



Thomas Adewumi University

Journal of Innovation, Science and Technology (TAU-JIST)

ISSN: 3043-503X



RESEARCH ARTICLE

SOURCING OPEN ACCESS ELECTRONIC DATABASES FOR SCHOLARLY USE BY LECTURERS IN NIGERIAN UNIVERSITIES

Sawyerr-George, Oyinkepreye Evelyn & Ogunbodede, Kolawole Francis

Bayelsa State Polytechnic, Aleibiri, Ekeremor, Bayelsa State

University of Africa, Toru-Orua, Bayelsa State, Nigeria

*Corresponding Author E-mail: kolawoleogunbodede@yahoo.com

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ARTICLE DETAILS

Article History:

Received 02 July 2024

Accepted 05 October 2024

Available online 10 December 2024

ABSTRACT

Some Nigerian female writers have devoted much time to fictionalising patriarchal society in which men

This study examines the utilization of open access electronic databases by faculty members and librarians at the University of Africa, Bayelsa State, Nigeria. Using a descriptive survey design, data were collected from 50 respondents (40 lecturers and 10 librarians) through a structured questionnaire, achieving an 85% response rate. The findings reveal a high level of usage of open access databases for scholarly research, with faculty members identifying significant benefits, including enhanced access to academic resources, increased research visibility, and support for teaching activities. However, challenges such as inconsistent power supply, poor internet connectivity, and limited digital skills were identified as barriers to effective use. In addition, this study highlights various free electronic databases available for scholarly use, such as the National Virtual Library of Nigeria (NVLN), Project Gutenberg, and PubMed Central, emphasizing their importance in providing access to educational materials. The effectiveness of subscription-based versus open-access databases is discussed, noting that while subscription databases offer curated, high-quality content, they often face underutilization due to awareness and training gaps. Conversely, open-access databases democratize access to information but require critical evaluation of their content quality. To enhance research capabilities in Nigerian universities, a multifaceted approach is recommended, focusing on awareness and training, infrastructure improvement, collaboration among institutions, and the establishment of institutional repositories. By addressing these areas, Nigerian universities can effectively integrate open-access databases into their frameworks, promoting academic growth and innovation.

KEYWORDS

Open Access Electronic Databases, Scholarly Use, Lecturers, Nigerian Universities

Introduction

University libraries play a crucial role in supporting research, teaching, and learning activities by providing access to a wide range of resources. Traditionally, information resources were primarily available in print, making access time-consuming and often expensive. However, the advent of electronic databases has revolutionized access to scholarly information,

enabling easier and more efficient retrieval of academic materials (Hadi & Auwalu, 2020; Ajegbomogun & Fagbola, 2015). These databases offer academic journals, books, and primary sources in electronic formats, allowing researchers to access vast collections remotely and with greater convenience.

Quick Response Code



Access this article online

Website:

<https://journals.tau.edu.ng/index.php/tau-jist>
DOI: <https://doi.org/10.5281/zenodo.15003030>

Electronic databases are structured collections of digital information often subscribed to by academic institutions that provide access to comprehensive, peer-reviewed content across various disciplines. Nigerian universities commonly use databases such as JSTOR, Scopus, and ProQuest, among others. However, subscription costs for these resources have risen significantly, while library budgets have not kept pace, creating barriers to access for many researchers (Emmasiegbu & Anaehobi, 2021). This challenge is particularly pronounced in developing countries, where limited funding exacerbates the difficulty of accessing relevant scholarly materials.

One solution to this issue is the adoption of open-access electronic databases, which provide free access to scholarly content. Open access initiatives, such as the Directory of Open Access Journals (DOAJ) and OpenDOAR, offer valuable alternatives to subscription-based databases, allowing researchers to access quality academic resources without financial barriers (Ukwoma & Onyebinama, 2020). By embracing open access, Nigerian universities can alleviate some of the financial burdens associated with electronic database subscriptions while supporting the dissemination of scholarly knowledge. Furthermore, open access contributes to a more inclusive academic environment, enabling researchers in resource-limited settings to participate more fully in global academic discourse (Gutam, 2023; Greussing et al., 2020).

