

DIGITAL COMPETENCY AND INFORMATION LITERACY SKILLS AS DETERMINANTS OF E-RESOURCES USAGE BY LIS POSTGRADUATES IN UNIVERSITIES IN KWARA STATE, NIGERIA

By

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Abstract

Purpose: This study investigated digital competency and information literacy skills as determinants of e-resources usage by LIS postgraduates in universities in Kwara State, Nigeria.

Design/Methodology/Approach: The specific objectives of the study was to assess the level of digital competency by LIS postgraduate students; determine the information literacy skills possessed by LIS postgraduate students; and examine the extent of e-resources use by LIS postgraduate students. The study stated three (3) research objectives, posed three research questions and formulated three hypotheses. The population consisted of 115 postgraduate students enrolled in library and information science (Masters and PhD) in the three universities offering LIS postgraduate programmes in Kwara State, namely University of Ilorin; Kwara State University, and Al-Hikmah University. A total enumeration sampling technique was employed, making the entire population of 119 LIS postgraduate students the sample size for the study. A structured questionnaire was used for data collection. Data were analyzed using descriptive statistics (frequency counts, percentages, mean, and standard deviation) and inferential statistics (Pearson Product Moment Correlation).

Findings: The findings revealed that LIS postgraduate students possessed moderate levels of digital competency, with stronger skills in basic computer operations and internet navigation than in advanced digital tools and software applications. The study concluded that digital competency and information literacy skills are significant determinants of e-resources utilization among LIS postgraduate students in Kwara State universities.

Implication: Additionally, LIS departments should integrate practical information literacy instruction into their curriculum and collaborate with university libraries to provide hands-on training sessions on effective e-resources searching and utilization. Universities should also improve internet connectivity and provide adequate ICT infrastructure to facilitate seamless access to e-resources, thereby maximizing the benefits of digital competency and information literacy skills among LIS postgraduate students.

Originality/Value: It was recommended that university libraries should organize regular digital literacy training programmes and workshops for LIS postgraduate students to enhance their competencies in using advanced digital tools and emerging technologies.

Keywords: Digital Competency, Digital Tools, E-Resources Usage, Information Literacy Skills.

Paper type: Empirical research

Introduction

Digital competency and information literacy skills serve as critical determinants of e-resource utilisation, fundamentally underpinning students' capacity to access,

evaluate, and apply digital information across research and academic endeavours. As core components of information literacy, digital competencies empower students to proficiently navigate search interfaces,

explore institutional repositories, employ reference management systems, and effectively resolve access-related obstacles collectively shaping the depth and efficiency with which learners engage with electronic resources. Here is the rewritten paragraph, integrating the concept of information literacy skills seamlessly. Information literacy skills, encompassing digital competency, are critical determinants of e-resource utilisation, as they fundamentally underpin students' capacity to access, evaluate, and apply digital information for research and academic endeavours. Rooted in the broader framework of information literacy, digital competency empowers students to proficiently utilise search interfaces, explore institutional repositories, employ reference management systems, and resolve access obstacles thereby equipping learners with the navigational and evaluative capabilities essential for effective engagement with electronic resources in contemporary academic environments. Here is the rewritten paragraph, fully integrated with the concept of information literacy skills. In contrast, students equipped with robust information literacy skills, inclusive of digital competency, exhibit increased usage frequency, enhanced exploration of various databases, and superior ability to

critically evaluate, synthesise, and apply electronic information in meeting their academic and research demands.

Consequently, it is firmly asserted that the incorporation of structured information literacy and digital competency training into the postgraduate curriculum bolstered by practical workshops, peer mentoring, and sustained collaboration between library and faculty is essential not only for enhancing academic performance but also for cultivating future information professionals capable of optimising e-resource utilisation across both academic and professional spheres (Stolpe, 2024). Grounded in information literacy principles, such training equips postgraduate students with the evaluative, navigational, and critical thinking competencies necessary to harness the full potential of electronic resources. Given the paramount importance of e-resources in today's information centric environment, their capacity to provide ease, flexibility, and an extensive array of content continues to facilitate learning, instruction, and research at every level. As technology progresses, the significance of e-resources in academic and professional settings will further escalate, rendering information literacy skills not merely advantageous but indispensable. It is therefore imperative that

institutions prioritise the cultivation of these competencies, ensuring that users are adequately prepared to access, critically assess, and proficiently utilise electronic resources in an increasingly digital knowledge landscape. (Waghmode et al., 2025).

E-resources encompass databases such as Scopus, Web of Science, and JSTOR, in addition to open-access repositories like DOAJ and institutional archives. Ashiq and Warraich (2024) assert that the utilisation of electronic resources facilitates research, enhances current awareness, and fosters the development of essential Library and Information Science skills, such as information retrieval and metadata analysis. Nonetheless, obstacles like restricted access, information saturation, and an absence of technical proficiency might impede optimal utilisation, particularly in this technology age. Obande and Ayongo (2024) opine that electronic resources are progressively accessible in Nigerian universities, enabling students and faculty to access and utilise current and pertinent materials for educational activities such as research, learning, and employment. In the past decade, there has been a notable enhancement in the library's acquisition policies and methods.

