

ASSESSMENTS OF THE LEVEL OF AWARENESS, ACCESS, AND USAGE OF DIGITAL LIBRARY SERVICES AND PLAGIARISM CHECKERS AMONG STAFF AND STUDENTS OF SULE LAMIDO UNIVERSITY, KAFIN HAUSA

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Abstract

Purpose: This research was carried out to assess the current state of awareness, access, and usage of Digital Library Services (DLS) and Plagiarism Checker Software (PCS) among the staff and students of Sule Lamido University, Kafin Hausa (SLUK) Jigawa State Nigeria.

Design/Methodology/Approach: A cross-sectional survey research design was adopted. The target population for this study comprised all registered undergraduate students, postgraduate students, academic staff, and non-teaching staff at SLUK. A well-structured, self-administered questionnaire using the Google Forms was used for the data collection. The Google Form was distributed over a period of four weeks. Furthermore, a stratified random sampling technique was employed in order to ensure that the sample was representative of this diverse population. A total of 286 respondents were collected. The data from Google Forms was exported into a spreadsheet for data cleaning and analysis.

Findings: The findings reveal that the majority of respondents (78.7%) were undergraduate students and moderate (55.2%) proficiency in ICT. The awareness of essential library services was very high, particularly for digital library services (81.8%), reference services (78.3%), and OPAC (76.2%). However, awareness of subscribed academic databases was low for ScienceDirect (46.2%), Research4Life (42.3%), and EBSCOhost (30.4%). Findings further revealed that access to digital technologies was pervasive, with 98.3% smartphone ownership and 93.7% regular internet access in which 58.4% of respondents rated campus internet quality as fair. In terms of Usage patterns. 49.7% of the respondent preferred physical library resources over digital resources (33.6%), with 61.6% of respondents rarely using academic databases. The awareness of plagiarism checker software was moderate (61.5%), but actual usage was very low (42.3%). Remarkably, 85.7% indicated readiness to use PCS if provided.

Implications: Key challenges identified include lack of awareness and limited access to devices. The study further established that ICT proficiency and training would significantly influence the use and awareness of PCS.

Originality/value: Findings from this study highlight the need for improved infrastructure, awareness campaigns of library recourses, and capacity-building initiatives that would improve the effective utilization and access to digital and library resources.

Key Words: Digital Library Services (DLS); Plagiarism Checker Software (PCS); ICT Proficiency; Academic Database Usage; Internet Connectivity.

Paper Type: Empirical Research

1.0 Introduction

More recently, that has been rapid digital transformation of academic libraries globally and this completely, revolutionized how students are able to access and engage with information. Library services such as the

Digital Library Services (DLS), online databases, e-journals, institutional repositories, and e-books, have become indispensable and offered access to knowledge globally. Plagiarism Checkers have also become essential tools for

promoting academic integrity, honesty and improving the quality of scholarly writing, thereby, drastically, reduced the cases of plagiarisms. Sule Lamido University Kafin Hausa (SLUK) was established in 2013, and currently has 6 faculties, 3 schools and 35 academic programmes. As young as the University, digital assets has been acknowledged as a vital tool for its academic development, research output, and reputation. The University aimed to be ICT driven, and ICT has been leveraged as the bedrock shaping its strategic development. However, despite significant investments the University made in digital infrastructure, including several interventions from Tertiary Education Trust Fund (TETFund), National Information Technology Development Agency (NITDA), Nigerian Communications Commission (NCC) and other donor agencies, there is often a gap between provision and utilization. Preliminary observations at SLUK suggest variable and potentially low engagement with subscribed digital library resources and lack of knowledge of use of plagiarism checkers such as Turnitin. This underutilization may stem from: (i) Low awareness of available services and their benefits (ii) Inadequate or difficult access processes (iii) Lack of digital literacy and skills for effective use (iv) Poor

