eISSN 3141-6152
GLOBAL ACADEMIC INTERNATIONAL JOURNAL OF LIBRARY AND INFORMATION SCIENCE (GAIJLIS) VOL: 2.1 (2026) PP 68-79



Received: 29.05.2026| Accepted: 26.06.2026 |Published: 10.07.2026
Citations: GBOGBONOSHE, H., & EGHWERE, E.S. (2026) A multi-dimensional assessment of electronic library utilization among post-graduate students in South-East Nigerian state universities: the interplay of information literacy, digital skills, and personal interest Gaijlis vol.2.1. Pp.68-79 https://globreshub.org/index.php/gaijlis/ **DOI**: https://doi.org/10.5281/zenodo.21870430

A MULTI-DIMENSIONAL ASSESSMENT OF ELECTRONIC LIBRARY UTILIZATION AMONG POST-GRADUATE STUDENTS IN SOUTH-EAST NIGERIAN STATE UNIVERSITIES: THE INTERPLAY OF INFORMATION LITERACY, DIGITAL SKILLS, AND PERSONAL INTEREST

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Abstract

Background: *The effective utilization of electronic library resources is critical for postgraduate research. However, several user-based factors may influence how postgraduate students engage with e-libraries in Nigerian universities.*

Objective*: This study examined the multi-dimensional factors influencing electronic library utilization among postgraduate students in state universities in South-East Nigeria. Specifically, it assessed the influence of information literacy, digital skills, and personal interest on effective e-library utilization.*

Methods: *A descriptive survey research design was adopted. The population comprised 74 postgraduate students in Library and Information Science across four state universities in South-East Nigeria. Due to the manageable size, the entire population was studied without sampling. Data were collected using two researcher-structured questionnaires validated by three experts. Reliability was established using Cronbach's Alpha, with coefficients ranging from 0.76 to 0.89 across clusters and an overall index of 0.81. Data were analysed using mean, standard deviation, and t-test.*

Results*: Findings revealed that information literacy (Mean = 3.28), digital skills (Mean = 3.24), and personal interest (Mean = 3.34) are significant characteristics influencing effective electronic library utilization. Hypothesis testing confirmed the statistical significance of these user characteristics in e-library utilization (p < .000).*

Conclusion*: The study concludes that user characteristics significantly influence e-library use. It recommends that university libraries should regularly organize workshops, seminars, and training sessions to enhance students' information literacy, digital skills, and personal interest. These initiatives should be integrated into postgraduate curricula, orientation programs, and academic support services.*

Keywords*: Electronic library utilization, information literacy, digital skills, personal interest, postgraduate students, South-East Nigeria*

*Authors GBOGBONOSHE, H., & EGHWERE, E.S. (2026) agree that this article remain permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

1. Introduction

The proliferation of electronic information resources has fundamentally transformed academic libraries worldwide, creating unprecedented opportunities for knowledge access and dissemination. Electronic libraries serve as vital repositories of digital content, providing primary and secondary information electronically through communications networks (Buba & Lawal, 2023). In the Nigerian educational context, electronic libraries have become indispensable tools for postgraduate

students engaged in advanced research and scholarly inquiry.

Electronic libraries encompass a wide range of digital resources including CD-ROM databases, electronic mails, Online Public Access Catalogues (OPAC), and Internet browsing capabilities (Oduwole & Akpati in Ogunbodede et al., 2022). These platforms offer postgraduate students the flexibility to access scholarly materials remotely, conduct comprehensive literature searches, and engage with current research developments in their respective fields. However, despite the availability of these sophisticated resources, effective utilization remains a significant challenge for many postgraduate students in Nigerian universities (Ugwulebo & Okuonghae, 2021).

The concept of user characteristics has emerged as a critical factor in understanding e-library utilization patterns. User characteristics refer to the traits and qualities that define how individuals interact with technology, products, and services (Iyishu, 2019). These include age, gender, education level, technological proficiency, cognitive abilities, information seeking behavior, academic discipline, and language proficiency. Understanding these characteristics is essential for designing effective e-library systems that cater to diverse user needs.