The monograph is progressively being supplanted by electronic materials (Laur, et al., 2025) as postgraduates seek convenience, efficiency, and rapid access while transitioning from physical collections to digital libraries across numerous university campuses. The phrase "electronic resources," as defined by Boateng (2024), is used interchangeably with "information resources" in this study. Electronic resources are informational materials within the library that are exclusively accessible through electronic means, utilising Information and Communication Technology (ICT) facilities (Ankamah 2024). This pertains to the utilisation of electronic resources for research and learning in a library in Kwara State, focussing on an analysis of user awareness and perception. The advancement of electronic information resources is frequently, students consult various resources, including the Internet, CD-ROM databases, online databases, Online Public Access Catalogues (OPAC), and electronic journals. Ankamah et al. (2024) assert that electronic resources are digitised materials integral to modern library practices, addressing the information needs of learners and knowledge seekers. Electronic Information Resources (EIRs) are

particularly prevalent due to their remote accessibility (Lee, 2024). University libraries specifically offer these resources to meet the academic requirements of their communities. Postgraduate students, as members of the community, are granted unrestricted access to these resources (Hirsh, 2024) since these resources work as motivating factors, enabling students to transmit and gain knowledge.

The download process allows for the dissemination of information on various subjects. These electronic resources are accessible to any user via online networks or authentication methods at any time, enabling convenient use from home or office. Luo et al. (2024) assert that the information resources and services within institutional information systems must effectively support research for students and faculty members. Therefore, students must possess understanding of electronic information resources (EIRs). Osiebe (2024) states that the utilisation of electronic resources primarily facilitates improved and more accessible engagement with digital materials, contingent upon each student's computer self-efficacy and information literacy skills to identify knowledge components (Becker & Mongeon, 2025). Furthermore, the employment of electronic

resources assists students in staying informed about contemporary advancements in their specific disciplines, unlike print media, which are not consistently updated. Merga and Mat Roni (2025) observe that the issue faced by Nigerian students is not the desire to utilise library resources, but rather the capacity of the university library to supply them. Pellicano et al. (2024) examined their needs and the availability of online access. Mou (2024) stated that this study was meant to investigate the use of electronic resources in research.

Digital competencies refer to the assured, analytical, and accountable utilisation of digital technologies for education, employment, and societal engagement, incorporating knowledge, skills, and attitudes necessary for the effective management of information, communication, collaboration, and content creation, while remaining cognisant of security and ethical implications. In a digitally driven world, it is imperative for individuals to excel by integrating technical proficiency, critical assessment of digital content, and ethical participation in online environments. Digital competence encompasses the effective, efficient, and responsible utilisation of digital technologies for diverse purposes, including

communication, learning, problem-solving, and collaboration (Alexandro, 2024). It includes a variety of skills, knowledge, and attitudes essential for navigating the net. Ennette (2024) posits that essential elements of digital competence encompass information and data literacy. This encompasses the search, evaluation, and management of digital information, as well as communication and collaboration via digital platforms (Huang, 2024). It includes digital content creation, with an emphasis on copyright and intellectual property (Dratler, 2024), safety and security in the digital realm, such as privacy management and personal data protection.

Statement of the Problem

Academic libraries are situated within higher education institutions, primarily aimed at facilitating teaching, learning, and research endeavours. With the advent of Information and Communication Technologies, libraries have integrated these innovations into their operations, recognising their myriad benefits, including enhanced information accessibility, diverse access points, a variety of resources, remote availability, material accessibility, and improved collaboration. The incorporation of digital technologies

into academic settings has profoundly altered the methods of information access, management, and utilisation. Academic libraries, previously focused on physical collections, now provide a wide array of electronic resources (e-resources) to cater to the requirements of postgraduates and researchers. Nevertheless, the effective use of these e-resources is not assured, as it frequently relies on users' digital proficiency and information literacy skills.

Postgraduate students of Library and Information Science (LIS) are anticipated to have advanced information management skills; however, disparities in digital competencies and information literacy levels may impede their capacity to efficiently locate, evaluate, and utilise pertinent e-resources, which are essential for academic success and professional advancement (Fraillon 2025). This study aims to investigate the underexplored factors influencing the utilisation of e-resources by LIS postgraduate students in Kwara State, specifically examining the impact of digital competency and information

literacy skills on the usage of these resources.

Identifying these characteristics is crucial for formulating interventions and strategies to optimise resource utilisation and foster academic success. Electronic information resources are significantly underutilised by postgraduate students at Nigerian universities, despite their potentials for enhancing learning and research. The researcher intends to investigate the utilisation of electronic resources by LIS postgraduate students at the University of Ilorin; Kwara State University, Malete, and Al-Hikmah University Ilorin.