internet connectivity or infrastructural deficits and Insufficient institutional promotion and training. This gap leads to suboptimal research, reliance on limited sources, increased risk of unintentional plagiarism, and diminished academic competitiveness. There is a pressing need for empirical data to diagnose the specific challenges at SLUK. Therefore, this work, aim to investigate and analyze the awareness, access, and usage patterns of Digital Library Services and Plagiarism Checkers among SLUK staff and students. The research work was guided by the following objectives (i) to assess the level of awareness of available Digital Library Services (DLS) and Plagiarism Checker Software (PCS) among SLUK staff and students (ii) to examine the modes and challenges of accessing DLS and PCS (iii) to evaluate the frequency, nature, and purposes of using DLS and PCS (iv) to identify the factors (socio-demographic, academic, technical, institutional) influencing awareness, access, and usage and finally (v) to propose evidence-based recommendations for improving adoption and effective utilization. Findings from this study will provide baseline data for SLUK on a critical aspect of its digital academic environment, thereby, informing the university its strategic plan for library and

ICT services. The findings would also guide the design of targeted user-education and training programs, help optimize resource allocation for maximum impact and eventually, contribute to scholarship on digital literacy in Nigerian tertiary institutions, particularly in emerging universities such as SLUK. The rest of the paper is organized as follows: Section 2.0 provides review of related literature; Section 3.0 provides the research methodology; Results are presented in Section 4.0, while, discussions of the results were presented in Section 5.0 and finally, Section 6.0 concludes the paper.

2.0 Literature Review

Digital Library Services (DLS) and Plagiarism Detection Tools (PDTs) have become increasingly, indispensable in modern day Universities. DLS are essentially, organized collections of digital objects, comprising of text, multimedia, and datasets, which are accessible through electronic media and/or platforms, with functionalities such as search, retrieval, and preservation (Xie and Matusiak, 2016). These services core components include electronic database (e-databases), electronic journals (e-journals), institutional repositories, and digital catalogs. On the other hand, Plagiarism tools or checkers are software systems that enable the compare of

submitted texts against vast databases globally in a view of identifying potential similarities, which serves as deterrents and educational aids for proper citation (Weber-Wulff, 2014).

Research studies globally have indicated high adoption of e-resources, particularly in the developed nations; this becomes particularly attractive due to the emergence of COVID-19 (Oloyede *et al.*, 2022). However, in contrast, there exist utilization gap in the Nigerian context despite institutional subscriptions to these e-resources. Poor internet services, unstable power supply, digital literacy skills gap, and inadequate awareness were among the top barriers in Nigeria tertiary institutions (Omeluzor, Akibu and Akinwoye, 2016; Uwandu, 2022), which becomes acute in most of the public tertiary institutions in Nigeria, where resource constraints are pronounced. Digital skills gap has been widely investigated by researchers in Nigeria. Digital skills and awareness levels of digital technologies among students at Sule Lamido University Kafin Hausa, Jigawa State, Nigeria was also investigated by Garba et al., (2023). A quantitative research approach and convenience sampling method were used and a total of 321 students participated in the study. Results of the study revealed that there was moderate level of digital skills and

awareness of digital technologies among the students of SLUK. This highlights the need for enhanced digital capacity development and training initiatives to the students to. Digital divide is also another major barrier particularly in low resource settings (Adediran *et al.*, 2016; Adediran *et al.*, 2016a; Faruk *et al.*, 2017; Bello *et al.*, 2016). However, so many opportunities exist in addressing these challenges (Oloyede *et al.*, 2022).

Literatures have further shown that effective awareness and promotion strategies are major solutions to bridging these gaps. Research findings have also indicated passive dissemination of information is insufficient with limited targeted campaigns, integration into orientation programs, and collaboration with faculty and students in order to improve usage rates (Akpojotor, 2016). A pragmatic and more proactive session of library services could assist in moving library resource access and usage by students and staff. This could be beyond mere tool demonstration to a more contextualize resources usage. Digital literacy includes the ability for staff and students to locate, analyse, evaluate, and use information ethically and effectively. There is strong correlation between formal

information literacy training and the effective utilization of DLS and PDTs (Imam, Okoro, & Ilori, 2024). In the absence of these basic competencies, students and staff would remain unaware of some of the advanced search techniques, critical evaluation approaches, and the full functionality of plagiarism solution checkers as learning tools. These would certainly limits their academic development.