Information literacy represents a foundational competency for effective e-library utilization. It encompasses the ability to identify information needs, locate relevant resources, evaluate information credibility, and apply information ethically (Ajayi et al., 2023; Odede & Zewadde, 2018). Postgraduate students with strong information literacy skills demonstrate greater confidence in navigating digital databases, conducting advanced searches, and synthesizing information from multiple sources (Bashorun et al., 2021). Digital skills constitute another crucial dimension of e-library utilization. Digital skills refer to abilities required to effectively navigate, use, and communicate through various digital technologies and platforms (Udoh et al., 2020). In the context of electronic libraries, digital skills enable students to operate computer systems, utilize software applications, manage basic computer functions, and engage with social media platforms for academic collaboration (Ukaegbu & Wegwu, 2019).

Personal interest represents a motivational dimension that significantly influences e-library engagement. When students exhibit genuine curiosity and passion for their research topics, they demonstrate greater persistence in seeking and utilizing electronic resources (Igbozuruike & Ile, 2022). Personal interest drives students to actively seek out relevant resources, engage critically with materials, and apply knowledge gained to their academic work. The Technology Acceptance Model (TAM) proposed by Davis (1989) provides a theoretical framework for understanding how users accept and utilize technology. The model posits that perceived usefulness and perceived ease of use shape individuals' attitudes toward technology, ultimately influencing their behavioral intentions and actual system usage. This framework is particularly relevant for understanding postgraduate students' adoption and utilization of electronic library resources in Nigerian universities.

2. Statement of the Problem

Nigerian universities are increasingly investing in electronic libraries to provide postgraduate students with access to scholarly resources. However, evidence suggests that utilization levels remain suboptimal despite the availability of these digital platforms. The researcher observed that postgraduate students often fail to take full advantage of electronic resources available to them, raising questions about the factors influencing

their engagement with these platforms.

Existing literature indicates low utilization of e-library resources among postgraduate students in Nigerian universities (Agboke & Effiong, 2022; Ndagi & Madu, 2018). This situation may be attributed to deficiencies in information literacy, inadequate digital skills, or insufficient personal interest in exploring digital resources. However, empirical evidence specifically examining the interplay of these characteristics in the South-East Nigerian context remains limited.

Therefore, this study sought to investigate the extent to which information literacy, digital skills, and personal interest influence effective utilization of electronic library resources by postgraduate students in state universities in South-East Nigeria.

3. Research Objectives and Questions

Objectives of the Study

The main purpose of the study was to examine the information users' characteristics for effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria. Specifically, the study sought to:

1. Examine the influence of users' information literacy on effective utilization of electronic library by postgraduate students
2. Determine the influence of users' digital skills on effective utilization of electronic library by postgraduate students
3. Ascertain the influence of users' personal interest on effective utilization of electronic library by postgraduate students

Research Questions

The following research questions guided the study:

1. What is the influence of users' information literacy on effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria?
2. What is the influence of users' digital skills on effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria?
3. What is the influence of users' personal interest on effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria?

4. Literature Review

Conceptual Framework

Electronic libraries, also known as digital libraries, are digital repositories of books, journals, articles, and various information resources accessible through electronic means (Mommoh & Gomina, 2023). These platforms house vast collections of e-books, research papers, scholarly articles, multimedia files, and archival materials organized for easy search and retrieval (Abdrahman, 2021).

Information literacy encompasses the ability to identify information needs, locate relevant resources, evaluate information critically, and apply information effectively (Ajayi et al., 2023; Odede & Zewadde, 2018). Odede and Zewadde (2018) operationalized information literacy through seven dimensions including tool literacy, resource literacy, social-structural literacy, research literacy, publishing literacy, emergent technology literacy, and critical literacy. Digital skills refer to competencies for effectively handling and communicating information through digital media and formats (Udoh et al., 2020). These include critical thinking, creativity, collaboration, communication, information literacy, media literacy, technology literacy, and adaptability (Udoh et al., 2023). Digital skills enable students to access, manage, integrate, analyze, and synthesize

digital information while generating new knowledge and producing digital content (Yo, 2021).