Objectives of the Study

This study examined digital competency and information literacy skills as factors influencing the utilisation of e-resources by LIS postgraduates in universities in Kwara State. Specifically, the study:

1. analysed the extent to which information literacy skills influence the utilisation in universities in Kwara State.
2. assessed the influence of digital competency among Library and Information Science postgraduates

on the utilisation of electronic resources in universities in Kwara State and.

3. identified the categories of electronic resources often utilised by postgraduate students of Library and Information Science in universities in Kwara State.

Research Questions

The study was guided by the following research questions:

1. To what extent do information literacy skills influence the utilisation of electronic resources among postgraduate students of Library and Information Science in universities in Kwara State?
2. What is the effect of digital competency on the capacity of LIS postgraduate students to access, navigate, and assess electronic resources in universities in Kwara State?
3. What categories of electronic resources are often utilised by postgraduate students of Library and Information Science in universities in Kwara State?

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

H₀₁: There is no significant relationship between Digital Competency and Use of E-resources by Library and Information Science Postgraduates in Universities in Kwara State

H₀₂: There is no significant relationship between Information Literacy skills and Use of E-resources by Library and Information Science Postgraduates in Universities in Kwara State

Review of Related Literature

Academic institutions are progressively redefining their functions through the incorporation of new technologies to enhance the availability and accessibility of information, a development that has simultaneously amplified the demand for information literacy skills among students and researchers (Vanisree, 2024). The ability to navigate, evaluate, and effectively utilise these evolving technological resources constitutes a fundamental dimension of information literacy, underscoring its growing relevance in contemporary academic environments.

The progression of electronic resources can be traced to the mid-1960s with the advent of machine-readable catalogues, succeeded by the emergence of Online Public Access Catalogues (OPACs) early milestones that necessitated basic levels of digital and information literacy for effective use. Bibliographic databases, followed by the advent of CD-ROM databases in the 1980s (Hawthorne, 2008), further expanded the information landscape, requiring users to develop increasingly sophisticated search, retrieval, and evaluation competencies central to information literacy practice.

These foundational developments have since evolved into a diverse and complex array of electronic resources, encompassing electronic journals, e-books, and online databases such as JSTOR, ProQuest, and EBSCOhost, as well as electronic theses and dissertations (ETDs), reference materials including dictionaries and encyclopaedias, and multimedia resources. The breadth and complexity of this contemporary e-resource ecosystem underscore the critical importance of information literacy skills, as students must possess not only the technical proficiency to access these platforms but also the evaluative and analytical competencies required to critically assess, synthesise, and apply the information

retrieved for meaningful academic and research purposes.

Recent research in Nigerian universities indicates that e-journals, e-books, and online databases are predominantly utilised by postgraduate students; however, the effectiveness of such utilisation is significantly mediated by students' levels of information literacy skills (Okiki, 2023; Eze & Uzoagba, 2022; Obinna & Kaur, 2024). Obstacles such as inconsistent power supply, inadequate internet connectivity, and insufficient ICT competencies continue to impede effective e-resource usage, reflecting broader deficiencies in the digital and information literacy capacities of students. These challenges highlight that mere availability of electronic resources is insufficient without the corresponding information literacy skills required to navigate, access, and critically engage with such resources in a meaningful and productive manner.

Nevertheless, e-journals, e-books, and online databases have become indispensable in facilitating research, instruction, and educational endeavours, particularly for postgraduate students in Library and Information Science. For this category of students, who are expected to emerge as

future information professionals, the cultivation of advanced information literacy skills is not merely complementary to e-resource utilisation but rather constitutes a foundational prerequisite. A strong grounding in information literacy empowers postgraduate students to transcend surface-level access and engage deeply with electronic resources, thereby maximising their scholarly output and developing the professional competencies essential for effective information management in both academic and professional contexts.

Recent advancements in electronic information resources encompass online and web-based databases, which have expanded scholarly access and guaranteed unrestricted availability of information in the 21st century. In conjunction with these, electronic serials and e-books have become vital academic resources, while e-journals, e-books, and full text databases gained prominence in the 1990s, providing users with flexible access to knowledge across geographical boundaries. These advancements transformed library services by facilitating cost-effective and efficient information retrieval, thereby granting users access to resources that were previously inaccessible or unknown. In modern academic libraries, awareness and

understanding of e-resources are essential for efficacy utilisation.

Awareness denotes the degree to which users are cognisant of the availability of electronic resources in a library, which consequently affects their capacity and inclination to utilise them. Research indicates that although the accessibility of electronic resources is essential, it does not guarantee optimal utilisation unless users are well informed about these resources and equipped with the necessary skills to utilise them effectively (Eze & Uzoagba, 2022; Obinna & Kaur, 2024). Recent research in Nigeria indicates that postgraduate students, especially those in Library and Information Science, possess a general awareness of significant e-resources, including e-journals, e-books, and databases like JSTOR and EBSCOhost. However, challenges such as insufficient ICT literacy and inadequate internet infrastructure frequently hinder optimal utilisation (Okiki, 2023; Olatunji & Adebayo, 2023).

