



DIGITAL LITERACY, ONLINE DATABASES, AND CONTINUOUS PROFESSIONAL DEVELOPMENT IN THE RESEARCH ACTIVITIES OF ACADEMIC LIBRARIANS IN KADUNA STATE UNIVERSITY LIBRARY

Haruna Tinau Ahmed

Kaduna State University Library, Kaduna State, Nigeria

harunatahmad@gmail.com

Lillian Zenom Elisha

Kaduna State University Library, Kaduna State, Nigeria

lilianelisha@gmail.com

Lami Gillian Daniel

Kaduna State University Library, Kaduna State, Nigeria

Lami.daniel@kasu.edu.ng

Abstract

Academic librarians are increasingly recognized as active contributors to scholarly research rather than passive custodians of information resources. In the digital age, librarians' research engagement is shaped by their digital literacy skills, access to online databases, and participation in continuous professional development (CPD). This paper presents an opinion-based, human-centered analysis of how these factors influence the research activities of academic librarians in Kaduna State University Library. Drawing on professional experience, contextual realities, and existing literature, the paper argues that librarians' research productivity is closely tied to their ability to navigate digital tools, exploit electronic scholarly resources, and sustain lifelong professional learning. The paper further contends that although librarians are central to the research enterprise of universities, their own research potential is often constrained by limited institutional support, infrastructural challenges, and uneven access to CPD opportunities. The study concludes that deliberate investment in digital training, consistent access to online databases,

and institutionalized CPD frameworks is essential for strengthening librarians' research engagement and scholarly visibility in Nigerian universities.

Keywords: *Digital Literacy, Online Databases, Continuous Professional Development, Academic Librarians, Research Activities, Nigerian University Libraries*

Introduction

Academic libraries play a central role in supporting teaching, learning, and research in universities, serving as structured environments where scholarly information is acquired, organized, and disseminated. Within this system, academic librarians function not only as custodians of information resources but also as facilitators of research and contributors to scholarly knowledge. In recent decades, the global shift toward digital scholarship has significantly transformed library operations, research practices, and professional expectations of academic librarians (Tenopir & King, 2020). As a result, librarians are increasingly required to engage actively in research activities alongside their traditional service responsibilities.

Academic libraries remain foundational to teaching, learning, and research in universities, serving as organized spaces where knowledge is acquired, preserved, and disseminated. Within this environment, academic librarians play a pivotal role in supporting students and faculty by providing access to scholarly resources and guiding research processes (IFLA, 2018). However, contemporary expectations extend beyond support functions, as librarians are increasingly expected to engage directly in research and contribute to scholarly discourse through publications and conference presentations (Tenopir & King, 2020). In Nigeria, the emphasis on research productivity as a criterion for promotion and institutional ranking has heightened expectations for academic librarians to publish scholarly works. Despite this, many librarians face difficulties sustaining active research profiles due to structural and professional challenges, particularly in state-owned universities where funding and infrastructure are often limited (Oladokun & Aina, 2020). These challenges raise important questions about the conditions necessary for meaningful librarian research engagement.

The rapid digitization of scholarly communication has further transformed the research landscape. Research activities now depend heavily on electronic databases, digital tools, and online platforms for collaboration and dissemination (Raju, 2017). Consequently, digital literacy has emerged as a core competency for academic librarians, shaping their ability to access, evaluate, and produce scholarly knowledge. Without adequate digital skills, librarians may struggle to participate fully in research activities, regardless of their academic qualifications. Access to online databases also plays a critical role in shaping research engagement. Databases provide the intellectual foundation for research by offering access to peer-reviewed literature, citation tools, and research metrics. However, disparities in access and skills often limit their effective use in Nigerian university libraries (Ezeani & Igwe, 2021). This situation underscores the importance of continuous professional development as a mechanism for bridging skill gaps and adapting to evolving research technologies.

The emergence of digital technologies has fundamentally altered how research is conducted, accessed, and disseminated. Scholarly communication now relies heavily on electronic platforms, online databases, digital repositories, and research management tools. Consequently, digital literacy has become a critical competence for academic librarians, influencing their ability to locate, evaluate, analyze, and utilize information effectively for research purposes (Raju, 2017). Digital literacy extends beyond basic computer skills to include advanced capabilities such as database searching, citation management, data analysis, plagiarism detection, and engagement with online publishing platforms. Librarians who possess these skills are better positioned to undertake rigorous research and contribute meaningfully to academic discourse.