Personal interest represents intrinsic motivation driving engagement with electronic resources. Adeniran and Onuoha (2018) found that students with higher information literacy skills, often fueled by personal interest, demonstrated increased usage of electronic resources. Magaya and Kotoroi (2022) emphasized the importance of personal interest in self-directed learning, highlighting that students exhibiting genuine interest are more likely to develop essential skills in information retrieval and critical thinking.

Empirical Evidence

Ugwulebo and Okuonghae (2021) investigated information literacy skills and utilization of electronic information resources by postgraduate students in Nigeria. Using ex post facto research design with 3,744 postgraduate students from three federal universities, the study revealed significant relationships between students' knowledge of electronic resources, search skills, access to information, information evaluation capability, and their utilization of electronic information resources.

Igbozuruike and Ile (2022) examined knowledge of digital skill and e-library information resource usage among postgraduate students in Rivers State, Nigeria. Using descriptive and correlation designs with 652 postgraduate students, the study revealed that knowledge of digital skill is positively and highly correlated to usage of e-library information resources and timely completion of research papers among postgraduate students.

Adeniran and Onuoha (2018) examined the influence of information literacy skills on postgraduate students' use of electronic resources in private university libraries in South-West Nigeria. Using survey research design with 550 postgraduate students, findings revealed a significant positive correlation between information literacy skills and use of electronic resources ($r = 0.28$, $p < .05$).

Babalola (2019) investigated the influence of ICT skills on the utilization of electronic information resources among undergraduates of Covenant University. Using descriptive survey research design, findings showed that ICT skills significantly influenced the use of electronic books and other digital resources, especially for completing assignments.

Shafiu et al. (2019) examined factors affecting effective utilization of e-library resources among staff and students of Jigawa State College of Education, Gumel. The study found that human factors including user awareness, willingness to use e-library resources, and lack of computer skills significantly affected utilization.

5. Methodology

Research Design

This study adopted a descriptive survey research design. According to McCombes (2019), descriptive designs are appropriate when the research aim is to identify characteristics, frequencies, current trends, and categories, and when little is known about the topic being investigated. The descriptive approach allows for statistical analysis of user characteristics and library use patterns. The study was conducted in South-East Nigeria, one of the six geopolitical zones representing the inland South-Eastern part of the country. South-East comprises five states: Anambra, Abia, Ebonyi, Enugu, and Imo. The zone is predominantly Igbo-speaking and known for its strong emphasis on education, with a high literacy rate compared to other geopolitical zones in Nigeria. The choice of South-East was informed by the people's high regard for education, evident by the

establishment of several universities and heavy investments in children's education.

The population consisted of seventy-four (74) Library and Information Science postgraduate students across four state universities in South-East Nigeria offering postgraduate programs. The distribution included: Abia State University (18 students), Chukwuemeka Odumegwu Ojukwu University, Anambra State (8 students), Enugu State University (8 students), and Imo State University (40 students). The entire population was studied without sampling because the size was manageable, in line with McCombes (2019) who stated that the entire population can be sampled if the population size is small or manageable. The instruments used for data collection were two researcher-structured questionnaires: Information Users' Characteristics Questionnaire (IUCQ) and Effective Utilization of Electronic Library Questionnaire (EUELQ). The IUCQ had two parts: Part A elicited demographic information, while Part B contained 56 items spread across clusters on information literacy, digital skills, research skills, personal interest, gender, and age characteristics. The EUELQ contained 15 items on effective utilization of electronic library. Both instruments were structured on a four-point rating scale: Strongly Agree (SA)=4, Agree (A)=3, Disagree (D)=2, and Strongly Disagree (SD)=1.

