



INFORMATION LITERACY SKILLS, LIBRARY SERVICE QUALITY AND ENGAGEMENT WITH ELECTRONIC INFORMATION RESOURCES AMONG UNDERGRADUATES IN PUBLIC UNIVERSITIES IN OSUN STATE, NIGERIA

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ABSTRACT

Information literacy skills and library service quality are essential for students' engagement with electronic information resources EIRs, which in turn supports academic success. Despite the growing investment in digital library resources, many undergraduates still underutilise these tools due to varying levels of information literacy and perceptions of library services. On this premise, this study investigated the influence of information literacy skills and library service quality on engagement with EIRs among undergraduates in public universities in Osun State, Nigeria. Employing a descriptive survey research design, a structured questionnaire was administered to 380 undergraduate students proportionally sampled across selected universities. Descriptive and inferential statistical analyses were used to analyse the data. The findings revealed that information literacy skills significantly influenced engagement with EIRs also showing that students with stronger information literacy competencies and better perceptions of library service quality are

more likely to effectively engage with electronic information resources. The study concludes that universities must strengthen both information literacy training and library service delivery to maximize the value of electronic resources. It recommends institutional strategies such as continuous information literacy programmes, enhanced library service quality initiatives, and digital resource user support systems.

Keywords: Information literacy skills, Library service quality, Electronic information resources, Engagement, Undergraduates

Introduction

In today's rapidly evolving digital age, engagement with Electronic Information Resources (EIRs) has become a cornerstone of academic success in higher education. These resources, which include digital databases, online journals, and academic repositories, provide students with access to vast amounts of scholarly information essential for learning, research, and innovation (Verma, & Dwivedi 2023). The extent to which students effectively engage with these resources significantly influences their academic performance and research productivity. However, students' ability to engage meaningfully with electronic resources is shaped by several critical factors. One such factor is Information Literacy Skills (ILS) the capacity to locate, evaluate, and use information effectively. These skills enable students to navigate complex digital platforms, select credible sources, and apply information ethically and efficiently in their academic work.

Another essential determinant is Library Service Quality (LSQ), which encompasses the responsiveness, accessibility, and support provided by university libraries. High-quality library services not only enhance students' satisfaction but also encourage frequent use of both physical and digital resources (Verma, & Dwivedi 2023). In the context of public institutions in Osun State, Nigeria, where financial and infrastructural limitations frequently hinder the best possible delivery of educational services, the synergy between EIRs involvement, information literacy, and library service quality is especially important. Designing successful techniques that encourage undergraduates to use resources, achieve academic success, and develop lifetime learning skills requires an understanding of how these factors interact. This study examines the relationships between these variables and how they affect the academic performance of undergraduates at public universities in Osun State, Nigeria.

EIRs have dramatically changed access to academic content, offering benefits such as 24/7 accessibility, cost-effectiveness through shared subscriptions, and enhanced search capabilities that allow for efficient information retrieval (Marasinghe *et al.* 2024). E-books, online journals, scholarly databases, institutional archives, and multimedia tools are a few types of EIRs. Despite these benefits, Nigerian institutions frequently encounter major barriers to use Electronic Information Resources to its fullest potential, including as poor infrastructure, low awareness, and low student digital literacy. Since they give students 24/7 access to e-books, online journals, academic databases, and multimedia content, electronic information resources, or EIRs, have emerged as essential tools for academic learning. Compared to conventional printed documents, these resources offer a number of benefits, including as simpler access,

lower costs, and more sophisticated search features. However, state universities in Nigeria frequently struggle to properly utilise EIRs. The main obstacles include a lack of contemporary computing equipment and poor infrastructure, such as erratic Internet connections.

Furthermore, a lot of students are not aware of the entire array of EIRs that are available, and even those that are may struggle to use and navigate these resources because they have not received enough instruction in digital literacy. Using EIRs is essential for research, study, and other academic endeavors. Libraries have therefore concentrated on obtaining, compiling, and providing their patrons with access to the digital resources they require. Libraries can obtain information from non-print sources such as CD-ROMs, audiovisual resources, e-books, e-journals, online databases, and online abstracts. Undergraduates regularly use these resources to help them finish projects, term papers, assignments, and seminar presentations, all of which help them succeed academically. As information technology has advanced, it has become more crucial than ever for undergraduates, especially those attending public universities, to acquire ILS and use electronic resources efficiently. Advancements in technology have made library services accessible online, enabling institutions to connect with their users in ways that were once unimaginable.