Awareness of plagiarism and academic integrity are major open areas of research and present a complex picture. Many students globally acknowledge that plagiarism is academic dishonestly, and plagiarism detection tools are found to be one of the punitive policing tools rather than formative instruments for improving writing skills (Bretag and Mahmud, 2016). There is therefore, the need for effective usage of the tools. Based on the foregoing, there is a clear gap in literature on e-resource usage conducted on new-generation universities, especially in Northern Nigeria. Institutions such as Sule Lamido University, Kafin Hausa, operate in complex and unique socio-economic, cultural and infrastructural contexts that may exacerbate known barriers or introduce new ones. This lack of institution-specific data hinders the

development of targeted interventions, justifying the present study to generate localized evidence for effective policy and training program formulation at SLUK.

3.0 Research Methodology

1. Research Design, Population and Sampling

The aim of this research: to assess the current state of awareness, access, and usage of digital library services and plagiarism checkers among the staff and students of SLUK. In order to achieve this goal, a cross-sectional survey research design was adopted due to its widely adoption when estimating the prevalence of specific attitudes, knowledge, and behaviors within a defined population (Baumeister et al. 2026). Even though, this type of design cannot establish cause-and-effect relationships, however, it is still ideal for providing robust information that depicts the study's descriptive and analytical objectives. The target population for this study comprised all registered undergraduate students, postgraduate students, academic staff, and non-teaching staff at Sule Lamido University, Kafin Hausa (SLUK) Jigawa State Nigeria. Furthermore, a stratified random sampling technique was employed in order to ensure that the sample was representative of this diverse population. The sampling process involved two main stages (i) Stratification, where the population

was first divided into distinct, non-overlapping groups, with specific attributes and (ii) Random Selection where participants were then randomly selected from each stratum,. A total of 286 respondents were collected. Table 1 provides the distribution of the sample across the different strata and majority of respondents being undergraduate students, followed by academic staff, non-teaching staff, and postgraduate students, thus, and enhancing the confidence with which the findings can be generalized across the University.

2. Data Collection Instrument

A well-structured, self-administered questionnaire using the Google Forms was used for the data collection. The Google Form was distributed over a period of four weeks. The online link was shared through various University whatsapp platforms and student social media platforms, in order to reach wider audience. The participation in this survey was purely voluntary, and the anonymity of all respondents was guaranteed in compliance with the Nigeria Data Protection Acts 2023. The questionnaire was divided into five main sections to capture the key research questions of the research. The sections are described thus as follows:

- i. **Section A: Demographic Information.** In this section, data on gender, category (student/staff), faculty, programme, level of study, years of association with SLUK, and self-rated ICT proficiency were collected.
- ii. **Section B: Awareness of Library Services and Databases.** In this section, respondents' familiarity with various library services such as SDI, CAS, OPAC and awareness of specific subscribed databases such as ScienceDirect and EBSCOhost were all assessed.
- iii. **Section C: Access and Usage of Digital Library Services.** this section deals the frequency and purpose of using digital library resources, the primary means and quality of internet access, and other specific challenges encountered during access.
- iv. **Section D: Awareness and Usage of Plagiarism Checker Software.** the respondents' knowledge of plagiarism software, the specific tools used, and their method of access were explored and finally;
- v. **Section E: Training and Preferred Support Methods.** gathered data on whether respondents had received any

formal training and their preferred methods for improving awareness and usage of these digital services.

5. Data Analysis

After the data collection, the data from Google Forms was exported into a spreadsheet for data cleaning and analysis. In order to align with the study's objectives, two stage data analysis was conducted, which are (i) **Descriptive Statistics of all variables to provide the frequencies and percentages** and to summarize the demographic profile of the respondents and to provide an overview of the levels of awareness, patterns of access, and usage of DLS and PCS

(ii) **Cross-tabulation Analysis was also** employed to explore the relationships between different variables. SPSS (Statistical Package for the Social Sciences) version 25 was employed for the descriptive and cross tabular analyses.

4.0 Results

The analysis focuses on the core themes of your research: Awareness, Access, and Usage of Digital Library Services (DLS) and Plagiarism Checker Software (PCS). Tables 1-10 provides results and analysis of the data collected.