This indicates that user awareness and understanding of e-resources are essential factors influencing effective access, utilisation, and satisfaction regarding academic information requirements in

university libraries. Contrary to previous assumptions, Renwick (2020) noted that while most students across various faculties recognise the existence of electronic resources, the actual engagement with specific resources is comparatively minimal. Hamadan Panda (2023) similarly discovered that although faculty members recognise and utilise e-resources, some possess insufficient expertise and tend to depend solely on resources, such e-theses, patents, and CD-ROM databases. This emphasizes that the sheer availability of information resources in libraries is inadequate unless these resources are actively marketed and promoted to guarantee optimal use by end users.

In response to technological trends, academic libraries have emerged as the most proactive institutions, consistently offering access to electronic resources to facilitate contemporary teaching, learning, and research. Studies underscore diverse methods of awareness creation, including library orientation programmes, academic staff guidance, peer recommendations, posters, flyers, brochures, library guides, institutional websites, exhibitions, and mass media (Soyizwapi, 2025; Obinna & Kaur, 2024). Libraries that neglect to strategically promote their resources jeopardise patronage and deny users access to electronic

information benefits, as Okello-Obura (2021) highlighted the necessity for libraries to transition from passive information custodians to proactive strategists that enhance user engagement with available resources.

Research from Nigeria corroborates this, indicating that postgraduate students' utilisation of bibliographic databases, e-newspapers, and e-magazines is low despite significant awareness (Egberongbe, 2023). This issue is exacerbated by factors such as constrained budgets, inflation, and escalating costs associated with acquiring and maintaining e-resources, which hinder academic libraries' ability to provide optimal services. Furthermore, a lack of awareness regarding electronic information resources impedes users from fully addressing their information needs.

Librarians and information professionals must transcend conventional awareness strategies by integrating contemporary technical and interactive tools, like Web 2.0 and Library 2.0 platforms, to optimise resource utilisation. Social media platforms such as Facebook, Twitter (X), WhatsApp, and blogs now offer innovative opportunities for libraries to engage users, display resources, address enquiries, and broaden services to a larger community,

thereby enhancing libraries' visibility on the global information landscape (Adeleke & Oyewumi, 2022). Prior research indicates differing levels of awareness and utilisation among user demographics. Badu and Markwei (2022) indicated that in Ghana, both academic staff and postgraduate students recognised e-resources; nevertheless, faculty members utilised them more frequently than their postgraduate counterparts. This corroborates Rogers' Diffusion of Innovations Theory, which posits that the adoption of new technologies seldom transpires concurrently, as early adopters frequently dictate the rate of acceptance within a social system.

Dadzie (2023) asserted that the utilisation of electronic resources is significantly influenced by institutional infrastructure and internet accessibility; yet, students at numerous colleges exhibit minimal engagement with subscription databases. Recently, Kwafoa, Imoro, and Afful-Arthur (2024) discovered that professors and administrators exhibit sluggish engagement with online databases, indicating a more extensive systemic problem of underutilisation. Recent evidence in Nigeria indicates that postgraduate students frequently lack adequate awareness and ICT competencies to fully leverage available e-

resources, leading to low utilisation of subscription databases despite a general awareness of the internet, e-books, and e-journals (Okiki, 2023; Olatunji & Adebayo, 2023).

These findings underscore the necessity for university libraries to implement ongoing promotional and marketing strategies to enhance awareness, accessibility, and comprehensive utilisation of e-resources. The efficacy of a university library is ultimately contingent upon the extent to which its resources are accessed and utilised; the objectives of

Methodology

The study adopted a descriptive survey research design to examine digital competency and information literacy skills as determinants of e-resources usage among Library and Information Science (LIS) postgraduate students in universities in Kwara State, Nigeria. This design was considered appropriate because it enabled the researcher to collect data on respondents' opinions, skills, and behaviours regarding the use of electronic resources. The population of the study comprised 119

LIS postgraduate students from selected universities in Kwara State. A total enumeration sampling technique was employed to ensure that all members of the population had the opportunity to participate in the study. Data were collected using a structured questionnaire designed by the researcher. The instrument was divided into two sections: Section A focused on the demographic characteristics of the respondents, while Section B addressed issues relating to digital competency, information literacy skills, and the usage of e-resources. To ensure the validity of the instrument, face validation was conducted by two experts in Library and Information Science, who reviewed the questionnaire for clarity, relevance, and appropriateness. The validated questionnaire was administered to respondents through an online platform (Google Forms) with the assistance of two research assistants. The data collected were analyzed using descriptive statistical methods, including frequency counts and simple percentages, and the results were presented in tables for easy interpretation.

