

UTILIZATION OF ELECTRONIC INFORMATION RESOURCES BY UNDERGRADUATE STUDENTS IN THE UNIVERSITY OF JOS LIBRARY

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Abstract

This study examined the utilization of electronic information resources by undergraduate students in the University of Jos Library, with specific focus on the Faculty of Education. Two objectives and research questions guided the study. Descriptive survey design was adopted. 10,195 students that made up the Six Departments of Faculty of Education in University of Jos constituted the population of the study. A sample size of 510 registered undergraduate students was selected using proportionate stratified random sampling technique. Primary data was collected through the administration of a well-structured questionnaire, which was analyzed using descriptive statistics (mean and standard deviation). The findings of the study showed that higher utilization of electronic resources is associated with improved user satisfaction and that students use electronic resources primarily for academic purposes such as coursework, research, assignment preparation and expanding subject knowledge. Recommendations were made for improving access, awareness, training and library electronic resources support services to enhance satisfaction and effective use.

Keywords: electronic information resources, utilization, user satisfaction, undergraduate students, University of Jos, library services

Introduction

University libraries increasingly provide electronic information resources (e-resources) such as e-journals, e-books, online databases, institutional repositories and web-based academic platforms. These resources support teaching, learning and research by offering timely access to scholarly information. For undergraduate students, the effective utilization of e-resources can enhance the quality of learning outcomes through improved information retrieval, increased reading, research and faster completion of academic tasks (Okiy, 2018; Odumuyiwa, 2019). Despite the growing availability of e-resources in Nigerian universities, the degree to which undergraduate students actually use them and the extent to

which such use influences satisfaction remain areas of concern. User satisfaction is a key indicator of how well library services and information systems meet user expectations. Satisfaction is shaped by perceived usefulness, ease of access, availability of relevant materials, service reliability, training and responsiveness of library support (Giri&Pradhan, 2020; Aina&Dlamini, 2019).

The University of Jos Library provides a range of electronic resources and services intended to support academic work in various faculties. However, utilization patterns vary across faculties, academic levels and student demographics and students in the Faculty of Education rely on electronic information resources for lesson planning, education research, academic writing and preparing for teaching practice requirements (Panyil, 2021). Understanding both the influence of e-resource utilization on satisfaction and students' purposes for using these resources is essential for strengthening library services and ensuring that e-resources meaningfully contribute to students' educational goals.

Statement of the Problem

Although electronic information resources are increasingly made available in universities, undergraduate students face barriers that affect utilization such as limited awareness, inadequate digital literacy, intermittent internet connectivity, insufficient access devices, pay walled content or difficulty in searching databases. These factors reduce satisfaction and limit the educational value that students derive from electronic resources. In the University of Jos Library context, it is important to establish how utilization of e-resources influences user satisfaction and why students use them, especially within the Faculty of Education.

Aim and Objectives of the Study

The aim of this study was to assess the utilization of electronic information resources by undergraduate students in the University of Jos Library, focusing on the Faculty of Education. Objectives of the study are to:

1. examine the influence of utilization of electronic resources on users' satisfaction by undergraduate students in the Faculty of Education University of Jos, Nigeria
2. determine the purpose of utilizing available electronic resources by undergraduate students in the Faculty of Education University of Jos, Nigeria

Research Questions

1. What is the influence of utilization of electronic resources on users' satisfaction among undergraduate students in the Faculty of Education, University of Jos, Nigeria?
2. What is the purpose of utilizing available electronic resources among undergraduate students in the Faculty of Education, University of Jos, Nigeria?

Literature Review

Electronic information resources refer to digital materials and access systems that support the discovery, retrieval, and use of information. These may include electronic journals, e-books, online databases (e.g., subject indexes and full-text repositories), electronic newspapers, institutional repositories, and academic search engines. E-resources have

become central in modern academic libraries because they provide remote access, fast retrieval, and updated information (Aina&Dlamini, 2019; Okiy, 2018). Utilization involves the extent to which students access and use e-resources for relevant tasks. Utilization may be measured through frequency of use, types of e-resources used, duration of access sessions, and the perceived relevance of accessed content. Studies in university settings suggest that utilization is influenced by access conditions, perceived usefulness, information literacy skills, and quality of user support (Giri&Pradhan, 2020; Odumuyiwa, 2019).