Collaboration between universities, funding agencies, and publishers is critical in advancing open access initiatives. Collective efforts can establish a more sustainable and equitable system of scholarly communication, free from financial constraints on information access. This study, therefore, examines the utilization of open access electronic databases, their benefits, and the challenges lecturers faced in the use of open access electronic databases among lecturers and librarians in the University of Africa, Bayelsa State.

Statement of the Problem

Access to high-quality scholarly resources is crucial for research, teaching, and learning in universities. However, many Nigerian university libraries face significant challenges in providing access to these resources due to the rising subscription costs of electronic databases. These databases, essential for lecturers and researchers to stay updated in their fields and produce relevant research, have become increasingly expensive. Simultaneously, library budgets have not kept pace with these rising costs, creating a financial barrier that affects the quality of research output in Nigerian universities. The limited access to electronic databases hinders lecturers and researchers from obtaining the most recent and relevant information, which impairs their ability to engage with global research developments. This not only impacts academic productivity but also weakens collaboration within the global academic community, potentially affecting the reputation of Nigerian universities. Open access resources present a viable solution by providing free access to scholarly literature. However, the utilization of these resources among Nigerian lecturers may remain low. This study aims to examine the utilization of open access electronic databases, their benefits, and the challenges faced by lecturers and librarians at the University of Africa, Bayelsa State. Understanding these issues is essential for improving access to scholarly resources and strengthening the research capabilities of Nigerian universities.

Research Questions

The following questions guided the study:

1. What is the level of utilization of open access electronic databases among lecturers?
2. What are the benefits of the use of open access electronic databases among lecturers?
3. What are the challenges lecturers faced in the utilization of open access electronic databases?

Literature Review

The section is centered on three main ideas: level of utilization of open access electronic databases, benefits in the utilization of the use of open access electronic databases, and the challenges in the utilization of open access electronic databases.

Level of Utilization of Open Access Electronic Databases

In a study conducted by Azubuike et al. (2021) on faculty of education lecturers in federal universities in the South East, Nigeria, the researchers found that these lecturers are aware of and make use of the electronic databases mentioned in the study for their scholarly research. In a similar vein, Ivwighrehweta & Saadatu (2022) examined the usage of open access electronic academic databases by lecturers and postgraduate students at Western Delta University in Oghara, Delta State, Nigeria, and found that both lecturers and postgraduate students had a high level of utilization for research. In a related study, Okwu et al. (2023) looked at how faculty members at state universities in Bayelsa and Rivers States felt about using open educational resources. The results showed that faculty use and have favourable opinions on OER. In summary, the reviewed literature consistently shows that faculty members in Nigerian universities actively utilize these resources for scholarly research and academic purposes.

Benefits in the Utilization of Open Access Electronic Databases

The use of open access publications and the research productivity of teachers at polytechnics in south-south Nigeria were investigated by Akpojotor & Ekuerehare (2024). Lecturers' productivity has several positive effects, such as the following: improving students' reading habits, bridging knowledge gaps, raising the academic standard of institutions, creating new knowledge, providing research materials, publishing research papers in open access databases, and imparting knowledge to both students and researchers. Amponsah et al. (2021) looked at the relationship between faculty members' utilization of open access electronic materials and their research output in Ghana. Research productivity among Dartum University professors is significantly impacted by their utilization of open access electronic resources, according to the results. The attitude of librarians on their involvement in improving research via the use of open access databases was also explored by Emezie et al. (2023). Librarians, according to the results of the poll, should work with faculty to build institutional repositories and promote open access databases on campus. In conclusion, the literature evaluation highlights the beneficial impact of electronic resources and open access publications on research output in academic institutions. There is a clear correlation between librarians' efforts to raise awareness and encourage the establishment of open access repositories and the enhanced access to information and research materials enjoyed by lecturers and faculty members.