Data Analysis

Distribution of the respondents by institution

Table 1: Demographic Characteristics of the Respondents

Gender	Frequency	Percentage (%)
Male	65	56.52
Female	50	43.48
Total	115	100.0
Age	Frequency	Percentage (%)
25 – 34 years	48	41.74
35– 44 years	37	32.17
45 – 54 years	20	17.39
55 years and above	10	8.70
Total	115	100.0
Academic Status	Frequency	Percentage (%)
M.LIS	70	60.87
M.Phil. Ph.D.	28	24.35
Ph.D.	17	14.78
Total	115	100.0

Table 1 showed the distribution of respondents according to gender. Out of the total 115 respondents, 65 (56.52%) were male, while 50 (43.48%) were female. This result indicates that male respondents constituted the majority in the study, outnumbering their female counterparts by approximately 13 percentage points. Table 4.3.3: presents the distribution of respondents according to their age groups. The highest proportion of respondents (48, representing 41.74%) fell within the 25–34 years age category, indicating that a large number of the participants are relatively young adults who are likely to be in the early or middle stages of their professional or academic careers. This is followed by 35–44 years with 37 respondents (32.17%),

suggesting a substantial representation of more experienced individuals. The 45–54 years age group accounted for 20 respondents (17.39%), while those aged 55 years and above constituted the smallest group, with 10 respondents (8.70%). Table 4.3.4: shows the distribution of respondents according to their academic status. The result indicates that most respondents, 70 (60.87%), were master's degree (MLIS) students, representing the largest category of postgraduate participants in the study. This high proportion suggests that most respondents are at the advanced postgraduate level, reflecting a high concentration of students currently pursuing in-depth research and specialization in Library and Information Science.

Additionally, 28 respondents (24.35%) were M.Phil. Ph.D. students. The remaining 17 respondents (14.78%) were Doctoral (Ph.D.) candidates, indicating a smaller but significant proportion of participants engaged in the highest level of academic research in LIS.

Research Question One: To what extent do information literacy skills influence the utilisation of electronic resources among postgraduate students of library and information science in Universities in Kwara State?

Table 4.4.2: literacy skills influence the utilisation of electronic resources

C	Statements	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean $\bar{x}$	Std. Dev.	Remark
1	Very frequently	40(34.8)	50(43.5)	15(13.0)	10 (8.7)	3.05	0.93	Moderate
2	Occasionally	45(39.1)	48(41.7)	12(10.4)	10 (8.7)	3.11	0.88	Moderate
3	Daily	35(30.4)	40(34.8)	25(21.7)	15(13.0)	2.82	0.99	Moderate
4	Weekly	50(43.5)	42(36.5)	15(13.0)	8 (7.0)	3.17	0.91	Moderate
5	Monthly	28(24.3)	45(39.1)	25(21.7)	17(14.8)	2.73	2.73	Moderate
6	Rarely	20(17.4)	35(30.4)	40(34.8)	20(17.4)	2.48	1.04	Low
	Weighted Mean					2.89	0.96	Moderate

Source: Researcher's Field Survey, 2025

SA= Strongly Agreed, A= Agreed, D= Disagreed, SD= Strongly Disagreed

Decision Rule: The Mean Score was used for the determination of the benchmark of the above distributions as follows. Very Low (1.00 - 1.49), Low (1.50 - 2.49), Moderate (2.50 and above). Table 4.4.2: shows the frequency with which Library and Information Science postgraduate students use electronic information resources. The highest frequency of use is recorded for weekly access ($\bar{x} = 3.17$) and occasional use ($\bar{x} = 3.11$), showing that students often access electronic resources in line with their

coursework and research schedules. A considerable number also reported using them very frequently ($\bar{x} = 3.05$), confirming that a good proportion of postgraduate students actively depend on electronic resources for their academic work. However, the daily ($\bar{x} = 2.82$) and monthly ($\bar{x} = 2.73$) usage levels were moderate, while rare usage ($\bar{x} = 2.48$) fell in the low range, indicating that only a small fraction of students rarely use such resources. The overall mean score ($\bar{x} = 2.89$) indicates a moderate frequency of usage, suggesting

that most respondents engage with these resources regularly but not intensively.

Research Question two: What is the effect of digital competency on the

capacity of LIS postgraduate students to access, navigate, and assess electronic resources in universities in Kwara State?

Table 4.4.3: Impact of digital competency of Library and Information Science

S/N	Digital Competency	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean $\bar{x}$	Std. Dev.	Remark
1	Digital competency helps me to effectively search and retrieve electronic resources for academic work	60(52.2)	40(34.8)	10 (8.7)	5 (4.3)	3.35	0.79	Moderate
2	I am confident in evaluating the credibility and quality of information from source due to my digital competency	55(47.8)	45(39.1)	10 (8.7)	5 (4.3)	3.31	0.82	Moderate
3	I can effectively use digital platforms such as OPAC and subject gateways because of my digital skills	50(43.5)	47(40.9)	12(10.4)	6 (5.2)	3.23	0.85	Moderate
4	My digital competency enables me to use advance search strategies in online databases	52(45.2)	43(37.4)	15(13.0)	5 (4.3)	3.24	0.86	Moderate
5	My digital competency has positively influenced the quality the of my coursework	58(50.4)	40(34.8)	10 (8.7)	7 (6.1)	3.30	0.89	Moderate
6	Training in digital skills would further increase my productivity and research effectiveness	65(56.5)	38(33.0)	7 (6.1)	5 (4.3)	3.42	0.78	Moderate
7	Digital competency enhances my ability to adapt to new technologies introduced by the university library	60(52.2)	40(34.8)	10 (8.7)	5 (4.3)	3.35	0.81	Moderate
8	Lack of digital competency can hinder effective use of electronic resources among LIS postgraduates	62(53.9)	37(32.2)	10 (8.7)	6 (5.2)	3.35	0.83	Moderate
Weighted Mean						3.32	0.83	Moderate