Libraries in higher education institutions support learning, teaching, and research by offering both print and digital resources (Beyene *et al.*, 2023). A range of digital platforms and applications that offer access to data, material, and information are collectively referred to as electronic information resources. Numerous facets of daily life, such as education, research, business, entertainment, and interpersonal contact, make extensive use of these resources. Scholars, researchers, and students frequently use electronic resources to access databases, e-books, scholarly publications, and other online resources. Scholarly databases that are available through institutional subscriptions are essential among these tools. The Directory of Open Access Journals (DOAJ), JSTOR, Emerald, ProQuest, ERIC, IEEE Xplore, ScienceDirect, and PubMed are a few examples. Electronic resources are essential for facilitating teaching and learning in educational environments. They provide access to interactive tools, multimedia information, online courses, and instructional materials all of which enhance and engage the learning process. Electronic resources can play a key role in supporting professional development.

Statement of the Problem

Despite the exponential growth of EIRs and their significant potential to enhance academic research and learning, undergraduate students in Nigerian public universities, including those in Osun State, demonstrate low engagement with these resources (Oladokun *et al.*, 2023). EIRs, which include online databases, digital libraries, and academic journals, are critical tools that support students' research, learning, and academic success. However, students' limited engagement with these resources has been a persistent issue. Adeshola, and Agoyi (2023), who indicated that key factors influencing this low engagement are inadequate ILS and suboptimal LSQ. ILS, such as the ability to identify, locate, evaluate, and effectively use information are foundational for navigating electronic databases and digital resources (Isiaka *et. al.* (2024). Many undergraduates face challenges in accessing, locating, and effectively utilising EIRs, often due to a

lack of these essential skills. In addition to skill deficits, the quality of library services in public universities plays a crucial role in shaping students' engagement with electronic resources. Issues such as outdated infrastructure, poor Internet connectivity, inadequate technical support, and a lack of comprehensive user training programmes hinder the ability of university libraries to meet students' needs (Shahzad, & Khan, 2023). These challenges highlight the urgent need for a thorough examination of how ILS, library service quality, and other contextual factors impact students' engagement with EIRs in Nigerian public universities.

Objectives of the Study

The aim of this study is to investigate the influence of ILS and library service quality on the engagement with EIRs among undergraduates in public universities in Osun State, Nigeria. The objectives are to:

- i. identify the level of engagement with EIRs among undergraduates in public universities in Osun State;
- ii. identify the level of information skills among undergraduates in public universities in Osun State; and
- iii. examine the quality of library service provided to undergraduates in public universities in Osun State.

Research Questions

This study sets to provide answers to the following research questions:

1. What is the level of engagement with EIRs among undergraduates in public universities in Osun State?
2. What is the level of ILS among undergraduates in public universities in Osun State?
3. What is the quality of library services provided to undergraduates in public universities in Osun State?

Review of Related Literature

The increasing dependence on digital information resources in higher education has made it essential for students to develop strong information literacy skills to achieve academic success. Information literacy, which is the ability to identify when information is needed and to find, assess, and use it effectively, is critical for students as they navigate the vast amount of academic content available online. Research consistently shows a significant link between students' information literacy abilities and their capacity to effectively utilise electronic resources such as online databases, e-books, journals, and academic search engines. A variety of studies have examined the connection between students' information literacy skills and their engagement with EIRs, consistently finding that students with stronger information literacy skills are more effective and proactive in utilising digital resources.

Research indicates that information literacy is a key factor in students' ability to navigate, search, assess, and apply electronic resources effectively for their academic work. Studies in the area of EIRs have

indicated that undergraduates have continued leverage the various types of EIRs to complement class room instructions and lecture notes (Letsoalo, 2023). Onunka *et. al.* (2023) stated that the traditional university library cannot compete favorably well with information technology driven libraries, especially with their outdated and obsolete traditional resources of prints. This may have continuously informed libraries transformation into digital and virtual libraries where the physical collections such as books, journals and magazines have metamorphosed into e-books, e-journals, and e-magazines.