Challenges in the Utilization of Open Access Electronic Databases

The difficulties that college students in Taraba State, Nigeria, have while trying to get access to and make use of electronic information resources were studied by Mamman and Abubakar (2022). The results show that the institutions surveyed had a lot of problems with EIR access and use due to things like inadequate computer terminals, slow internet connections, and a lack of ICT expertise. Additionally, Emmasiegbu & Sebastian (2021) investigated the difficulties encountered by lecturers when using electronic databases at university libraries held by the Nigerian government in the state of Anambra. Slow internet access and a lack of user education and assistance on database usage are the top most problems. There is evidence that other emerging countries face similar difficulties. Advocates for open access have arisen among Cameroon's librarians, who are working to educate academics on the merits of the practice (Emezie et al., 2023). However, despite these efforts, many academics still struggle with limited access to reliable internet services and inadequate training on how to navigate open-access databases effectively. In Brazil, initiatives like Bioline have successfully increased visibility for journals from low-income countries by making articles freely available online. However, even with such successes, researchers still face hurdles such as inconsistent internet access and a lack of familiarity with digital tools necessary for effective research (Melo, 2022).

Free Electronic Databases for Scholarly Use

There are several free electronic databases available for scholarly use. Here are some examples:

- **National Virtual Library of Nigeria (NVLN):** The NVLN, established by the National Library of Nigeria, is a digital platform providing access to educational resources such as books, journals, and research papers. It serves students, researchers, and educators, offering materials that support education and research. NVLN also acts as a repository for Nigeria's cultural and historical resources. By providing online access, it promotes education, research, and cultural knowledge, aligning with global efforts to make library resources more digitally accessible. <https://virtuall.nln.gov.ng/>
- **Project Gutenberg:** Established in 1971 by Michael Hart, Project Gutenberg is one of the oldest digital libraries, offering over 70,000 eBooks that are in the public domain. These books cover various genres such as fiction, non-fiction, and classics. Project Gutenberg provides free access, allowing users to read, download, and share books legally. The platform is an excellent resource for readers worldwide. <https://www.gutenberg.org/>
- **ManyBooks:** Founded in 2004, ManyBooks is an online platform with over 50,000 free eBooks available in a variety of genres. It features public domain books and those under Creative Commons licenses. Users can download books without creating an account, although registration allows additional features such as bookshelves and community participation. It is an excellent resource for readers seeking free, legal content. <https://manybooks.net/>
- **PDFDRIVE:** PDFDRIVE is a free platform offering an extensive collection of PDFs covering topics from science and technology to fiction. Users can search by keyword, author, or title and download

materials without registration. It is a widely accessible platform for acquiring free reading materials. <https://www.pdfdrive.com/>

- **Library Genesis (LibGen):** Launched in 2008, Library Genesis provides free access to millions of books, articles, and research materials. It is a popular platform for academic resources, although its distribution of copyrighted materials has sparked legal controversy. Despite this, LibGen remains a significant resource for researchers worldwide. <https://libgen.li/>
- **Bookboon:** Founded in Denmark, Bookboon offers free textbooks and business books, generating revenue through advertising and premium services. Targeted primarily at university students and professionals, its catalogue covers subjects such as business, engineering, IT, and language learning. Bookboon provides a wide range of educational resources for skill development. <https://bookboon.com/>
- **Directory of Open Access Journals (DOAJ):** DOAJ is a directory launched in 2003, indexing peer-reviewed open access journals across various disciplines. With over 16,000 journals included, DOAJ promotes open access and best practices in academic publishing, ensuring high-quality resources for scholars, researchers, and the public. <https://doaj.org/>
- **PubMed Central (PMC):** Managed by the National Center for Biotechnology Information (NCBI), PubMed Central is a free repository for biomedical and life sciences articles. It offers over 6 million full-text articles from scholarly journals, making it an essential resource for researchers in these fields. <https://www.ncbi.nlm.nih.gov/pmc/>
- **arXiv:** Established in 1991, arXiv is a repository for preprints in physics, mathematics, computer science, and other scientific fields. It allows rapid dissemination of research before peer review, fostering collaboration and discussion among scientists. The platform hosts over 1.8 million papers, freely accessible to all. <https://arxiv.org/>
- **Google Scholar:** Launched by Google in 2004, Google Scholar enables users to search across multiple scholarly resources, including journal articles, conference papers, theses, and technical reports. It also provides citation metrics, helping users track the impact of publications. Google Scholar is a crucial tool for academic research. <https://scholar.google.com/>
- **Europe PMC:** Europe PMC, managed by the European Molecular Biology Laboratory, offers free access to biomedical and life sciences research articles. It includes peer-reviewed journals, preprint servers, and funding organization articles. The platform provides tools for literature analysis, making it valuable for researchers in various scientific disciplines. <https://europepmc.org/>
- **Open DOAR:** The Directory of Open Access Repositories (Open DOAR) is a global directory launched in 2005, offering information on open access repositories, including institutional and subject-based collections. It supports researchers in finding accessible materials, promoting global access to research outputs. <https://beta.jisc.ac.uk/opendoar>