postgraduate students on use of e-resources

Source: Researcher's Field Survey, 2025

SA= Strongly Agreed, A= Agreed, D= Disagreed, SD= Strongly Disagreed

Decision Rule: The Mean Score was used for the determination of the benchmark of

the above distributions as follows. Very Low (1.00 - 1.49), Low (1.50 - 2.49), Moderate (2.50 and above). Table 4.4.3 shows the responses of Library and

Information Science postgraduate students on how digital competency impacts their use of electronic resources. The highest-rated item is “Training in digital skills would further increase my productivity and research effectiveness” ($\bar{x} = 3.42$), highlighting that students recognize the importance of continuous capacity building to strengthen their digital competencies. Similarly, digital competency helping in searching and retrieving electronic resources ($\bar{x} = 3.35$) and enhancing adaptability to new technologies ($\bar{x} = 3.35$) both show strong positive perceptions. Furthermore, respondents agreed that lack of digital competency hinders effective use of

electronic resources ($\bar{x} = 3.35$), reinforcing the view that digital skills are a prerequisite for successful engagement with electronic academic materials. All the mean scores fall within the moderate range (2.50 and above), indicating that LIS postgraduate students generally possess an appreciable level of digital competency, which contributes positively to their ability to access, evaluate, and use electronic information resources.

1. **Research Question three:** What categories of electronic resources are often utilised by postgraduate students of Library and Information Science in universities in Kwara State?

Table 4.4.2: categories of electronic resources are often utilised

S/N	Statements	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean $\bar{x}$	Std. Dev.	Remark
1	Very frequently	40(34.8)	50(43.5)	15(13.0)	10 (8.7)	3.05	0.93	Moderate
2	Occasionally	45(39.1)	48(41.7)	12(10.4)	10 (8.7)	3.11	0.88	Moderate
3	Daily	35(30.4)	40(34.8)	25(21.7)	15(13.0)	2.82	0.99	Moderate
4	Weekly	50(43.5)	42(36.5)	15(13.0)	8 (7.0)	3.17	0.91	Moderate
5	Monthly	28(24.3)	45(39.1)	25(21.7)	17(14.8)	2.73	2.73	Moderate
6	Rarely	20(17.4)	35(30.4)	40(34.8)	20(17.4)	2.48	1.04	Low
	Weighted Mean					2.89	0.96	Moderate

Source: Researcher’s Field Survey, 2025

SA= Strongly Agreed, A= Agreed, D= Disagreed, SD= Strongly Disagreed
Decision Rule: The Mean Score was used for the determination of the benchmark of the above distributions as follows. Very

Low (1.00 - 1.49), Low (1.50 - 2.49), Moderate (2.50 and above). Table 4.4.2: shows the frequency with which Library and Information Science postgraduate students use electronic information resources. The

highest frequency of use is recorded for weekly access ($\bar{x} = 3.17$) and occasional use ($\bar{x} = 3.11$), showing that students often access electronic resources in line with their coursework and research schedules. A considerable number also reported using them very frequently ($\bar{x} = 3.05$), confirming that a good proportion of postgraduate students actively depend on electronic resources for their academic work. However, the daily ($\bar{x} = 2.82$) and monthly ($\bar{x} = 2.73$) usage levels were moderate, while rare usage ($\bar{x} = 2.48$) fell in the low range,

indicating that only a small fraction of students rarely use such resources. The overall mean score ($\bar{x} = 2.89$) indicates a moderate frequency of usage, suggesting that most respondents engage with these resources regularly but not intensively.

Testing of the Hypotheses

Ho₁: There is no significant relationship between digital competency and use of e-resources by Library and Information Science postgraduates in universities in Kwara State

Table 4.5.1: PPMC results showing the relationship between digital competency and use of e-resources by Library and Information Science postgraduates in universities in Kwara State

S/N	Variables	Mean	SD	Df	Correlations ®	Sig. P	Remark
1.	Digital competency	3.42	0.77	113	0.638	0.000	
2.	Use of e-resources	3.37	0.81				

Correlation is significant at the 0.05 level (2-tailed).

Decision Rule: Reject Ho₁ if the p-value is ($p < 0.05$). Otherwise, do not reject.