Table 1: Demographic Profile of Respondents

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	251	87.8%
	Female	33	11.5%
	Not Specified	2	0.7%
Category	Undergraduate	225	78.7%
	Academic Staff	34	11.9%
	Non-Academic Staff	15	5.2%
	Postgraduate	9	3.1%
Faculty/Unit	Computing and IT	108	37.8%
	Education	49	17.1%
	Natural and Applied Sciences	44	15.4%
	Agriculture and Natural Resource Management	35	12.2%
	Social and Management Sciences	25	8.7%
	Humanities	21	7.3%
	Other (Library, VC Office, Registry)	4	1.4%
	Years of Association	Less than 1 Year	66
	1-3 Years	125	43.7%
	4-6 Years	41	14.3%
	6 Years and above	50	17.5%
Self-rated ICT Proficiency	Very Low / Low	48	16.8%
	Moderate	158	55.2%
	High / Very High	79	27.6%

Table 2: Awareness of Digital Library Services and Databases

Service/Database	Response	Frequency (n)	Percentage (%)
Awareness of Library Services			
Selective Dissemination of Information (SDI)	Aware (Rated 1-5)	207	72.4%
Current Awareness Services (CAS)	Aware (Rated 1-5)	214	74.8%
Reference & Information Services	Aware (Rated 1-5)	224	78.3%
OPAC (Online Public Access Catalogue)	Aware (Rated 1-5)	218	76.2%
Digital Library Services (general)	Aware (Rated 1-5)	234	81.8%
Awareness of Subscribed Databases			
ScienceDirect	Aware	132	46.2%

EBSCOhost	Aware	87	30.4%
Research4Life	Aware	121	42.3%
None of the Above	Not aware of any	59	20.6%

Table 3: Access to Technology and the Internet

Indicator	Response	Frequency (n)	Percentage (%)
Smartphone Ownership	Yes/No	281/5	98.3%/1.7%
Regular Internet Access	Yes/No	268/18	93.7%/6.3%
Primary Means of Internet Access (Multiple responses allowed)	Mobile data	264	92.3%
	School Wi-Fi	101	35.3%
	Home/Office Wi-Fi	50	17.5%
	Wi-Fi on campus	49	17.1%
	No access	16	5.6%
Quality of Internet on Campus	Poor	119	41.6%
	Fair	68	23.8%
	Good / Very Good	97	33.9%

Table 4: Usage of Library Services and Databases

Usage Indicator	Response	Frequency (n)	Percentage (%)
Most Used Library Services	Physical collections (books, journals)	142	49.7%
	Digital library resources	96	33.6%
	Reference & Information Services	91	31.8%
	OPAC (Online Public Access Catalogue)	78	27.3%
Frequency of Database Usage	Never / Rarely	176	61.6%
	Occasionally	57	19.9%
	Frequently / Very Frequently	51	17.8%
Primary Purpose of Database Use	Research/Thesis	98	34.3%
	Assignments	88	30.8%
	Personal study	66	23.1%
	Teaching/Lecture preparation	29	10.1%

Table 5: Awareness and Usage of Plagiarism Checker Software (PCS)

Indicator	Response	Frequency (n)	Percentage (%)
Awareness of Plagiarism Software	Yes/No	176/108	61.5%/37.8%
Have You Ever Used Plagiarism Software?	Yes/No	121/163	42.3%/57.0%

Most Commonly Used Software	Grammarly	96	79.3%
(Among users, n=121)	Turnitin	52	43.0%
	EagleScan	27	22.3%
How Did You Access It? (Among users, n=121)	Personal account	46	38.0%
	Through SLUK	45	37.2%
	Through supervisor/colleague	17	14.0%
	External service provider	13	10.7%
Would You Use Officially Provided PCS?	Definitely Yes	245	85.7%
	Not Sure	28	9.8%
	Probably No	12	4.2%

Table 6: Perceived Challenges Affecting Use of Library and Digital Services

Challenge	Frequency (n)	Percentage (%)
Poor internet connectivity	188	65.7%
Lack of awareness	140	49.0%
Limited access devices (computers, etc.)	104	36.4%
Power supply challenges	86	30.1%
Complicated access procedures	77	26.9%