For instance, According to Oseghale (2023) found that students with higher levels of information literacy were more likely to use academic databases, digital libraries, and online journals for research purposes. These students were not only more adept at finding relevant sources but also more confident in their ability to assess the credibility of digital content. This was contrasted with students who lacked strong information literacy skills, who often struggled to locate authoritative sources, relied heavily on search engines like Google, and had difficulty distinguishing between credible and unreliable information (Lucaser, & Acedera, 2025). Similarly, Oseghale (2023) conducted a study examining undergraduate students' use of electronic resources in relation to their information literacy proficiency.

The findings revealed a positive correlation between students' information literacy skills and their engagement with academic databases such as JSTOR, ProQuest, and Google Scholar. Students with strong information literacy skills demonstrated a more sophisticated approach to searching these databases, using advanced search features, applying appropriate filters, and understanding how to refine and narrow down search results to obtain more relevant materials. Researcher conducted a survey of the use of electronic library resources at seven universities in Wuhan, China. The purpose of this survey was to report on users' information behavior in China. The aim was to help producers and providers collect and develop more electronic library resources. The results showed that most National Science and Technology Library users were graduates and young staff members; male users performed better than female ones. Findings suggested that c-library resource producers should offer more foreign literature and providers should improve the quality of services (Gautam, 2025).

The quality of library services is crucial in determining how students interact with electronic information resources. Libraries serve as key centers for academic resources, providing not only access to digital content but also support, training, and an environment conducive to effective use. High-quality library services that include user support, knowledgeable staff, and comprehensive training programmes significantly improve students' ability to locate, assess, and effectively use electronic resources. The quality of library services, particularly in terms of accessibility, support, and training, directly affects students' willingness and ability to engage with electronic information resources. Research has consistently demonstrated that when library services are of high quality, students are more likely to use these resources regularly and effectively for academic purposes.

One of the primary aspects of library service quality is the availability and effectiveness of user support. Libraries that provide responsive and accessible help, whether through in-person consultations, online chat services, or email support, create an environment in which students feel more comfortable

navigating electronic resources (Jiang, 2024). Studies have shown that students who encounter difficulties in accessing digital resources often turn to library staff for help. Oyedokun (2025) found that students who had access to prompt technical support from library staff were more likely to overcome challenges related to using electronic resources, such as logging in, navigating interfaces, or troubleshooting search issues. As a result, they were able to engage more thoroughly with the available digital tools and resources. Similarly, DeVille, and Sughrue (2023) conducted a study on the relationship between user support services and student engagement with digital libraries and academic databases. They found that when library staff provided high levels of personalized support, students exhibited greater confidence in using digital resources. This support was especially critical for students who were less familiar with academic digital tools or were encountering technical issues that could hinder their research process (Georgopoulou *et. al.*, 2024).

Khan *et. al.* (2023) found that the academic staff perceived the quality of library services just above average and the library staff was considered quite helpful and able to instill confidence in library users. The researcher further observed that, the overall satisfaction with the library services was quite satisfactory. In two university libraries scholars found no significant difference in the perception of readers with different educational qualifications except on the dimension of adequate provisions of display of new books but found a perceptual difference in the perceived quality of services rendered by the library staff and the perceived service quality availed by the users. While making a comparative study on service quality being provided in the special libraries (Pandey, 2023).

In special educational institutes recognised by Rehabilitation Council of India (2025), study found all the respondents satisfied with good number of books and journals, more than 83% respondents to prefer the books in Indian languages and majority of the respondents (92.15%) expecting good special collection like Braille books, talking or audio books, tactile picture books, e-books, among others. At Kharazmi University of Tehran, a study reported that the quality level of perceived services in all three factors including services effectiveness, information control and library as place lagged behind the minimum level of the users' expectations (Khajeh, *et. al.*, 2024). A study revealed that the items of LSQ viz., library space that inspired study and learning, quiet space for individual activities and making information easily accessible available for independent use, were on desired level of expectations. Kaur and Singh (2023) measured the quality of services provided by the library of National Law School of India University, Bangalore and noticed that the most desired LibQUAL item were a library website enabling me to locate information.

ILS, library service quality, and engagement with EIRs are interrelated factors that significantly influence the academic success of undergraduate students. ILS refer to the ability of students to effectively identify, locate, evaluate, and use information, especially in the context of digital resources like online databases, e-journals, and e-books. Students who possess strong ILS are better equipped to navigate the vast range of EIRs available through academic libraries. These students are able to search more effectively, assess the credibility of sources, and synthesize information from various digital formats to enhance their academic work.