- **Directory of Open Access Books (DOAB):** DOAB, launched in 2012, is a directory providing access to open access academic books. It covers diverse disciplines such as humanities, social sciences, and natural sciences. The platform makes it easier for researchers and students to find open access books for academic purposes. <https://www.doabooks.org/>
- **Open Library:** Open Library aims to provide "one web page for every book ever published." It offers a lending library for e-books, allowing users to borrow and read books online or download them. The platform is a collaboration with libraries and publishers, promoting book accessibility for all readers. <https://openlibrary.org/>

These databases are crucial for Nigerian researchers and students, addressing the challenge of high subscription costs by offering free or low-cost access to scholarly information. They encourage research, knowledge sharing, and collaboration, fostering academic growth and innovation. Through these platforms, researchers can access a vast wealth of educational materials, making it possible to overcome barriers to information access and promote a culture of learning.

Comparisons between the Effectiveness of Subscription-Based Versus Open-Access Databases

The effectiveness of subscription-based versus open-access databases is a vital consideration in the realm of academic research, impacting how institutions allocate resources and how users access information.

- **Cost and Accessibility:** Subscription-based databases typically require a financial investment from libraries or institutions, which can consume a significant portion of their budgets. However, these databases often offer curated content that is peer-reviewed and reliable, which can justify their costs. In contrast, open-access databases are free to access, eliminating financial barriers for users and promoting wider dissemination of knowledge. Nevertheless, the quality of content in open-access databases can vary, as not all materials undergo rigorous peer review (Irenoa & Sawyerr-George, 2022).
- **Utilization and Awareness:** Subscription-based databases are often underutilized due to a lack of awareness and training among users. Many individuals do not fully leverage these resources despite their availability. Users frequently report challenges such as complex interfaces and the need for specific training to navigate these databases effectively. On the other hand, open-access databases tend to be more accessible, leading to potentially higher usage rates among the general public. However, users may encounter difficulties in finding reliable sources since the absence of centralized curation can result in varying quality in the available content (Sohani et al., 2021).
- **Quality of Information:** In terms of information quality, subscription-based databases generally provide high-quality, vetted content that is crucial for academic research. They often include advanced search capabilities and filters for peer-reviewed articles. While the cost-per-use ratio can sometimes be misleading high usage does not always equate to high value if it leads to over-reliance on certain resources—these databases remain a cornerstone for many researchers. Conversely, while open-access databases democratize access to information, their quality can be inconsistent. Users must critically evaluate sources to ensure credibility, particularly with the

rise of platforms like Google Scholar that mix open-access and subscription content (Sohani et al., 2021).

- **Training and Support:** Training is another critical factor in utilizing these resources effectively. Subscription-based databases necessitate user training for optimal use, yet many educational institutions fall short in providing this support. This gap can lead to underutilization despite the potential benefits of these databases. Libraries are encouraged to enhance user training programs to improve engagement with subscription resources. In contrast, while open-access databases are easier to access, users still benefit from guidance on evaluating sources and navigating the vast amount of available information. Institutions are increasingly promoting open-access repositories as a means to support research dissemination without financial constraints (Irenoa & Sawyerr-George, 2022; Ofua, 2021).

However, both subscription-based and open-access databases have unique advantages and challenges. Subscription databases provide high-quality, curated content but suffer from issues related to underutilization due to awareness and training gaps. Open-access databases offer free access but require careful evaluation of information quality. Institutions must find a balance between these factors when deciding on resource allocation and user support strategies to maximize research effectiveness. (Sohani et al., 2021).