The researcher, assisted by two research assistants, administered 74 copies of validated instruments to respondents across four universities. Direct delivery and retrieval method was employed to minimize wastage and achieve high return rate. Data were analyzed using mean, standard deviation, and independent samples t-test. Mean values answered research questions, while standard deviation ascertained respondents' rating consistency. Hypotheses were tested at 0.05 significance level using Statistical Package for Social Sciences (SPSS) version 26.

6. Results and Analysis

Research Question One: Influence of Information Literacy on Electronic Library Utilization

Table 1: Mean Ratings on Information Literacy Characteristics for Effective E-Library Utilization (N=74)

S/N	Item Statements	Mean	SD	Remarks
1	I feel confident in my ability to effectively search for relevant information in electronic library resources	3.45	0.86	Agree
2	I am comfortable evaluating the credibility of information found in electronic library resources	3.12	1.02	Agree
3	I regularly utilize advanced search techniques to refine my search results in electronic library resources	3.34	0.97	Agree
4	I understand the importance of properly attributing sources in my research using electronic library resources	3.45	1.08	Agree
5	I regularly engage in critical thinking when analyzing information obtained from electronic library resources	3.20	0.80	Agree
6	I feel confident in my ability to use different electronic library platforms and interfaces	3.15	0.85	Agree

S/N	Item Statements	Mean	SD	Remarks
7	I am proactive in seeking guidance from librarians when using electronic library resources	3.38	1.04	Agree
8	I prioritize staying up-to-date on new developments in electronic library resources and information literacy skills	3.20	0.92	Agree
	Cluster Mean	**3.28**	**0.94**	**Agree**

Data in Table 1 revealed that respondents agreed that all eight items represent users' information literacy characteristics for effective utilization of electronic library, with mean ratings ranging between 3.12 and 3.45. The standard deviation scores ranging between 0.80 and 1.08 indicated that respondents' opinions were related. The cluster mean of 3.28 indicated that user information literacy is an information user characteristic for effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria.

Research Question Two: Influence of Digital Skills on Electronic Library Utilization

Table 2: Mean Ratings on Digital Skills Characteristics for Effective E-Library Utilization (N=74)

S/N	Item Statements	Mean	SD	Remarks
9	I am familiar with various digital tools that enhance my research and learning experiences in the electronic library	2.75	0.79	Agree
10	I am comfortable using technology to communicate with others for group projects related to library resources	3.33	0.86	Agree
11	I actively seek out opportunities to enhance my digital skills	3.49	1.01	Agree
12	I am proficient in citing sources into my academic work using appropriate referencing styles	3.12	0.98	Agree
13	I am aware of the importance of data privacy when using electronic library resources	3.40	0.80	Agree
14	I am able to troubleshoot technical issues when encountering difficulties with electronic library platforms	2.90	0.77	Agree
15	I actively participate in online training sessions or workshops to improve my digital literacy skills	3.46	0.97	Agree
16	I am familiar with various digital tools that enhance my research work	3.48	0.88	Agree
	Cluster Mean	**3.24**	-	**Agree**

Data in Table 2 revealed that respondents agreed that all eight items represent users' digital skills characteristics for effective utilization of electronic library, with mean ratings ranging between 2.75 and 3.49. The standard

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deviation scores ranging between 0.77 and 1.01 indicated that respondents' opinions were related. The cluster mean of 3.24 indicated that users' digital skills are information user characteristics for effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria.