Methodology

This study employed a descriptive survey research design to collect quantitative data that reflect the existing conditions, practices, and opinions of undergraduate students without any form of variable manipulation. The design was considered suitable because it provides a factual and detailed account of how students engage with EIRs in relation to their information literacy skills and perceptions of library service quality in public universities across Osun State. The population of the study comprised all undergraduate students in the three public universities in Osun State: Obafemi Awolowo University, Ile-Ife; Osun State University, Osogbo; and the University of Ilesa. These institutions were selected because they represent the major public universities in the state that provide access to electronic information resources for learning and research. The target respondents were undergraduate students across various faculties who frequently use the library and electronic resources for their academic work.

From this population, a total of 380 respondents was drawn to participate in the study through stratified random sampling to ensure adequate representation across the institutions. A structured questionnaire was used as the primary instrument for data collection. The instrument was developed to obtain relevant information on students' engagement with electronic information resources, their level of information literacy skills, and their perceptions of library service quality. The questionnaire was divided into four main sections: Section A: Demographic information of respondents. Section B: Engagement with electronic information resources (measured through perceived usefulness and perceived ease of use). Section C: Information literacy skills (based on the SCONUL seven pillars: identify, scope, plan, gather, evaluate, manage, and present). Section D: Library service quality (based on LibQUAL dimensions Affect of Service, Information Control, and Library as a Place). Each item was presented on a four-point Likert scale, ranging from Strongly Agree (4) to Strongly Disagree (1), allowing for objective assessment of respondents' levels of agreement with the statements provided.

The structure of the instrument was carefully aligned with the research questions and objectives of the study to ensure adequate coverage of all aspects of the investigation. Data collection was carried out through direct personal administration of the questionnaire to respondents in their respective institutions. In cases where physical access was limited, the questionnaire was distributed electronically using Google Forms to enhance coverage and ensure timely responses. Before administering the instrument, participants were informed about the purpose of the study and assured that their participation was voluntary and confidential. These ethical considerations promoted honesty, accuracy, and reliability of responses.

Data Analysis and Results**Response Rate**

A total of 380 copies of the questionnaire were distributed proportionately across the three selected public universities. Out of this number, 368 copies were returned and found valid for analysis, yielding a response rate of 96.84%, which is adequate for the study.

Table 1: Distribution, Returned and Response Rate

Institution Distributed	Returned	Response	Rate (%)
Obafemi Awolowo University (OAU)	286	277	96.85%
Osun State University (UNIOSUN)	63	61	96.83%
University of Ilesa (UNILESA)	31	30	96.77%
Total	368		96.84%

Field Survey, 2025**Data Analysis and Results****Table 1:** Respondents' Engagement with Electronic Information Resources

Statements	VH(%)	H(%)	L (%)	VL (%)	M
Perceived Usefulness					
Using electronic resources helps me complete assignments efficiently.	142 (38.6%)	150 (40.8%)	49 (13.3%)	27 (7.3%)	3.11
Electronic resources are useful for my academic performance	156 (42.4%)	140 (38.0%)	50 (13.6%)	22 (6.0%)	3.17
I prefer electronic to printed materials for research	127 (34.5%)	133 (36.1%)	71 (19.3%)	37 (10.1%)	2.95
Electronic resources provide access to a wide range of materials	173 (47.0%)	126 (34.2%)	48 (13.0%)	21 (5.8%)	3.22
I achieve better academic outcomes using electronic resources	135 (36.7%)	151 (41.0%)	57 (15.5%)	25 (6.8%)	3.08
Weighted Mean					3.11
Perceived Ease of Use					
It is easy for me to access electronic resources from the library website.	125 (33.9%)	141 (38.3%)	73 (19.8%)	29 (8.0%)	2.98
I find it easy to navigate electronic databases.	108 (29.3%)	153 (41.6%)	77 (20.9%)	30 (8.2%)	2.92
Learning to use e-resources is easy for me	114 (31.0%)	147 (39.9%)	80 (21.7%)	27 (7.3%)	2.95
I can access electronic information resources without help	113 (30.7%)	136 (37.0%)	81 (22.0%)	38 (10.3%)	2.88
I rarely face technical issues when using Electronic information resources.	89 (24.2%)	132 (35.9%)	101 (27.4%)	46 (12.5%)	2.72
Weighted Mean					2.89
Grand Mean					3.0

Field's Survey, 2025

Decision rule: 1.0.-1.74 = very low, 1.74-2.49 – low, 2.50 -3.24 = High, 3.25-4.00 = Very high