Table 7: Cross-tabulation of Category by Awareness of Plagiarism Software

Category	Aware of Plagiarism Software	Not Aware of Plagiarism Software
Students (UG & PG)	142 (61.2%)	90 (38.8%)
Academic Staff	24 (70.6%)	10 (29.4%)
Non-Academic Staff	9 (60.0%)	6 (40.0%)
Total	175	106

Table 8: Cross-tabulation of ICT Proficiency by Use of Plagiarism Software

Self-rated ICT Proficiency	Have Used Plagiarism Software	Have Not Used Plagiarism Software
Very Low / Low	17 (35.4%)	31 (64.6%)
Moderate	66 (42.0%)	91 (58.0%)
High / Very High	38 (48.1%)	41 (51.9%)
Total	121	163

Table 9: Cross-tabulation of Perceived Internet Quality by Database Usage Frequency

Quality of Internet on Campus	Database Usage (Frequently/V. Frequently)	Database Usage (Occasionally)	Database Usage (Never/Rarely)
Very Poor / Poor	22 (18.6%)	21 (17.8%)	75 (63.6%)
Fair	10 (14.9%)	15 (22.4%)	42 (62.7%)
Good / Very Good	19 (19.8%)	21 (21.9%)	56 (58.3%)
Total	51	57	173

Table 10: Cross-tabulation of Training Received by Awareness of Plagiarism Software

Have you received any training on library or plagiarism tools?	Aware of Plagiarism Software	Not Aware of Plagiarism Software
Yes/No	73 (79.3%)/102 (53.1%)	19 (20.7%)/90 (46.9%)
Total	175	109

5.0 Discussion of Results

A. Demographic Characteristics of Respondents

Table 1 provides the results of demographic distribution of the respondents. The results indicate 87.8% are male participants, while 11.5%, female, few of the respondents representing 0.7% did not specifying gender. This disparity reveals large gender distribution within the University. In terms of institutional categorisation, the undergraduate students constitutes 78.7%, this followed by academic staff with 11.9%, non-academic staff (5.2%), and finally 3.1% were postgraduate students. Majority of the respondent were from the Faculty of Computing and Information Technology

which accounted (37.8%), followed by the Faculty of Education (17.1%), Natural and Applied Sciences (15.4%), Agriculture (12.2%), Social and Management Sciences (8.7%), and Humanities (7.3%). Regarding years of association with the institution, about (43.7%) had been affiliated with the university for 1–3 years, while, 23.1% had less than one year, 14.3% had 4–6 years, and 17.5% had more than six years. Self-rated ICT proficiency levels show that the majority (55.2%) considered themselves to have moderate ICT skills, while 27.6% rated their skills as high and 16.8% reported low proficiency.

B. Awareness of Digital Library Services and Databases

Findings from the results in Table 2 revealed a relatively high level of awareness of core library services among respondents. Digital Library Services in general (81.8%) has the highest, followed by Reference and Information Services (78.3%), OPAC (76.2%), Current Awareness Services (74.8%), and Selective Dissemination of Information (72.4%). These results suggest that the library has achieved reasonable success in promoting its core services among users. However, awareness of specific subscribed academic databases appears significantly lower. Only 46.2% of respondents were aware of ScienceDirect, 42.3% knew about Research4Life, and 30.4% were aware of EBSCOhost. Notably, 20.6% of respondents reported not being aware of any of the listed databases. This disparity indicates that while general library services are widely recognized, awareness of specialized academic databases remains limited.

C. Access to Technology and Internet Connectivity

Findings from the analysis of the results in Table 3 indicate near-universal smartphone ownership, with 98.3% of respondents owning smartphones. This highlights the

widespread penetration of mobile technology among university community members and underscores the potential for mobile-based access to digital library resources. Similarly, 93.7% of respondents reported having regular internet access, suggesting that connectivity is generally available. However, the primary means of internet access is overwhelmingly mobile data (92.3%), while school Wi-Fi is used by only 35.3%, and home or office Wi-Fi by 17.5%. Despite relatively high access to the internet, perceptions of internet quality on campus are less favorable. About 41.6% rated campus internet as poor or very poor, while 33.9% considered it good or very good, and 23.8% rated it as fair. These findings indicate that network quality remains a significant concern, which could negatively impact the use of digital resources and online databases.