Research Question Three: Influence of Personal Interest on Electronic Library Utilization

Table 3: Mean Ratings on Personal Interest Characteristics for Effective E-Library Utilization (N=74)

S/N	Item Statements	Mean	SD	Remarks
27	I am interested in using electronic library resources for my academic studies	3.30	0.88	Agree
28	I am willing to learn new technology in order to access electronic library resources	3.43	0.85	Agree
29	I believe that electronic library resources can enhance my research and learning experience	3.40	0.86	Agree
30	I enjoy reading and conducting research on various topics outside of my academic studies	3.23	0.90	Agree
31	I am proactive in seeking out information for my academic work	3.49	0.87	Agree
32	I am confident in my ability to use electronic library databases effectively	3.13	0.82	Agree
33	I have a passion for exploring different genres of literature	3.45	0.94	Agree
34	I am open to exploring different types of media formats (e-books, journals, databases) in the electronic library	3.20	0.86	Agree
35	I am self-motivated to utilize electronic library resources to supplement my learning	3.34	0.99	Agree
36	I believe that electronic library resources can help me stay organized and efficient in my academic pursuits	3.46	0.78	Agree
	Cluster Mean	**3.34**	-	**Agree**

Data in Table 3 revealed that respondents agreed that all ten items represent users' personal interest characteristics for effective utilization of electronic library, with mean ratings ranging between 3.13 and 3.49. The standard deviation scores ranging between 0.78 and 0.99 indicated that respondents' opinions were related. The

cluster mean of 3.34 indicated that users' personal interests are information user characteristics for effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria.

Hypothesis Testing

Table 4: Summary of t-test Results on Significance of User Characteristics

Hypothesis	Variables	N	Mean	t-value	df	p-value	Decision
H1	Information Literacy → E-Library Utilization	74	3.23	12.564	73	.000	Significant
H2	Digital Skills → E-Library Utilization	74	3.18	10.343	73	.000	Significant
H3	Personal Interest → E-Library Utilization	74	3.41	13.204	73	.000	Significant

Data in Table 4 showed that all three user characteristics significantly influenced electronic library utilization among postgraduate students in state universities in South-East Nigeria. The p-values for information literacy (p=.000), digital skills (p=.000), and personal interest (p=.000) were less than 0.05 level of significance. Therefore, all null hypotheses were rejected, confirming that users' information literacy, digital skills, and personal interest are significantly effective for the utilization of electronic library by postgraduate students in state universities in South-East Nigeria.

7. Discussion of Findings

Influence of Information Literacy on Electronic Library Utilization

The finding that information literacy significantly influences electronic library utilization aligns with previous empirical studies. Ugwulebo and Okuonghae (2021) found significant relationships between postgraduate students' knowledge of electronic resources, search skills, access to information, information evaluation capability, and utilization of electronic information resources. Similarly, Adeniran and Onuoha (2018) revealed a significant positive correlation between information literacy skills and use of electronic resources ($r = 0.28$, $p < .05$).

The present finding is also consistent with Bankole et al. (2024) who found that ICT competencies, web competencies, and web search strategies significantly influenced librarians' ability to retrieve information effectively. Ndagi and Madu (2018) further revealed a strong positive correlation between information literacy skills and utilization of electronic resources. These consistent findings underscore the foundational role of information literacy in enabling postgraduate students to navigate digital environments, locate relevant resources, evaluate information credibility, and apply information effectively.

Influence of Digital Skills on Electronic Library Utilization

The finding that digital skills significantly influence electronic library utilization corroborates previous research. Igbozuruike and Ile (2022) revealed that knowledge of digital skill is positively and highly correlated to usage of e-library information resources among postgraduate students. Babalola (2019) similarly found that ICT skills significantly influenced how undergraduates accessed and used electronic books and other digital resources.

These findings align with Salman et al. (2020) who revealed that 32.4% of respondents acknowledged that lack of digital skills impeded their ability to use electronic information resources. Abdullahi and Yusuf (2018) stated that postgraduate students with strong digital skills are better equipped to locate, evaluate, and synthesize information from electronic libraries, resulting in higher academic performance. The consistency of these findings across different educational contexts reinforces the critical importance of digital competence in enabling effective e-library utilization.

Influence of Personal Interest on Electronic Library Utilization

The finding that personal interest significantly influences electronic library utilization supports existing literature. Adeniran and Onuoha (2018) found that students with higher information literacy skills, often fueled by personal interest, demonstrated increased usage of electronic resources. Magaya and Kotoroi (2022) emphasized that personal interest in self-directed learning contexts leads to greater exploration of digital resources and development of essential information retrieval and critical thinking skills.