Results indicate that the students generally exhibit a high level of engagement with electronic information resources. Under the dimension of perceived usefulness, respondents strongly agreed that electronic resources enhance their academic performance, facilitate assignment completion, and provide access to a wide range of materials. The weighted mean of 3.11 reflects a high perception of usefulness. For perceived ease of use, findings show that although students consider electronic resources relatively easy to access and navigate, some still experience technical challenges and occasional difficulties in database navigation. The weighted mean of 2.89, though slightly lower than usefulness, still falls within the high range. Overall, the grand mean of 3.00 indicates that students positively engage with electronic information resources. They acknowledge their value for academic success but encounter moderate challenges in ease of use and system reliability.

Table 2: The Level of Information Literacy Skills among the Respondents

Components	VH (%)	H (%)	L (%)	VL (%)	M
Identify Information					
Weighted Mean					
I can clearly define the information needed for my academic tasks.	146 (39.6%)	159 (43.1%)	44 (12.0%)	20 (5.3%)	3.18
I can distinguish between general topic and specific information needs.	140 (37.9%)	151 (40.9%)	55 (14.9%)	22 (6.0%)	3.11
I know when I need more information to complete an assignment.	138 (37.4%)	156 (42.3%)	52 (14.1%)	22 (6.0%)	3.11
Weighted Mean					
Scope Information					
I know the types of information resources (e.g., books, articles, websites)	134 (36.4%)	155 (42.1%)	54 (14.7%)	25 (6.8%)	3.08
I can recognise the differences between scholarly and non-scholarly sources.	128 (34.8%)	158 (42.9%)	59 (16.0%)	23 (6.3%)	3.06
I am aware of the range of sources available through the library.	139 (37.8%)	147 (39.9%)	55 (15.0%)	27 (7.3%)	3.08
Weighted Mean					
Plan Information					
I develop a strategy before starting my research.	130 (35.3%)	153 (41.6%)	57 (15.5%)	28 (7.6%)	3.04
I organise my search process before gathering information.	122 (33.2%)	160 (43.5%)	58 (15.8%)	28 (7.6%)	3.02
I determine what tools or databases to use before starting a search.	125 (34.0%)	151 (41.0%)	64 (17.4%)	28 (7.6%)	3.01
Weighted Mean					
3.02					

Gather Information

I can effectively search for information Using the library's databases.	140 (38.0%)	152 (41.3%)	51 (14.1%)	25 (6.8%)	3.10
I know how to use keywords and Filters when searching.	136 (36.9%)	154 (41.8%)	55 (14.9%)	23 (6.3%)	3.09
I retrieve relevant and quality Materials for my assignments.	133 (36.1%)	158 (42.9%)	54 (14.7%)	23 (6.3%)	3.09

Weighted Mean**3.09****Evaluate Information**

I assess the credibility and accuracy Of information sources	132 (35.9%)	157 (42.7%)	54 (14.7%)	25 (6.8%)	3.07
I can detect biased or unreliable information	126 (34.2%)	159 (43.2%)	58 (15.8%)	25 (6.8%)	3.05
I cross-check information from multiple sources before using it	138 (37.5%)	150 (40.8%)	55 (14.9%)	25 (6.8%)	3.08

Weighted Mean**3.07****Manage Information**

I save and organise information for future use.	118 (32.1%)	154 (41.8%)	69 (18.8%)	27 (7.3%)	2.98
I use citation tools or software to keep track of my references.	110 (29.9%)	151 (41.0%)	77 (20.9%)	30 (8.2%)	2.92
I store information in a way that allows easy retrieval.	115 (31.3%)	148 (40.2%)	75 (20.4%)	30 (8.2%)	2.94

Weighted Mean**2.95****Present Information**

I present information clearly and logically in my academic work.	132 (36.0%)	152 (41.3%)	60 (16.3%)	24 (6.5%)	3.06
I follow academic guidelines for citing sources.	125 (34.0%)	155 (42.1%)	63 (17.1%)	25 (6.8%)	3.02
I use the right format (APA, MLA, etc.) when presenting information.	120 (32.6%)	150 (40.8%)	73 (19.8%)	25 (6.8%)	2.99

Weighted Mean**3.02****Grand Mean****3.08****Field Survey, 2025**

Decision rule: 1.0-1.74 = Very Low, 1.74-2.49 – Low, 2.50 -3.24 = High, 3.25-4.00 = Very High

Findings revealed that respondents demonstrated a high level of ILS across all seven components assessed. Respondents showed strong competence in identifying information needs (weighted mean = 3.13), with most students able to define and recognise the information required for their academic tasks. Similarly, they displayed a high level of skill in scoping information (mean = 3.07), indicating good understanding of various sources and their relevance to academic work. The ability to plan the search process (mean = 3.02) and gather information efficiently (mean = 3.09) was also high, suggesting that students are capable of developing effective search strategies and retrieving relevant materials.