Access to online databases further strengthens librarians' research capacity by providing timely and authoritative scholarly resources. Subscription-based databases, open-access journals, and institutional repositories serve as essential sources of peer-reviewed literature, research data, and citation tools. These resources enable academic librarians to conduct comprehensive literature reviews, identify research gaps, and situate their studies within existing knowledge frameworks (IFLA, 2018). However, effective utilization of online databases depends not only on availability but also on librarians' ability to navigate complex search interfaces and apply advanced retrieval strategies. In contexts where access is limited or skills are inadequate, research productivity is often negatively affected.

Continuous professional development (CPD) has therefore emerged as a vital mechanism for sustaining librarians' research competence in a rapidly evolving information environment. CPD encompasses formal and informal learning opportunities such as workshops, conferences, seminars, online courses, and professional networking activities aimed at updating knowledge and skills. Through CPD, academic librarians can enhance their digital literacy, adapt to emerging research tools, and remain current with scholarly standards and methodologies (Ezeani & Igwe, 2021). Research has shown that librarians who participate consistently in professional development activities demonstrate higher levels of research engagement and scholarly output.

In Nigeria, academic librarians are increasingly expected to publish research findings as part of career advancement, institutional accreditation, and global visibility efforts. Despite this expectation, several challenges continue to constrain librarians' research activities. These include limited access to relevant online databases, inadequate digital infrastructure, uneven digital skills, heavy workloads, and insufficient institutional support for continuous professional development (Oladokun & Aina, 2020). In many university libraries, CPD opportunities are irregular and often dependent on personal initiative rather than structured institutional policies, limiting their impact on sustained research productivity.

The situation is particularly evident in state-owned universities, where funding and infrastructural constraints are more pronounced. Academic librarians in such institutions often balance extensive service responsibilities with expectations to conduct and publish research, creating tension between professional duties and scholarly engagement. Without adequate digital literacy skills, reliable access to online databases, and structured CPD frameworks, librarians may struggle to meet research expectations, leading to low publication output and reduced scholarly visibility.

Against this backdrop, examining the relationship between digital literacy, online databases, and continuous professional development in the research activities of academic librarians becomes both timely and necessary. Understanding how these factors interact provides insight into the conditions required to strengthen librarians' research engagement and professional effectiveness. This study is therefore situated within the broader discourse on research capacity building in academic libraries, with a focus on how strategic investment in skills development,

digital resources, and professional learning can enhance the research contributions of academic librarians in Nigerian universities.

Research Activities of Academic Librarians

Research activities among academic librarians encompass a broad range of scholarly practices, including empirical studies, conceptual analyses, case studies, and reflective professional writing. These activities contribute to knowledge production in library and information science and support evidence-based library practice (Tenopir & King, 2020). Librarians' research also strengthens institutional research output and enhances the professional status of the library within the university. In the Nigerian context, librarians' engagement in research is often shaped by institutional culture and expectations. Where libraries encourage research through mentorship, incentives, and recognition, librarians are more likely to view research as integral to their professional identity (Oladokun & Aina, 2020). Conversely, in environments where research is treated as secondary to routine service delivery, librarians may disengage from scholarly activities. Kaduna State University Library, librarians are expected to publish for career advancement, yet many face heavy workloads and limited research support. This tension between expectation and reality reflects broader structural challenges within Nigerian academic libraries and highlights the need for supportive mechanisms that make research engagement attainable (Ezeani & Igwe, 2021).

Digital Literacy and Librarians' Research Engagement

Digital literacy is a foundational requirement for effective research in contemporary academic environments. It involves the ability to locate, evaluate, analyze, create, and communicate information using digital technologies (Raju, 2017). For academic librarians, digital literacy includes advanced competencies such as database searching, reference management, plagiarism detection, and scholarly communication tools. Librarians with strong digital literacy skills are better equipped to conduct systematic literature reviews, identify research gaps, and prepare manuscripts for publication. Studies have shown that digital competence significantly influences research productivity and confidence among academic librarians (Tenopir & King, 2020). In Kaduna State University Library, librarians who are digitally proficient tend to participate more actively in research and professional discourse. Conversely, limited digital literacy

can hinder research engagement by creating inefficiencies and reducing confidence. Librarians who struggle with digital tools may avoid research activities altogether, reinforcing a cycle of disengagement (Raju, 2017). This reality underscores the importance of structured digital skills training as part of librarians' professional development.