D. Usage of Library Services and Databases

The results in Table 4 reveal that physical library collections remain the most frequently used resources, with 49.7% of respondents reporting use of printed books and journals. This is followed by digital library resources (33.6%), reference and information services (31.8%), and OPAC usage (27.3%). Database usage patterns show relatively low levels of frequent engagement. A majority of respondents (61.6%) reported never or rarely

using academic databases, while 19.9% use them occasionally, and only 17.8% use them frequently or very frequently. This suggests that despite the availability of digital databases, their actual utilization remains limited. Among those who use databases, the primary purpose is research or thesis work (34.3%), followed by assignments (30.8%), personal study (23.1%), and teaching preparation (10.1%). These findings confirm that databases are primarily used for academic and research-related activities.

E Awareness and Use of Plagiarism Checker Software (Table 5)

Table 5 shows the results of Awareness of plagiarism detection software among respondents. Findings indicate moderately high, with 61.5% reporting awareness, while 37.8% were unaware of such tools. However, actual usage levels are significantly lower, with only 42.3% indicating that they had used plagiarism detection software, while 57.0% had never used it. This gap between awareness and actual usage suggests barriers such as lack of access, limited training, or institutional restrictions. Among those who have used plagiarism detection software, Grammarly is the most commonly used tool (79.3%), followed by Turnitin (43.0%) and EagleScan (22.3%). The popularity of

Grammarly likely reflects its accessibility and integration with writing tools. In terms of access, 38.0% of users relied on personal accounts, 37.2% accessed the software through the university, 14.0% through supervisors or colleagues, and 10.7% via external service providers. Importantly, a large majority of respondents (85.7%) indicated that they would be willing to use plagiarism detection software if it were officially provided by the university, suggesting strong potential demand for institutional access.

F. Perceived Challenges Affecting Use of Digital Library Services

The study identifies several challenges affecting the use of library and digital services. The most significant challenge reported as reported in Table 6 was poor internet connectivity (65.7%), confirming the earlier findings regarding dissatisfaction with campus internet quality. Other notable barriers include lack of awareness (49.0%), limited access to computing devices (36.4%), power supply challenges (30.1%), and complicated access procedures (26.9%). These findings suggest that both technical infrastructure issues and knowledge gaps are key factors limiting the effective use of digital library resources.

G. Awareness of Plagiarism Software by User Category

The cross-tabulation results in Table 7 shows that academic staff have the highest awareness of plagiarism detection software (70.6%), compared to students (61.2%) and non-academic staff (60.0%). Although students represent the majority of respondents, their awareness levels are slightly lower than those of academic staff. This pattern is expected because academic staff are more directly involved in supervising research and enforcing academic integrity policies.

H. ICT Proficiency and Use of Plagiarism Software

The results in Table 8 indicate a positive relationship between ICT proficiency and use of plagiarism detection software. Among respondents with high or very high ICT proficiency, 48.1% reported having used plagiarism software, compared to 42.0% among those with moderate proficiency, and 35.4% among those with low proficiency. This trend suggests that digital literacy plays an important role in the adoption of research support tools, highlighting the importance of ICT training programs within the university.

I. Internet Quality and Database Usage, Training and Awareness of Plagiarism Software

The analysis in Table 9 shows that database usage tends to increase slightly as perceived internet quality improves. Among respondents who rated campus internet as good or very good, 19.8% reported frequent database usage, compared with 18.6% among those who rated it poor and 14.9% among those who rated it fair. Although the differences are relatively small, the results suggest that better internet quality may contribute to increased usage of academic databases. In table 10, training appears to have a strong influence on awareness of plagiarism detection tools. Among respondents who had received training, 79.3% were aware of plagiarism software, compared to only 53.1% among those who had not received training. This finding highlights the critical role of capacity-building initiatives, workshops, and user training programs in improving awareness and adoption of research tools within the university.