Respondents further exhibited proficiency in evaluating information (mean = 3.07), showing critical awareness in assessing the credibility and reliability of sources. In terms of managing information, the mean score of 2.95 shows that students are generally able to organise and store information for future use, though with slightly less confidence compared to other dimensions. Competence in presenting information (mean = 3.02) was equally high, indicating that students adhere to academic conventions such as proper citation and formatting. The overall grand mean of 3.08 indicates a consistently high level of information literacy among respondents. This suggests that undergraduates in public universities in Osun State possess well-developed skills in locating, evaluating, organising, and presenting information necessary for effective academic performance and research productivity.

Table 3: Library Service Quality Dimensions

Dimension	SA (%)	A (%)	D (%)	SD (%)	M
Affect of Service					
Library staff are courteous/ respectful staff	149 (40.5%)	159 (43.2%)	37 (10.1%)	2 (6.2%)	3.18
Staff are always willing to assist with electronic resources.	133 (36.1%)	154 (41.8%)	54 (14.7%)	27 (7.4%)	3.07
Library staff provide prompt responses to user inquiries	132 (35.9%)	155 (42.1%)	52 (14.1%)	29 (7.8%)	3.06
Staff are knowledgeable about the library's electronic services.	140 (38.0%)	156 (42.4%)	4 (13.0%)	24 (6.5%)	3.12
I receive individual attention when I need help from library staff.	130 (35.3%)	146 (39.7%)	64 (17.4%)	28 (7.6%)	3.03
Weighted Mean					
Information Control					
I can easily access electronic information resources provided by the library.	137 (37.2%)	148 (40.2%)	58 (15.7%)	25 (6.9%)	3.08
The library provides a wide range of useful electronic information resources.	125 (34.0%)	144 (39.1%)	67 (18.1%)	32 (8.8%)	2.98

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The online library platform is easy to navigate	135 (36.6%)	155 (42.0%)	52 (14.1%)	27 (7.3%)	3.09
I am able to access needed electronic resources from outside the library.	114 (31.0%)	146 (39.7%)	76 (20.7%)	32 (8.6%)	2.93
I find the information provided by the library to be reliable and up-to-date.	115 (31.2%)	147 (39.9%)	75 (20.4%)	31 (8.4%)	2.94

Weighted Mean **3.02**

Library as a Place

The library is a comfortable and quiet place for individual study	142	160 (38.5%)	45 (43.5%)	21 (12.2%)	3.52 (5.8%)
The library provides adequate seating and study space.	128	148 (34.8%)	65 (40.2%)	27 (17.6%)	3.41 (7.4%)
The library offers a clean and well-maintained environment	148	152 (40.2%)	44 (41.3%)	24 (12.0%)	3.51 (6.5%)
The library is a good place for group learning and discussion.	132	140 (35.9%)	62 (38.0%)	34 (16.8%)	3.33 (9.3%)
I enjoy spending time in the library's physical environment.	138	151 (37.5%)	52 (41.0%)	27 (14.1%)	3.44 (7.4%)

Weighted Mean **3.4**
Grand Mean **3.17**

Field Survey, 2025

Decision rule: 1.0.-1.74 = Very Low, 1.74-2.49 – Low, 2.50 -3.24 = High, 3.25-4.00 = Very High

The table presents respondents' perceptions of library service quality across three dimensions, Affect of Service, Information Control, and Library as a Place. Overall, respondents expressed positive perceptions, with a grand mean of 3.17, indicating agreement that university libraries provide quality services. Under Affect of Service, most respondents agreed that library staff are courteous, respectful, knowledgeable, and willing to assist with electronic resources (weighted mean = 3.10). This shows that staff offer effective and supportive service to users. In terms of Information Control, respondents agreed that electronic information resources are accessible, reliable, and easy to use, with high ratings for ease of access, navigation, and remote availability (weighted mean = 3.02). For Library as a Place, respondents agreed that the library environment is comfortable, clean, quiet, and conducive for study, with adequate seating and group learning spaces (weighted mean = 3.40). Overall, the findings indicate that students in public universities in Osun State perceive their libraries as providing competent staff assistance, dependable electronic resources, and a supportive physical environment that enhances learning and research.