Integration of Open Access Databases in Nigeria Universities

Integrating open-access databases into the institutional frameworks of Nigerian universities is essential for enhancing research capabilities and academic output. To achieve this, a multifaceted approach is required, focusing on awareness, infrastructure, and collaborative efforts.

- **Enhancing Awareness and Training:** First, universities in Nigeria must prioritize awareness campaigns to educate faculty and students about the benefits of open-access databases. This can be accomplished through workshops, seminars, and orientation programs that highlight available resources and demonstrate how to effectively utilize them. For instance, studies have shown that librarians can play a pivotal role in promoting these databases by linking them on library websites and providing direct access to open-access publications. Regular training sessions tailored for academic staff can also help bridge the knowledge gap regarding digital tools necessary for effective research.
- **Improving Infrastructure:** Infrastructure development is another crucial component. Many Nigerian universities face challenges related to inadequate internet connectivity and outdated technology. Institutions should invest in reliable internet services and modern computing facilities to ensure consistent access to online resources. Collaborating with government agencies and private sector partners could provide the necessary funding and technical support to enhance ICT infrastructure across campuses.
- **Fostering Collaboration:** Collaboration among universities can significantly alleviate financial burdens associated with database subscriptions. Establishing consortia for shared access

to open-access databases allows institutions to pool resources, reducing individual costs while expanding access to a broader range of scholarly materials. Government bodies like the Nigerian Universities Commission (NUC) can facilitate these collaborations by creating frameworks that support joint subscriptions and resource sharing.

- **Establishing Institutional Repositories:** Finally, developing institutional repositories that host locally produced research can enhance visibility for Nigerian scholars while contributing to global knowledge bases. These repositories should be indexed and made accessible internationally, promoting local scholarship and increasing its relevance in the global academic community.

By enhancing awareness, improving infrastructure, fostering collaboration, and establishing institutional repositories, Nigerian universities can effectively integrate open-access databases into their frameworks, ultimately enriching academic research and scholarship in the country.

Methodology

The research method used in the study was the descriptive survey. The study population comprised 40 lecturers in the faculty of social and management sciences and 10 librarians at the University of Africa, Bayelsa State, Nigeria. The census sampling techniques were adopted for the study, and data were collected using the questionnaire. The 50 questionnaires were distributed to the respondents, and 43 (35 lecturers; 8 librarians) of them responded to the questionnaire, giving a response rate of 85%. Measurement and assessment experts checked the questionnaire for face and content validity to make sure it was suitable for the research. A Cronbach's alpha of 0.83 assured that the instrument was reliable. Statistical Product and Service Solutions (SPSS) version 29 was used for data analysis, along with basic percentages and frequency counts. For questions 1-3 of the study, a criteria score of 2.5 was used. For research question 1, the mean scores of 2.5 and above were considered high level utilization, and those below 2.5 were deemed low level utilization. For research questions 2 and 3, the mean scores below 2.5 were adjudged as disagreed, and the scores of 2.5 and above were adjudged as agreed. The table below is a representation of the outcome.

Findings of the Study

Research Question 1: What is the level of utilization of open access electronic databases among lecturers and librarians?

Table 2: Level of Utilization of Open Access Electronic Databases

S/N	Level of utilization of open access electronic databases	SA	A	D	SD	Mean
1.	I frequently use open access electronic databases for my academic work.	14	25	3	1	3.2
2.	I regularly access open access electronic databases for preparing research papers.	19	19	5	-	3.2
3.	I use open access electronic databases to support my teaching materials and lectures.	12	28	1	2	3.1

4.	Open access electronic databases are my primary source of academic information.	16	19	8	-	3.1
5.	I rely on open access electronic databases to find up-to-date research publications.	13	20	10	-	3.0
Grand Mean						3.1

Table 1 shows that items 1-5 have mean scores that are above the criterion mean (2.5), more so, the grand mean (3.1) is greater than the criterion mean (2.5), which shows that the respondents have a high level utilization of open access databases.

Research Question 2: What are the benefits of the use of open access electronic databases among lecturers and librarians?