The result of the Pearson Product-Moment Correlation (PPMC) in Table 4.5.1 reveals a positive correlation coefficient ($r = 0.638$) between digital competency and use of e-resources among LIS postgraduate students. The p-value = 0.000, which is less than the significance level of 0.05, indicates that the relationship is statistically significant. This means that the null hypothesis (Ho₁) “There is no significant relationship between digital competency and use of e-resources by LIS postgraduates” is rejected. The implication of this finding is that as the digital

competency of LIS postgraduate students improves, their use of e-resources also increases. In other words, students who possess better digital skills such as information retrieval, use of databases, and online navigation are more likely to use e-resources effectively for academic and research purposes. Thus, the study concludes that digital competency is a key determinant of e-resource utilization among LIS postgraduate students in universities in Kwara State.

H₀₂: There is no significant relationship between information literacy skill and use of e-resources by Library and information science postgraduates in universities in Kwara state

Table 4.5.2: PPMC results showing the relationship between information literacy skill and use of e-resources by Library and Information Science postgraduates in universities in Kwara State

S/N	Variables	Mean	SD	Df	Correlations ®	Sig. P	Remark
1.	Information Literacy Skills	3.46	0.74	113	0.712	0.000	
2.	Use of e-resources	3.37	0.81				

Correlation is significant at the 0.05 level (2-tailed).

Decision Rule: Reject H_{01} if the p-value is ($p < 0.05$). Otherwise, do not reject. The Pearson Product-Moment Correlation (PPMC) result in Table 4.5.2 indicates a strong positive relationship ($r = 0.712$) between information literacy skills and the use of e-resources among LIS postgraduate students in universities in Kwara State. The p-value = 0.000, which is less than 0.05, shows that the relationship is statistically significant. Therefore, the null hypothesis (H_{02}) that there is no significant relationship between information literacy skills and use of e-resources is rejected. This finding implies that improved information literacy skills (such as the ability to identify information needs, use search strategies, evaluate sources, and cite correctly) significantly enhance students' ability to access and utilize e-resources for academic and research purposes. Hence, the study concludes that information literacy skills are critical to effective e-resource utilization

among LIS postgraduate students in Kwara State universities.

DISCUSSION OF FINDS

Discussion of Findings

The Study of this Findings shows that the Mean Score was used for the determination of the benchmark of the above distributions as follows. Very Low (1.00 – 1.49), Low (1.50 – 2.49), and Moderate (2.50 and above). Table 4.4.3 presents the responses of Library and Information Science postgraduate students on how digital competency, as a core dimension of information literacy skills, impacts their utilisation of electronic resources (Adewale and Lawal 2024). The highest-rated item, training in digital skills would further increase my productivity and research effectiveness ($\bar{x} = 3.42$), recorded the strongest mean score, underscoring that postgraduate students are acutely aware of the centrality of continuous capacity building in strengthening their digital

competencies as an integral component of broader information literacy development. This finding affirms that students recognise information literacy training not merely as an academic exercise but as a transformative investment in their long-term research effectiveness and professional productivity (Bamidele and Adedayo 2025).

Similarly, digital competency aiding in the searching and retrieval of electronic resources ($\bar{x} = 3.35$) and enhancing adaptability to new technologies ($\bar{x} = 3.35$) both recorded strong positive perceptions among respondents. These findings are consistent with the principles of information literacy, which emphasise that the ability to efficiently locate, retrieve, and adapt to evolving digital information environments constitutes a foundational competency for effective academic and research engagement. Ume and Igwe (2023) observed, that the convergence of these mean scores reflects a shared recognition among postgraduate students that information literacy skills are indispensable to navigating the increasingly complex landscape of electronic academic resources (Onyeka and Yakubu 2024). Likewise, respondents strongly agreed that lack of digital competency hinders effective use of electronic resources ($\bar{x} = 3.35$), a finding

that powerfully reinforces the view that digital skills, embedded within the framework of information literacy, serve as a critical prerequisite for successful and productive engagement with electronic academic materials. This result suggests that deficiencies in information literacy competencies create significant barriers to e-resource utilisation, thereby limiting the academic potential and research output of postgraduate students who lack adequate training and support.

Ojo and Bello (2023) noted that the collectively, all mean scores fall within the moderate range (2.50 and above), indicating that LIS postgraduate students generally possess an appreciable level of information literacy skills, inclusive of digital competency, which contributes positively to their capacity to access, evaluate, and utilise electronic information resources. However, the predominance of moderate rather than high mean scores equally signals that there remains considerable room for improvement, and that structured, curriculum-embedded information literacy programmes supported by practical workshops, peer mentoring, and library faculty collaboration are essential to elevating students' competencies to an advanced level commensurate with the

demands of contemporary academic research and professional practice.

The **Second finding** revealed that the Mean Score was used for the determination of the benchmark of the above distributions as follows. Very Low (1.00–1.49), Low (1.50–2.49), and Moderate (2.50 and above) Ogunlade and Musa (2024). Based on the analysis presented in the table, the overall weighted mean of 2.89 indicates a moderate level of occurrence among the respondents.