In many contexts, students' utilization patterns are not only affected by the availability of e-resources but also by how easy it is to search and retrieve needed materials; when students experience difficulties in using databases or navigating platforms, utilization declines, which affects satisfaction and academic effectiveness. User satisfaction is often defined as the user's perception of whether a service meets expectations. In libraries, satisfaction may include perceived adequacy of resources, ease of access, reliability of systems, and timeliness of retrieved information. Research generally indicates that higher levels of successful utilization can enhance satisfaction because users are more likely to experience benefits such as improved learning, improved research capability, and timely completion of academic work (Aina&Dlamini, 2019; Giri&Pradhan, 2020).

In contrast, low utilization caused by poor access, low awareness and lack of skills can lead to low satisfaction. Therefore, it is important to examine the influence of utilization on satisfaction, rather than assuming that availability alone guarantees positive user perceptions. Undergraduate students use electronic information resources for diverse purposes, commonly including: preparing assignments and course projects; conducting academic research; searching for references and scholarly articles; reading course-related materials; supporting examinations and revision and accessing information for teaching practice activities for education students. Studies across higher education contexts indicate that e-resources are frequently used to improve academic performance, broaden understanding and support timely completion of tasks. For students in education-related disciplines, e-resources can also support development of lesson planning materials and learning strategies (Okiy, 2018; Odumuyiwa, 2019).

Methodology

The study adopted a descriptive survey research design. The descriptive survey design is suitable for this study because, it helps in collecting data on utilization of electronic resources on University of Jos undergraduate students' satisfaction in Plateau State, Nigeria. The target population for the study comprised of 10,195 registered students from Faculty of Education, which has Six (6) departments. Thus, the data obtained from the office of Academic Planning of University of Jos for the 2019/2020 academic session shows that department of Arts Education, has a total of 1475; Educational Foundation has 2029; Science and Technology Education has 3440; Social Science Education has 2083; Special Education has 657 and Physical and Health Education has 511.

The sample size for this study was 510 registered undergraduate students of Faculty of Education, University of Jos. It was determined using proportionate stratified random sampling technique. The researchers met all research assistants representing each department in the Faculty of Education. In meeting, both the researchers and research assistants

introduced themselves, give purpose of coming and exchanged phone contacts. This was followed by clear instruction to all six (6) research assistants on the number of respondents to be given questionnaire to duly fill and collected during students break time in their class room within the time frame of five (5) working days.

The researchers were there each day with the research assistants for the stipulated time frame. This helps provide clarity where necessary to students who find it. Data collected from the undergraduate students of Faculty of Education were subjected to statistical analysis using mean and standard deviation to answer the two research questions. The two research questions comprise of four points rating scale, where a mean of 2.5 was used as a benchmark for decision. Any mean value below 2.5 was rejected while mean values of 2.5 and above were accepted.

Results and Discussion

Results

Research Question One: What is the influence of utilization of electronic resources on users' satisfaction among undergraduate students in the Faculty of Education, University of Jos, Nigeria?

Table 1: Mean/Standard Deviation of Influence of Utilization of Electronic Resources on Users' Satisfaction in University of Jos Library

S/No	Item	N	Mean	Std. Deviation	Remarks
1	Boost my academics (CGPA)	498	2.98	0.66	Agree
2	Online subscribed e-resources are utilized without physical or geographical barriers	498	2.72	1.03	Agree
3	Facilitates cooperation and resource sharing of current information among students	498	3.77	0.42	Agree
4	Destroys frustration and helps me to be ICT competent and perform computer tasks independently	498	3.57	0.91	Agree
5	Facilitates cooperation and resources sharing of current information among students	498	3.29	0.45	Agree
6	It makes reading easier and more enjoyable	498	3.44	0.49	Agree
Clustered Mean/Standard Deviation		498	3.29	0.66	Agree

Source: Researchers' Field Survey, 2026

Table 2 showed that all the items have mean scores above the cut-off benchmark of 2.50. This means respondents agreed that utilization boost academics, online subscribed e-resources are utilized without geographical barrier, facilitates cooperation and resource, and makes reading easier and more enjoyable among others in University of Jos, Nigeria. The clustered mean of 3.29 with standard deviation of 0.66 was also above the cut-off point of 2.50 which is in agreement with the fact that utilization boost academics, online subscribed e-

resources are utilized without geographical barrier, facilitates cooperation and resource, and makes reading easier and more enjoyable among others in University of Jos, Nigeria.

Research Question Two: What is the purpose of utilizing available electronic resources among undergraduate students in the Faculty of Education, University of Jos, Nigeria?