Table 2: Benefits of Open Access Electronic Databases

S/N	Benefits of open access electronic databases	SA	A	D	SD	Mean
1.	Open access electronic databases provide free access to valuable academic resources.	22	18	2	1	3.4
2.	Using open access electronic databases increases the visibility of my research publications.	17	26	-	-	3.3
3.	Open access databases allow me to access a wide range of interdisciplinary research materials.	19	19	5	-	3.2
4.	I find open access electronic databases useful for staying current with research developments.	16	19	8	-	3.1
5.	The use of open access electronic databases has improved my teaching and research activities.	11	27	4	1	3.1
Grand Mean						3.2

Table 2 shows that items 1-5 have mean scores that are above the criterion mean (2.5), more so, the grand mean (3.2) is greater than the criterion mean (2.5), which shows that the respondents perceive open access electronic databases positively, recognizing their benefits in accessing valuable resources, increasing research visibility, and supporting teaching and research activities.

Research Question 3: What are the challenges faced by lecturers and librarians in the use of open access electronic databases?

Table 2: Challenges in the Use of Open Access Electronic Databases

S/N	Challenges in the use of open access electronic databases	SA	A	D	SD	Mean
1.	Inconsistent power supply	20	23	-	-	3.5
2.	Poor Internet connectivity	18	23	1	1	3.3
3.	Lack of awareness about the available open access electronic databases.	12	28	1	2	3.1
4.	Poor digital skills	5	25	11	2	2.7
5.	Difficulties in finding relevant open access electronic databases for my field of study.	5	25	11	2	2.7
Grand Mean						3.1

Table 3 shows that items 1-5 have mean scores that are above the criterion mean (2.5), more so, the grand mean (3.2) is greater than the criterion mean (2.5), which shows that, on average, the

respondents **agree** that the listed challenges are significant in their use of open access electronic databases. Challenges like inconsistent power supply and poor internet connectivity stand out as the most prominent issues, whereas challenges like poor digital skills and difficulties in finding relevant open access electronic databases are less pronounced but still present.

Discussion of Findings

The first research question reveals that the respondents utilize open access databases at a high level. The high utilization of open access databases among respondents is likely due to their increasing availability and accessibility and the recognition of their value in supporting academic and research needs. This is in agreement with that of Azubuike et al. (2021), who also found that faculty of education lecturers utilized open-access e-databases for scholarly research. Research question two reveals that the respondents perceive open access electronic databases positively, recognizing their benefits in accessing valuable resources, increasing research visibility, and supporting teaching and research activities. Respondents likely perceive open access electronic databases positively because these resources offer free and immediate access to a wide range of valuable academic materials, making research more efficient and accessible. The findings are in line with those of Akpojotor & Ekuerhare (2024) and Amponsah et al. (2021). The third research question found that while inconsistent power supply and poor internet connectivity are the most significant challenges faced by respondents in using open access electronic databases, other challenges such as poor digital skills and difficulties in finding relevant databases are also present, though less severe. This highlights that while infrastructural issues are the primary obstacles, skill-related and accessibility challenges still affect the efficient use of these resources. Addressing both types of challenges could enhance the overall experience of using open access databases. This aligns with the findings of Mamman & Abubakar (2022).

Conclusion and Recommendations

The research establishes that the respondents have a high level of utilization of open access databases, and that they perceive open access electronic databases positively, recognizing their benefits in accessing valuable resources, increasing research visibility, and supporting teaching and research activities. Lastly, while inconsistent power supply and poor internet connectivity are the most significant challenges faced by respondents when using open-access electronic databases, other challenges, such as poor digital skills and difficulties in finding relevant databases, are also present, though less severe. Based on the findings, the researchers recommended that the institution should prioritize improving internet connectivity and power supply, while also providing digital skills training to enhance the effective use of open access electronic databases. Additionally, increasing awareness and accessibility of these databases, coupled with continuous user feedback, will help overcome challenges and maximize their benefits for teaching and research activities.