These findings are consistent with the Technology Acceptance Model (TAM) which suggests that users' perceptions of usefulness and ease of use influence their adoption of technology. Postgraduate students with strong personal interest in their research topics are more likely to perceive electronic libraries as useful tools for achieving their academic goals, thereby increasing their likelihood of engaging with these resources (Davis, 1989).

The convergence of findings across these three dimensions—information literacy, digital skills, and personal interest—suggest a multi-dimensional approach is necessary for understanding and promoting effective e-library utilization among postgraduate students.

8. Conclusion and Recommendations

Conclusion

Based on the findings of this study, it is concluded that users' information literacy, digital skills, and personal interest are significant information user characteristics influencing effective utilization of electronic library by postgraduate students in state universities in South-East Nigeria. The study confirms that postgraduate students who possess strong information literacy demonstrate greater confidence in navigating digital databases and evaluating information credibility. Those with developed digital skills exhibit enhanced ability to access, manage, and synthesize digital information. Students with genuine personal interest in their research topics demonstrate greater persistence and engagement with electronic resources.

The significant statistical relationships confirmed by hypothesis testing ($p<.000$) indicate that interventions targeting these three dimensions could substantially improve e-library utilization among postgraduate students. This multi-dimensional understanding provides a foundation for developing comprehensive strategies to enhance electronic library engagement in Nigerian universities.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. should organize regular workshops, seminars, and training sessions to improve information literacy skills of postgraduate students. These programs should focus on developing competencies in identifying information needs, locating relevant resources, evaluating information credibility, and applying information ethically. Such initiatives should be integrated into postgraduate orientation programs and academic support services.

2. should implement comprehensive digital skills development programs that address both basic computer proficiency and advanced digital competencies. Training should cover navigation of electronic library platforms, use of reference management software, effective search strategies, and troubleshooting technical issues. Collaborations with ICT departments can ensure sustainable skill development opportunities.

3. should incorporate information literacy and digital skills training into postgraduate curricula. Embedding these competencies into coursework, research methodology courses, and thesis supervision will reinforce their importance and provide structured opportunities for skill development. Personal interest can be stimulated through mentorship, research seminars, and exposure to diverse academic resources.

References

Abdrahman, A. M. (2021). Utilization of electronic resources by library users in Kwara State University, Nigeria. *International Journal of Scientific & Engineering Research*, 12(3). https://doi.org/10.14299/ijser.2021.03.04

Abdullahi, I., & Yusuf, A. (2018). Integrating digital skills in teaching and learning: A case study of lecturers' perceptions and experiences. *Journal of Education and Practice*, 9(26), 24-33.

Adeniran, P., & Onuoha, U. (2018). Influence of information literacy skills on postgraduate students' use of electronic resources in private university libraries in South-West, Nigeria. *Communications and Network*, 10(4), 164-179. https://doi.org/10.4236/cn.2018.104014

Agboke, A. L., & Effiong, A. E. (2022). Internet literacy skills and utilization of electronic information resources in federal university libraries by postgraduate students in South-South, Nigeria. *International Journal of Applied Technologies in Library and Information Management*, 8(1), 32-44.

Ajayi, J. L., Haliso, Y., & Unegbu, V. E. (2023). Information literacy skills as a predictor of electronic information resources use by lecturers in select private universities in South-West, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 14(1), 40-53. https://dx.doi.org/10.4314/iijikm.v14i1.3

Babalola, O. (2019). Influence of ICT skills on the utilization of electronic information resources among undergraduates of Covenant University, Ota, Ogun State, South West Nigeria. *Library Philosophy and Practice (e-journal)*, 2239.