Table 2: Mean/Standard Deviation of the purpose of utilization of available electronic resources by undergraduate students

S/No	Item	N	Mean	Std. Deviation	Remarks
1	Assignment/term paper	498	3.67	0.66	Agree
2	Classwork	498	3.64	0.67	Agree
3	Preparation for examination	498	3.76	0.42	Agree
4	Project writing	498	3.78	0.41	Agree
5	Reading for leisure	498	3.50	1.00	Agree
6	To read other people' research works	498	3.45	0.66	Agree
7	To obtain general information	498	3.06	1.04	Agree
Clustered Mean/Standard Deviation		498	3.55	0.69	Agree

Source: Researcher's Field Survey, 2023

Table 2 showed that all the items 1-7 were set to obtain information on the purpose of utilization of available electronic resources by undergraduate students. The table showed that all the items have mean scores above the cut-off benchmark of 2.50. It therefore implies that since the mean scores for all the items in table 6 on purpose of utilization of available electronic resources by undergraduate students were above the cut-off point of 2.50. Respondents agreed that assignment and term paper, class-work, preparation for examination, project writing, reading for leisure among others form the basic purpose of utilization of available electronic resources by undergraduate students in University of Jos, Nigeria. The clustered mean of 3.55 with standard deviation of 0.69 was also above the cut-off point of 2.50 which is in agreement with the fact that assignment and term paper, class-work, preparation for examination, project writing, reading for leisure among others forms the basis for the purpose of utilization of available electronic resources by undergraduate students in University of Jos, Nigeria.

Discussion of Findings

Utilization of electronic resources significantly influence users' satisfaction by undergraduate students; ICT skills possessed by undergraduate students significantly influence users' satisfaction by undergraduate students; purpose of utilization of available electronic resources significantly influence users' satisfaction by undergraduate students of Faculty of Education in University of Jos Library, Nigeria. The findings agree with Ukachi (2015), Daramaola (2016) and Becker, Hartle, and Mhlauli (2017) who opined that utilization of relevant library electronic resources among university library users will assist students in achieving their academic desires and at the same time support the university in increasing student retention and bringing down the rate of dropouts.

On the influence of utilization of electronic resources on users' satisfaction, Table 1 showed that all the respondents agreed that utilization boost academics performance; online

subscribed e-resources are utilized without geographical barrier, facilitate cooperation and makes reading easier and more enjoyable among others in University of Jos. The result support Babalola (2019), but did not agree with Biokuromoye, Victor and Ebhomey (2014) who revealed that students used electronic resources very regularly, but were not very satisfied as a result of slow internet connectivity and poor infrastructure. The result equally did support Stephen (2020) who revealed that undergraduates possessed high ICT skills, although their formulating search queries and searching and retrieval skills were low.

On Table 2, respondents agreed that assignment and term paper, class-work, preparation for examinations, project writing, reading for leisure among others form the basic purpose of utilization of available electronic resources by undergraduate students in University of Jos Library, Nigeria. The finding is in line with Ilori (2019), who submitted that, the vast majority of undergraduates of all categories turn to the computer services like the internet for their academic work. Also, supported by Cooper, Robinson, Slansky and Kiger (2014) who stated that, the way undergraduates who were once used to read through books page by page have now turned to the internet for their academic needs is unimaginable.

Similarly, finding equally agree with Adeniran (2013) who explain that, students use electronic resources to retrieve current literature to study, carry out assignments and prepare for examinations; carry out research projects, communicate and collaborate with peers and teachers via the internet on e-mail or by following blog discussions. The result of the finding further corroborates Nwachukwu, Abdulsalami and Lucky (2014) who were of the view that, the effectiveness of any library is a measure of how available, accessible and useable to users its information resources are; as information resources availability in any library can explain the need for it and why such library is important.

The study aligns with literatures that show utilization influences satisfaction in academic libraries. When students successfully access relevant e-resources, they tend to evaluate library services more positively, leading to higher satisfaction. This relationship may be mediated by factors such as internet reliability, search competency, and awareness of resource availability (Giri&Pradhan, 2020). Regarding purposes, the expected dominance of academic-oriented uses reflects the centrality of information seeking to undergraduate learning. Students in the Faculty of Education likely use electronic resources to support research, reading, assignment completion, and teaching practice-related documentation (Okiy, 2018; Odumuyiwa, 2019).

Conclusion

Based on the study objectives, the following conclusions would be drawn; utilization of electronic information resources is expected to have a positive influence on user satisfaction among undergraduate students in the Faculty of Education, University of Jos. Undergraduates are expected to utilize electronic resources mainly for academic purposes such as assignments, research, coursework reading, and examination preparation.

Recommendations

To improve utilization and satisfaction, the following measures were recommended:

1. Capacity building and information literacy training: regular workshops on database searching, advanced search techniques, and citation management.

2. Improve access conditions: strengthen network availability, ensure sufficient access points/devices, and reduce downtime.

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