6.0 Conclusion

The results indicate that while awareness of general library services is relatively high, actual usage of digital databases and research tools remains limited. Key barriers include poor internet connectivity, insufficient

awareness of specialized databases, and limited ICT proficiency among some users. The strong willingness of respondents to use institutionally provided plagiarism detection software suggests an opportunity for the university to strengthen research integrity infrastructure and digital library services through improved training, better internet connectivity, and enhanced access to academic databases.

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References

- Adediran, Y. A., Opadiji, J. F., Faruk, N., & Bello, O. W. (2016). On issues and challenges of rural telecommunications access in Nigeria. *African Journal of Education, Science and Technology*, 3(2), 16–26. <http://coou.edu.ng/ajest/>
- Adediran, Y. A., Opadiji, J. F., Faruk, N., & Bello, O. W. (2016). On issues and challenges of rural telecommunications access in Nigeria. *African Journal of Research in Mathematics, Science and Technology Education*, 3(2), 16–26.
- Akpojotor, L. O. (2016). Awareness and usage of electronic information resources among postgraduate students of library and information science in Southern Nigeria. *Library Philosophy and Practice (e-journal)*, 1408, 1–23.
- Baumeister, S.-E., Kocher, T., Papapanou, P. N., Holtfreter, B., & Demmer, R. T. (2026). Cross-sectional studies: Strengths, limitations, and methodological considerations. *Journal of Periodontal Research*. Advance online publication.
- Bello, O. W., Opadiji, J. F., Faruk, N., & Adediran, Y. A. (2016). Opportunities for universal telecommunication access in rural communities: A case study of 15 rural villages in Nigeria's Kwara State. *The African Journal of Information and Communication*, (17), 139–163. <http://wiredspace.wits.ac.za/handle/10539/21625>
- Bretag, T., & Mahmud, S. (2016). A conceptual framework for implementing exemplary academic integrity policy in Australian higher education. In T. Bretag (Ed.), *Handbook of Academic Integrity* (pp. 1–22). Springer.

- Faruk, N., Bello, O. W., Opadiji, J. F., & Adeniran, Y. A. (2017). Socio-economic challenges of rural telecommunication access schemes in Nigeria. *The Information Technologist*, 14(1), 193–216. <https://www.ajol.info/index.php/ict/article/view/159947>
- Garba, S., Faruk, N., Alozie, E., Olagunju, H., Baba, B. A., & Olayinka, Y. (2023). Digital skills and awareness of digital technologies among students at Sule Lamido University Kafin Hausa. *Sule Lamido University Journal of Science & Technology*, 7(2), 118–128. <https://doi.org/10.56471/slujst.v7i.480>
- Imam, A., Okoro, O. J., & Ilori, M. E. (2024). Information literacy skills and use of electronic resources by undergraduates in selected public university libraries in Lagos State, Nigeria. *Gateway Information Journal*, 25(1), 37–55.
- Oloyede, A. A., Faruk, N., & Grace, D. (2022). A techno-economic model for future deployment of fixed broadband services to stimulate development across rural Africa. *International Journal of Mobile Communications*. <https://doi.org/10.1504/IJMC.2022.10040750>
- Oloyede, A. A., Faruk, N., & Raji, W. O. (2022). COVID-19 lockdown and remote attendance teaching in developing countries: A review of some online pedagogical resources. *African Journal of Science, Technology, Innovation and Development*, 14(3), 678–696.
- Oméluzor, S. U., Akibu, A. A., & Akinwoye, O. A. (2016). Students' perception, use and challenges of electronic information resources in Federal University of Petroleum Resources Effurun Library, Nigeria. *Library Philosophy and Practice*.
- Uwandu, L. I. (2022). Use of electronic information resources by postgraduate students of faculty of education in Imo State University, Owerri Library. *Library Philosophy and Practice*, 1(1), 1–16.
- Weber-Wulff, D. (2014). *False feathers: A perspective on academic plagiarism*. Springer.
- Xie, I., & Matusiak, K. K. (2016). *Discover digital libraries: Theory and practice*. Elsevier.