis.

Results

The results are presented according to the research questions.

Research question one: What are the available electronic information resources for undergraduates in university libraries in Nasarawa State?

Table 1: Available electronic information resources for undergraduate in university libraries in Nasarawa State

| Electronic information resources | FULAFIA | | NSUK | | Bingham University | |
|----------------------------------|---------|-----|------|-----|--------------------|-----|
| E-books | ✓ | 100 | ✓ | 100 | ✓ | 100 |
| E-journals | ✓ | 100 | ✓ | 100 | ✓ | 100 |
| E-projects | | | ✓ | 100 | ✓ | 100 |
| E-document | ✓ | 100 | ✓ | 100 | ✓ | 100 |
| Audio visual materials | ✓ | 100 | ✓ | 100 | | ✓ - |
| E-news | ✓ | 100 | ✓ | 100 | | ✓ - |
| E-magazines | ✓ | 100 | ✓ | 100 | | ✓ - |
| E-newspapers | | | ✓ | 100 | ✓ | 100 |
| E-indexing and abstracting | | | ✓ | - | ✓ | - |
| E-reference | | | ✓ | - | ✓ | - |
| E-maps | | | ✓ | - | ✓ | - |
| E-manuscript | ✓ | 100 | | | ✓ | - |
| E-reports | | | ✓ | - | ✓ | - |
| E-photograph/pictures | | | ✓ | - | ✓ | - |
| E-Conference proceedings. | | | ✓ | 100 | | ✓ - |
| E-patents | | | ✓ | - | ✓ | - |
| E-standard | | | ✓ | - | ✓ | - |
| E- thesis | ✓ | 100 | ✓ | 100 | ✓ | 100 |
| E- dissertation | ✓ | 100 | ✓ | 100 | ✓ | 100 |
| E-abstract | | | ✓ | 100 | | ✓ - |
| Cluster % | 40% | 60% | 60% | 40% | 35% | 65% |

Table 1 reveals that all the twenty (20) items have percentages ranging from 0.0%. - 100%. From Federal University Lafia (FUL) 8 items out of 20 Items are available reveals that 40% choose available while 60% were identified as unavailable, the Items from Nasarawa State University (NSUK) reveals that twelve 12(60%) of the electronic resources listed are available while eight 8(40%) are not available. The table reveals that seven 7(35%) out of

twenty electronic information resources listed are available while thirteen 13(65%) are not available in Bingham University, Karu (BUK).

Research question two: Extent of undergraduates' perception on the accessibility of electronic information resources in university libraries Nasarawa State?

Table 2: Mean and standard deviation of undergraduate's perception on the accessible of electronic information resources

| S/N | Questionnaire Item | Mean | SD | Remark |
|-----|---------------------------------|-------------|-------------|-----------|
| 1 | E-books | 2.85 | .95 | HE |
| 2 | E-journals | 2.81 | 1.00 | HE |
| 3 | E-projects/theses/dissertations | 2.70 | 1.02 | HE |
| 4 | E-document | 3.03 | .88 | VHE |
| 5 | Audio visual materials | 2.93 | 1.02 | HE |
| 6 | E-news | 2.90 | .89 | HE |
| 7 | E-magazines | 2.87 | .91 | HE |
| 8 | E.-newspapers | 2.99 | .87 | HE |
| 9 | E-Indexes | 2.80 | .94 | HE |
| 10 | E-reference | 2.93 | .98 | HE |
| 11 | E-maps | 2.87 | .95 | HE |
| 12 | E-manuscripts | 2.80 | .92 | HE |
| 13 | E-reports | 2.83 | .97 | HE |
| 14 | E-photographs/pictures | 2.46 | 1.06 | HE |
| 15 | E-conference proceedings | 3.03 | .89 | VHE |
| 16 | E-patents | 2.87 | .92 | HE |
| 17 | E-standards | 2.83 | .90 | HE |
| 18 | E- theses | 2.79 | 2.24 | HE |
| 19 | E- dissertations | 2.91 | .94 | HE |
| 20 | E-abstract | 2.87 | .92 | HE |
| | Grand mean | 2.85 | 1.00 | HE |

Table 3 reveals that all the 20 items have ranged from 2.46-3.03 and SD 0.87-2.24 with a grand mean of 2.85 and SD 1.00, this result indicates the high extent of undergraduates' perception on the accessible of electronic information resources in the university libraries in Nasarawa State

Discussion

Finding of research question one revealed that out of the three universities where availability was checked, the percentage of

availability of electronic information resources is low. This finding is consonances with Oluwafemi, Okocha, and Ogundare (2016) whose findings revealed that the internet services, e-mail services, online databases, electronic databases and cybercafés were the available electronic information resources often used by the undergraduate students in University of Ibadan. The findings also agree with the findings of Abdulsalam, Okanla, Rasheed, and Pelemo (2020) found out that OPAC,

Ebsco Host, Research4Life, ScienceDirect, and e-resources (textbooks and journals) on Nursing, Law, Medical Laboratory Science, and Public Health are available. Few e-resources for all other twelve programmes in the university are also available in the e-Library. The findings also support the findings of Ternenge and Kashimana, (2019) that revealed that, e-journals, e-newspapers, Online Public Access Catalogue (OPAC), CD-ROM database, e-magazines, e-books, online database, e-research reports, virtual library online, science direct online and Ebscohost reference databases were the types of electronic information resources available for research by students in Francis Sulemanu Idachaba Library. The finding also agrees with the findings of Obande, and Abdulsalami (2020) The findings of the study revealed that there are several available electronic information resources such as E-books, e-journals, e-newspapers, e-magazines, e-preprints, CD-ROM, e-projects, e-lecture notes, e-research reports, online databases, and internet services in the two universities libraries sample; undergraduate students are aware of the available electronic information resources;

The result negates the findings of Abdulsalam, Okanla, Rasheed, and Pelemo (2020). Whose result revealed that the available electronic information resources, though, accessible, but were not sufficient for adequate use by the respondents. Considerably, majority of the respondents have a positive perception of electronic information resources and services. The study agrees with the findings of Ternenge and Kashimana, (2019) revealed from the findings that, the extent of accessibility of the availability electronic information resources for research by students is great.

Conclusion

Based on the result of findings, it is therefore concluded that undergraduates' perception on accessibility and utilization of electronic information resources in the three surveyed universities is to a high extent and will increase if the challenges identified by the target area are looked into and also if the listed electronic information resources are made available to the library patrons.

The following recommendations are made based on the findings of the study:

1. The management at the surveyed universities should massively increase their investments in ICT infrastructural facilities such as computers, the Internet, computer networks.
2. A well-articulated and sustained effort is required to provide information and communication technology (ICT) facilities/Internet in the university libraries in order to make electronic information resources accessible to the students thereby continually meeting their information need and use.

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