References

- Ajegbomogun, F. O., & Fagbola, O. (2015). Electronic resources access and usage as predictors of scholarly research of post graduate students of Federal University of Agriculture, Abeokuta. *Journal of Information and Knowledge Management*, 5 (5), 142-149.
- Akpojotor, L. O. & Ekuerhare, O. (2024). Use of open access publications and lecturers research productivity in polytechnics in south-south, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 15(1), 111-128. <https://dx.doi.org/10.4314/ijikm.v15i1.9>
- Amponsah, E., Madukoma, E., & Unegbu, V. E. (2021). Open access electronic resources use and research productivity of faculty members: A case study of a selected University in Ghana. *World Journal of Education*, 1(6). <https://doi.org/10.5430/wje.v11n6p18>
- Azubuike, F. C., Ekere, F. C., & Orsu, N. (2021). Awareness and utilization of electronic databases for scholarly research by faculty of education lecturers in federal universities in south east, Nigeria. *Library Philosophy and Practice*, 5797. <https://digitalcommons.unl.edu/libphilprac/5797>
- Emezie, N. A., Ezeri, C. N., & Ewulo, R. O. (2023). Harnessing open access databases to improve scholarship: perception of professionals at the frontline. *International Journal of Knowledge Content Development & Technology*, 13(3).
- Emmasiegbu, M., & Anaehobi, S. E. (2021). Challenges to the use of electronic databases by lecturers in government-owned university libraries in Anambra State, Nigeria. *Library Philosophy and Practice* (e-journal). 5224. <https://digitalcommons.unl.edu/libphilprac/5224>
- Emmasiegbu, M., & Anaehobi, S. E. (2021). Challenges to the use of electronic databases by lecturers in government-owned university libraries in Anambra State Nigeria. *Library Philosophy and Practice* (e-journal). 5224. <https://digitalcommons.unl.edu/libphilprac/5224>
- Greussing E, Kuballa S, Taddicken M, Schulze M, Mielke C., & Haux, R. (2020). Drivers and obstacles of open access publishing. A qualitative investigation of individual and institutional factors. *Front. Commun.*, 5, 587465.
- Gutam, S. (2023). Navigating open access: Key importance and benefits. <https://www.authoraid.info/en/news/details/1871/>
- Hadi, L., & Auwalu, D. Y. (2020). Perception, access and use of electronic databases among undergraduate students-users of Umaru Musa Yar'adua University Library, Katsina State, Nigeria. *International Journal of Applied Technologies in Library and Information Management*, 6(1), 33-42.
- Irenoa, Kenneth O. CLN and Sawyerr-George, Oyinkepreye E. (2022). An assessment of academic database subscription management in Nigerian tertiary institutions: Challenges and prospects. *Library Philosophy and Practice*, 7419. <https://digitalcommons.unl.edu/libphilprac/7419>

- Ivwithreghweta, O., & Saadatu, E. (2022). Usage of electronic academic database resources among lecturers and postgraduate students in Western Delta Universities, Oghara, Delta State, Nigeria. *Library Philosophy and Practice*, 7324. <https://digitalcommons.unl.edu/libphilprac/7324>
- Mamman, H. A., & Abubakar, B. M. (2022). Challenges of access and use of electronic information resources among students of higher institutions in Taraba State, Nigeria. *Covenant Journal of Library & Information Science*, 5(1).
- Melo, L. C. (2022). Enduring issues of digital exclusion, emerging pressures of internet regulation in Brazil. *Suprema*, 2(1). <https://doi.org/10.53798/suprema.2022.v2.n1.a156>
- Ofua, J. O. (2021). Awareness and utilization of online subscribed databases by academics in university libraries in Delta State. *Library Philosophy and Practice*, 6436. <https://digitalcommons.unl.edu/libphilprac/6436>
- Okwu, E., Ogunbodede, K. F., & Suleiman, A. B. (2023). Faculty perceptions of the use of open educational resources in state universities in Bayelsa and Rivers States Nigeria. *Asian Journal of Information Science and Technology*, 13(1), 35-40.
- Sohani, F., Shekofteh, M., Shahbodaghi, A., & Jambarsang, S. (2021). Journals on the road: Open access or non-open access? *Library Philosophy and Practice*, 6276. <https://digitalcommons.unl.edu/libphilprac/6276>
- Ukwoma, S., & Onyebinama, C. O. (2020). Access and use of open access resources by undergraduate students in federal universities in south east Nigeria. *Library Philosophy and Practice*, 4124. <https://digitalcommons.unl.edu/libphilprac/4124>