Discussion of the Findings

The results indicate that respondents in public universities in Osun State perceive EIRs as highly

beneficial to their academic work. Students generally reported that these resources help them complete academic tasks efficiently. Many also agreed that the use of EIRs has positively impacted their academic performance. These findings underscore the critical role that electronic resources play in enhancing students' academic productivity and engagement. This observation aligns with previous research, which found that university students widely adopt EIR due to their speed, accessibility, and extensive information coverage (Muhammad, & Makinde, 2025). Otulugbu (2023) also noted that Nigerian undergraduates frequently utilise electronic resources to support coursework and exam preparation.

Despite the positive perception of EIRs, some respondents still preferred printed information, indicating that many undergraduates adopt a hybrid approach to resource use. This supports earlier findings showing that a significant portion of Nigerian students favor print materials because they are tangible and easier to use without technical challenges (Asuzu, 2025). The study also highlighted persistent accessibility and technical issues. Several students reported frequent difficulties, including limited ICT skills, slow internet connectivity, and login problems. These challenges are consistent with previous research, which identified inadequate digital infrastructure and limited user support as barriers affecting EIRs usage in Nigerian universities (Bello, & Musa, 2025).

Overall, the perception that electronic information resources are vital academic tools is reinforced by the high level of positive responses from respondents, despite the reported challenges. Addressing these infrastructural and technical barriers could further enhance student satisfaction and engagement with EIRs. Thus, while the study corroborates existing literature on the advantages and challenges of EIRs, it also emphasizes the need for continued investment in digital infrastructure and user support services to optimize the benefits of these resources in higher education. Respondents generally expressed confidence in their abilities across several key information literacy competencies. In the areas of identifying and scoping information, many students perceived themselves as highly capable of defining their information needs and locating relevant materials. This indicates that a large proportion of undergraduates in public universities in Osun State possess the foundational information literacy skills needed for academic success, especially in identifying and retrieving information for assignments.

However, notable weaknesses emerged in certain skill areas. Many students reported challenges with managing information, including organising, storing, and integrating what they find. Difficulties were also observed in planning information-related tasks and in evaluating information critically. These shortcomings suggest that, although students are often able to retrieve information, they may lack the deeper skills required to systematically organise, interpret, and assess information abilities that are essential for academic rigor, originality, and effective scholarly work. These findings are consistent with previous studies. Research on students' self-assessment of information literacy skills in federal universities in South-west, Nigeria revealed that students generally rated themselves highly in basic information literacy tasks such as identifying information needs and evaluating sources, but showed weaker abilities in organizing and managing information (Trixa & Kaspar, 2024). Likewise, Tachie-Donkor, and Ezema (2023). study on

information literacy proficiency found strong competence in discovering and accessing information, though students demonstrated lower skill levels in organizing, presenting, and effectively using information. Additionally, research examining the impact of information literacy on academic performance among Nigerian undergraduates reported that stronger skills in recognizing and evaluating information were closely associated with improved academic outcomes (Onifade *et. al.*, 2023).

Although respondents demonstrate confidence in core information literacy skills, notable gaps remain in information management, planning, and presentation. Focused instructional interventions that address these weaker areas are essential for strengthening students' overall scholarly engagement, critical thinking, and academic performance. By closing these gaps, students will be better prepared to meet the demands of academic research and to make more effective use of electronic information resources. Respondent in Osun State's public universities generally hold a positive perception of the quality of library services. In the Affect of Service dimension, students expressed strong confidence in the courtesy, respectfulness, and professionalism of library staff. Many also agreed that staff are knowledgeable about the library's electronic services and respond promptly to user inquiries. These observations indicate that students view library personnel as supportive and competent, qualities that significantly enhance user satisfaction.