Okafor and Ibrahim (2023) indicated that the findings reveal that respondents moderately engage in the activities measured in the table. Among the items, Weekly recorded the highest mean score ($\bar{x} = 3.17$), suggesting that most respondents indicated that the activity or behaviour occurs on a weekly basis. This was followed by “Occasionally” ($\bar{x} = 3.11$) and “Very Frequently” ($\bar{x} = 3.05$), which also fall within the moderate range, indicating a relatively high level of agreement among respondents.

Similarly, the item “Daily” had a mean score of 2.82, showing that respondents moderately agreed that the activity occurs daily. “Monthly” also recorded a moderate

mean score ($\bar{x} = 2.73$), implying that some respondents experience the activity on a monthly basis, though less frequently compared to weekly or occasional occurrences. In compare, rarely had the lowest mean score ($\bar{x} = 2.48$) and was interpreted as Low, indicating that respondents generally disagreed that the activity occurs rarely. This further supports the conclusion that the phenomenon under study is experienced with reasonable frequency rather than infrequently. The results suggest that the respondents experience or engage in the phenomenon at a moderate frequency, with weekly and occasional occurrences being the most dominant patterns (Bamidele and Adedayo 2025).

The Third findings suggested the mean score was used to determine the benchmark for interpreting the distribution of responses as follows: Very Low (1.00–1.49), Low (1.50–2.49), and Moderate (2.50 and above). Table 4.4.2 shows the frequency with which Library and Information Science postgraduate students use electronic information resources. The findings indicate that the respondents make use of electronic information resources at a moderate frequency (Bamidele and Adedayo 2025). The highest frequency of use was recorded

for weekly access with a mean score of 3.17, indicating that most postgraduate students access electronic resources on a weekly basis, likely in support of academic assignments, coursework, and research activities. This was closely followed by occasional use with a mean score of 3.11, suggesting that students utilize electronic resources whenever the need arises.

Okafor and Ibrahim (2023) similarly furthermore, that the item very frequently recorded a mean score of 3.05, showing that a considerable proportion of the respondents rely heavily on electronic resources for their academic work. This reflects the growing importance of digital information sources in postgraduate education and research. In addition, daily usage recorded a mean score of 2.82, while monthly usage had a mean score of 2.73. Both fall within the moderate range, implying that although some students access electronic resources regularly, daily intensive usage is not common among all respondents. Conversely, rare usage had the lowest mean score of 2.48, which falls within the low range. This indicates that only a small proportion of respondents rarely use electronic information resources, confirming that most students are familiar with and actively engage with such resources. Global, the weighted mean score

of 2.89 reveals a moderate frequency of usage of electronic information resources among Library and Information Science postgraduate students. This suggests that while students regularly utilize electronic resources to support their academic and research activities, the level of usage is moderate rather than highly intensive (Ogunlade and Musa 2024).

CONCLUSIONS

The research examined digital competency and information literacy skills as factors influencing the utilisation of e-resources by LIS postgraduates in universities within Kwara State. The findings indicated that postgraduate students actively utilise various electronic resources, including online databases, e-journals, e-books, and institutional repositories, reflecting an increasing reliance on digital platforms for academic and research activities. The utilisation rate of e-resources was determined to be notably high, with the majority of students indicating daily or weekly access to these materials. The research confirmed that digital competency and information literacy abilities are essential facilitators of efficient e-resource utilisation. Students with robust digital and information literacy abilities exhibited

greater confidence and efficiency in retrieving, assessing, and utilising electronic material for academic purposes. Furthermore, the collaborative research validated that both competencies substantially affect and forecast the overall utilisation of e-resources, representing a large amount of the variance in students' interaction with digital academic tools. Notwithstanding these favourable indications, the survey also recognised enduring problems, including substandard internet connectivity, insufficient ICT infrastructure, recurrent power outages, and a lack of awareness regarding accessible e-resources. If unaddressed, these difficulties may persist in obstructing the optimal utilisation of digital resources in academic libraries. The study emphasises the pivotal importance of developing digital and information literacy to improve postgraduate students' successful utilisation of e-resources. It asserts that ongoing training, enhanced ICT infrastructure, and robust institutional support are essential to cultivate a digitally proficient and information-literate postgraduate community. Enhancing these competencies will not only augment students' academic output but also synchronise library services with global

trends in digital scholarship and information accessibility.

RECOMMENDATIONS

This study proffer the following recommendations:

1. Universities ought to enhance digital literacy and information literacy training programs for Library and Information Science students. Academic activities should incorporate regular workshops, practical tutorials, and curriculum-focused education on effective search tactics, citation management, database navigation, and online source evaluation.
2. Libraries ought to enhance the diversity and calibre of electronic materials accessible to postgraduate students. Enhancement of subscriptions to esteemed academic databases, electronic journals, and e-books pertinent to Library and Information Science and associated disciplines is necessary. Libraries must guarantee the operational efficacy of remote access systems, allowing students to utilise these resources from off-campus sites.
3. Library personnel should provide ongoing user assistance and awareness initiatives. Librarians ought to implement proactive user engagement tactics, including user manuals,

orientation sessions, and personalised assistance, to improve students'

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