Role of Online Databases in Librarians' Research Activities

Online databases are central to scholarly research, providing access to current and authoritative literature across disciplines. For academic librarians, these databases support both professional practice and personal research endeavors (IFLA, 2018). Access to databases such as Scopus, Web of Science, and discipline-specific platforms enhances the quality and relevance of research outputs. Kaduna State University Library, access to online databases has improved through national and consortium-based initiatives. However, challenges such as limited subscription coverage and unstable internet connectivity persist, affecting consistent use (Ezeani & Igwe, 2021). These limitations often constrain librarians' ability to conduct comprehensive literature reviews. Effective database use also depends on skill. Librarians must understand advanced search strategies, indexing systems, and citation tracking tools to maximize research outcomes. When these skills are developed, online databases become powerful enablers of scholarly productivity (Tenopir & King, 2020).

Continuous Professional Development and Research Capacity

Continuous professional development is essential for sustaining librarians' research competence in a rapidly changing information environment. CPD enables librarians to update their digital skills, learn new research methodologies, and engage with evolving scholarly standards (IFLA, 2018). Through workshops, conferences, and online courses, librarians gain exposure to best practices and emerging trends. In Nigerian university libraries, CPD opportunities are often uneven and dependent on personal initiative or external funding (Oladokun & Aina, 2020). At Kaduna State University Library, while CPD activities exist, they are not always systematically aligned with research needs. This limits their potential impact on research productivity. Institutionalizing CPD policies can transform librarians' research engagement by making professional learning continuous and purposeful. Research indicates that librarians who participate regularly in CPD demonstrate higher research output and professional confidence (Ezeani & Igwe, 2021).

Interrelationship between Digital Literacy, Databases, and CPD

Digital literacy, access to online databases, and continuous professional development are mutually reinforcing elements in librarians' research engagement. CPD enhances digital literacy, which in turn enables effective use of databases, leading to improved research outcomes (Raju, 2017). This synergy highlights the need for integrated strategies rather than isolated interventions. In Kaduna State University Library, fragmented approaches—such as providing databases without training limit effectiveness. A holistic framework that combines access, skills development, and ongoing learning is more likely to yield sustainable research engagement (IFLA, 2018).

Challenges Affecting Librarians' Research Engagement

Despite growing recognition of librarians as researchers, several challenges persist. These include inadequate funding, limited infrastructure, heavy workloads, and insufficient institutional recognition of librarians' scholarly roles (Oladokun & Aina, 2020). Time constraints are particularly significant, as routine service demands often leave little room for research. Digital skill gaps among librarians further exacerbates these challenges. Without inclusive and supportive training programs, less digitally confident librarians may feel excluded from research opportunities (Ezeani & Igwe, 2021).

Conclusion

This paper has examined how digital literacy, online databases, and continuous professional development shape the research activities of academic librarians in Kaduna State University Library. It argues that librarians' research engagement is a product of skills, access, and institutional support rather than individual effort alone. Strengthening these areas will enhance librarians' scholarly contributions and reinforce the library's role within the university's research mission.

Way Forward

To enhance librarians' research engagement, the following are recommended:

1. Institutionalized digital literacy training for librarians.
2. Sustained investment in online databases and open-access resources.
3. Structured and funded CPD policies aligned with research goals.
4. Mentorship and collaborative research initiatives within libraries.
5. Workload adjustments to allow dedicated research time.

References

- Aina, L. O. (2019). *Library and Information Science in the Digital Age*. Ibadan: Stirling-Horden Publishers. IFLA. (2018). *Global vision for professional development in libraries*. International Federation of Library Associations and Institutions.
- Ezeani, C. N., & Igwe, K. N. (2021). Professional development and research productivity of academic librarians in Nigeria. *Library Philosophy and Practice*, 1–15.
- IFLA. (2018). *Global vision for professional development in libraries*. International Federation of Library Associations and Institutions.
- Igbinovia, M. O. (2020). Emerging Trends in Academic Librarianship in Nigeria. *Nigerian Libraries Journal*, 54(2), 45–57.
- Oladokun, S. O., & Aina, L. O. (2020). Research engagement of academic librarians in Nigerian universities: Challenges and prospects. *Nigerian Libraries*, 53(2), 45–60.
- Oyedum, G. U. (2018). *Professional Development and Research Productivity of Librarians*. Library Philosophy and Practice.
- Raju, R. (2017). The role of digital literacy in academic library research support services. *Journal of Academic Librarianship*, 43*(6), 495–502.
- Tenopir, C., & King, D. W. (2020). Scholarly communication and the role of academic librarians in research productivity. *College & Research Libraries*, 81(3), 354–372.
- UNESCO. (2021). *Digital Literacy for Lifelong Learning*. Paris: UNESCO Publishing. University Librarians Forum (2022). *Report on Continuous Professional Development among Nigerian Librarians*