However, some gaps remain in the provision of individualised attention. A noticeable portion of students reported that they do not consistently receive personal assistance when needed, indicating an area where service delivery may be strengthened. In the Information Control dimension, students generally expressed satisfaction with the accessibility and usability of electronic information resources within the library. Nonetheless, accessing these resources from outside the library appeared to be more challenging for some students, suggesting occasional issues with remote access. Regarding the Library as a Place dimension, students reported the highest levels of satisfaction. They described the library as a comfortable, quiet, and well-maintained environment conducive to study. Seating arrangements and group learning spaces were viewed positively, though slightly less so compared to other aspects. Overall, students appreciated the physical environment and found it supportive of their academic activities.

The results of this investigation are consistent with findings reported in previous studies. For instance, a study on service quality and user satisfaction in Nigerian academic libraries revealed that, although students were generally satisfied with the physical environment and the professional conduct of library staff, many still desired more individualized academic support (Owolabi, *et.al.*, 2024). Similarly, Iwuagwu (2023). another assessment of library service quality in selected Nigerian university libraries found that students viewed library staff as polite and helpful, yet identified gaps in one-on-one engagement with users. In addition, a study on students' satisfaction with library services in federal universities in South-Western Nigeria reported that the majority of students were pleased with librarians' professionalism and responsiveness, reinforcing the positive perceptions observed in the present study. However, the same study also noted that many academic libraries continue to fall short in providing user-specific services such as research consultations and customised information support (Bai *et. al.* 2025).

Although many respondents hold a positive opinion of the quality of library services, particularly in terms of staff professionalism, timely assistance, and courteous interactions, there remains a clear need to enhance the level of individualized support available to users. Addressing this gap could further increase student satisfaction, promote deeper engagement with library resources, and ultimately contribute to improved academic outcomes. These insights provide a useful foundation for library administrators seeking to optimize service delivery by balancing overall efficiency with personalised support.

Conclusion

The findings of this study demonstrate that respondents in public universities in Osun State generally hold favourable perceptions of library service quality. Students consistently acknowledged the professionalism, courtesy, and responsiveness of library staff, as well as the overall conduciveness and maintenance of the library environment. These strengths play a significant role in shaping students' satisfaction and reinforcing the library's value in supporting academic success. However, the study also revealed areas in need of improvement, particularly the provision of individualised support. While general services are widely appreciated, many students expressed a need for more personalized assistance, such as one-on-one guidance, research consultations, and tailored information help. Addressing these gaps is essential for enhancing the user experience and deepening students' engagement with library resources. Improving individualized support while sustaining existing strengths in staff professionalism and service delivery will better equip libraries to meet the evolving academic needs of students. By striking an effective balance between efficiency and personalized attention, academic libraries can further enhance student satisfaction and contribute meaningfully to improved academic outcomes.

Recommendations

Based on the findings of the study regarding the engagement of electronic information resources, information literacy skills, and library service quality among undergraduates in public universities in Osun State, Nigeria, several recommendations are made:

1. The study revealed that while students are confident in identifying and locating information, they struggle with planning, organising, evaluating, and managing information. Therefore, universities should provide continuous and systematic information literacy instruction that focuses specifically on these weaker areas. Emphasizing planning, critical evaluation, information organisation, and ethical information use will address the precise deficiencies identified in the study.
2. Findings showed that students face technical difficulties such as slow internet connectivity, login issues, and unstable access to electronic platforms, especially from outside the library. To address these barriers, university administrators should invest in stronger ICT infrastructure, increase internet bandwidth, enhance the reliability of library databases, and ensure that e-resource platforms are user-friendly.

3. The study found that although students perceive EIR as useful, some still prefer printed materials and lack confidence in advanced information-handling skills. Collaboration between faculty and librarians to integrate information literacy into coursework will provide discipline-specific instruction, helping students meaningfully engage with EIRs in their academic setting.
4. One major finding indicated that students were satisfied with staff professionalism but less satisfied with the level of individualized attention provided. To address this gap, library staff should receive ongoing training and support aimed at improving one-on-one interactions, personalized guidance, and user-specific assistance.
5. The study showed that a noticeable proportion of students still prefer printed materials over electronic resources. Regular awareness campaigns, orientation programmes, and demonstrations should be organised to inform students particularly print-preferring users about the benefits, accessibility, and academic value of EIRs.
6. Findings indicated both strengths (staff professionalism, conducive library environment) and weaknesses (individualised help, remote access challenges). To address these evolving needs, libraries should collect student feedback on EIRs' usability, service quality, and resource relevance on a regular basis. These insights should guide data-driven improvements aligned with user expectations and academic requirements.

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