Bankole, Q. A., Sulaiman, K. G., Saliu, A., & Mahammuod, S. O. (2024). Determinants of effective research information retrieval among

Nigerian librarians: The roles of ICT competencies, web competencies, and web search strategies. *International Journal of Knowledge Content Development & Technology*, 14(4), 47-64.

Bashorun, M. T., Bashorun, R. B., & Akinbowale, A. T. (2021). Evaluating information literacy competence in the use of electronic resources among medical students in University of Ilorin, Nigeria. *University of Dar es Salaam Library Journal*, 16(1), 131-148.

Buba, A. A., & Lawan, A. Y. (2023). Utilization of electronic information resources and their influence on reading culture of undergraduate students in Federal University Dutse. *International Journal of Knowledge Content Development & Technology*, 13(3), 75-92. https://doi.org/10.5865/IJKCT.2023.13.3.075

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.

Igbozuruike, I. U., & Ile, O. G. (2022). Knowledge of digital skill and e-library information resource usage among post-graduate students. *Irish Journal of Educational Practice*, 5(4).

Iyishu, V. A. (2019). User characteristics and their observance of library regulations in university libraries in Cross River State, Nigeria. *International Research Journal of Educational Technology*, 1(2), 46-61.

Magaya, A. J., & Kotoroi, G. (2024). Exploring factors influencing postgraduate students' utilization of libhub services at Sokoine University of Agriculture Library. *International Journal of Librarianship*, 9(1), 27-44. https://doi.org/10.23974/ijol.2024.vol9.1.370

McCombes, S. (2019). *Descriptive research design: Definition, methods and examples*. Scribbr.

Mommoh, R. I., & Gomina, S. L. (2023). Electronic resources and library services in Nigerian universities. *Library Philosophy and Practice (e-journal)*.

Ndagi, S. S., & Madu, E. C. (2018). Effect of information literacy skills on use of electronic library resources by lecturers in universities in North Central Nigeria. *International Journal of Applied Technologies in Library and Information Management*, 4(3), 13-22.

Obande, B. O., Osakwe, J., Ujakpa, M. M., Iyawa, G., Ikechukwu, A. O., &Amunkete, K. (2020). Awareness, Accessibility and Usability of E-resources: University Students Perspective. IST-Africa 2020 Conference Proceedings Miriam Cunningham and Paul Cunningham, 9.

Odede, I. R., & Zawedde, N. (2018). *Information literacy skills in using electronic information resources*. Library Philosophy and Practice.

Ogunbodede, K. F., Wiche, H. I., & Uchendu, B. O. (2022). Gender differences and use of digital resources in university libraries in Nigeria. *African Journal of Library, Archives and Information Science*, 32(2), 257-266.

Salman, A., Ahmed, A., Raheem, R., & Pelemo, G. (2020). Availability, accessibility, and use of electronic information resources among undergraduate students in Fountain University Library, Osogbo. *Journal of Library and Information Sciences*, 1(10), 100-110.

Shafiu, A., Yakubu, A. M., Yakubu, M., & Nora, N. O. (2019). Assessing the factors affecting effective utilization of e-library resources among staff and students of Jigawa State College of Education Gumel,

Nigeria. *International Journal of Innovative Research and Advanced Studies*, 6(2), 73-79.

Udoh, I. U., Ekpenyong, G. E., & Olowookere, O. (2020). Digital literacy skills of undergraduate students of library and information science on the utilization of electronic information resources in two federal universities in Nigeria. *Library Philosophy and Practice (e-journal)*, 4269.

Ugwulebo, J. E., & Okuonghae, O. (2021). Information literacy skills and utilisation of electronic information resources by postgraduate students in Nigeria. *Library Philosophy and Practice (e-journal)*, 6265.

Ukaegbu, I. E., & Wegwu, C. C. (2019). Digital skills and utilization of electronic information resources by postgraduate students. *Library and Information Science Digest*, 12(1), 45-56.

Yo, N. (2021). Digital mathematical literacy as a component of the life skills of students of modern educational institutions. *The American Journal of Social Science and Education Innovations*, 378-384.