

Assessment of Accommodation and Space Requirements in Private University Libraries in South East Nigeria in Alignment with Librarians' Registration Council of Nigeria Minimum Standards and Guideline

Ngozi Njideka Okechukwu*, Anthonia Ukamaka Echedom

Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

*Corresponding author, email: nn.okechukwu@unizik.edu.ng

doi: 10.17977/um065.v6.i6.2026.1

Article history

Submitted: 19 March 2026

Revised: 24 April 2026

Accepted: 28 April 2026

Published: 29 April 2026

Keywords

Accommodation requirements

Library space

LRCN standards

Private universities

South East Nigeria

Abstract

The research was conducted using descriptive survey design to determine the accommodation and space needs in the private universities libraries in South East Nigeria. It was carried out in all the fourteen universities in the area using an observation checklist and structured interviews using Librarians Registration Council of Nigeria (LRCN) criteria. Instruments were checked with the experts and reliability tested, being very consistent. The information was gathered based on on-site visits that allowed observing and communicating with librarians directly. It was analyzed in percentages with a set of 70 as the benchmark of compliance. The methodology was a systematic way of assessing the effectiveness of the libraries in terms of facilities and services against LRCN standards. Findings indicated that the private university libraries in South East Nigeria conformed to LRCN standards of accommodation and space moderately. The number of assessed items, 23, aligns with most libraries (15/23) giving a partial correlation. The most essential facilities like staff offices, reading, ICT rooms, parking and the internet were mostly provided. But there were severe weaknesses in such aspects as accessibility to the special needs individuals, continuous power supply, noise requirements, exhibition facilities, and disaster management policies. Other facilities like common rooms of the staff and reading areas of the children were more or less absent. According to the study, despite the partial adherence to LRCN standards in South East Nigeria by the private university libraries, there is still need to work on the libraries to comply with the standards completely. The management of the university was advised to focus on improving the infrastructural development, inclusion in design, and compliance with the regulatory requirements to improve the effectiveness of the library.

1. Introduction

Accommodation and space needs in the library of a private university is an important aspect of effective academic library planning because it directly affects user satisfaction, services delivery and relevance of the institution. The private university libraries have ceased to be considered as simple archives of books in the modern context of higher education and are now vibrant learning environments which have to support a wide range of academic, technological and social demands. One of the key elements of space assessment is the knowledge of user requirements and behavior. Contemporary research highlights that the planning of library space must be user-friendly and must include information about the interactions between students and staff and library spaces. Methods like occupancy counts, observation studies, and surveys of the users are the most common in calculating seating capacity, peak usage, and preferred study environments (Allen & Moyer, 2021). Spatial mapping and activity tracking can be used as observational methods to offer empirical evidence on how the space is used, and so can be used to make evidence-based decisions on space allocation. They are also necessary in the privately owned universities where the number of students might be rapidly increasing to avoid overcrowding and underutilization.

The number of functional areas usually covered in accommodation requirements in the libraries of the private universities. They comprise reading areas, group study areas, learning digital areas, staff areas, as well as, collection and equipment storage areas. According to Frischer et al (2020), furniture, ICT facilities and necessary facilities like printing, internet connectivity, and support facilities should be adequately provided. Frischer et al. (2020) notes that adequate provision must be made for furniture, ICT facilities, and essential services such as printing, internet access, and user support areas. Notably, libraries are increasingly dedicating additional space to collaborative learning and technology-based services, and are, in many cases, shrinking the

size of print collections to make space more flexible so that students can study. This trend is an indication of a transformation of user preferences, especially the digitally oriented students.

The other important space assessment dimension is compliance with standards and guidelines. The professional organizations like the Association of College and Research Libraries (ACRL) encourage that the planning of library space should be in line with the institutional enrollment statistics, programmes offered and the future projections of growth. Despite the past orientation that was being based on the seating ratios and shelving capacity, modern-day orientation centers on evaluation parameters like user satisfaction, accessibility, and ability to be adapted (Prastyabudi & Latifah, 2024). In the case of private universities, space planning can be particularly relevant to the accreditation standards since library facilities tend to be a determinant of institutional quality assurance. One of the key elements in evaluating space requirements is flexibility and future expansion. Technological changes and the altering pedagogical practice are changing libraries at a fast rate. As pointed out by Jain et al (2023), the library space should be made thinking of its future growth and expansion, which can be reconfigured as well as accommodating new technologies. This involves the integration of multimedia capabilities, makerspaces and electronic laboratories. Modular furniture and flexible designs allow libraries to convert space into various functions and hence the most efficient usage of space as space can be a limitation.

Comfort and inclusiveness to the user are also considerations. The design of modern libraries is now more focused on providing ergonomic furniture, proper lighting, ventilation, and noise control to enable the development of favorable learning conditions. Also, the inclusive spaces are being incorporated, like quiet zones, collaboration areas, and sensory-friendly rooms to support the needs of a variety of users, including students with disabilities or neurodivergent conditions. The enrollment of students in a university is competitive in a private university setting, the inclusive and comfortable environments in these settings would help the university to increase its appeal and stature. Moreover, stakeholder engagement is also important in determining accommodation needs. The librarians, students, faculty, and the university administrators can all offer helpful insights on the use of space and its needs. Research has shown that user feedback plays a vital role in space management optimization, as it is a measure of what is really needed and desired (Abdelrahman & Miller, 2022). In the case of private universities, where the decision to allocate funds is often highly institutionalized, the involvement of stakeholders can guarantee the library spaces to be not only functional but also in line with the academic purposes.

The study was necessitated by the fact that there was the increasing growth of the number of private higher education institutions and the need in relation to these institutions to have quality library facilities. Although this has increased, very little empirical evidence exists on the satisfaction of existing library spaces to regulatory standards especially the regulatory standards established by the Librarians Registration Council of Nigeria (LRCN). Recent research shows that the main issues in academic libraries in Nigeria include overcrowding, insufficient seating capacity, and disastrous spatial organization that adversely impact user satisfaction and learning outcomes (Akande et al, 2023; Berily, 2025). These concerns imply that there is a discrepancy between the recommended standards and practice.

This research is novel as it centers on ensuring that physical library infrastructure conforms to LRCN minimum standards and guidelines, which is an aspect that has not been adequately addressed in the literature. Although the quality of service and user behaviour in libraries has been investigated in the previous research, a limited number of studies have critically assessed whether libraries in private universities adhere to national rules and regulations (Mahmood et al, 2023). This research incorporates the assessment of space with policy benchmarks, which is why the analysis of the sufficiency, usefulness, and preparedness of library space is structured in a systematic way. It also adds context-related information in South East Nigeria where the number of the private universities is booming. What are the comparisons between the accommodation and space provisions offered to the individual university libraries in the South East, Nigeria and the LRCN minimum standards and guidelines?

2. Method

It had a descriptive survey research design that methodically analysed the accommodation and space demand of the libraries of the private universities in South East Nigeria. This design was deemed to be suitable as it was aimed at gathering existing data and explaining existing conditions as they naturally existed and using methods like observation and interviews. It also allowed the researcher to have a detailed and precise description of the features, facilities and level of compliance of the libraries being studied. The study was carried out in the South East geopolitical area in Nigeria which includes Anambra, Abia, Enugu, Ebonyi and Imo states. Culturally, it was a unified region, Igbo speaking, and the region was well known to be keen on education, entrepreneurship and intellectual growth. The region had over the years witnessed tremendous development of tertiary education, especially the development of the private universities. The size, ownership and infrastructural development of these institutions differed, and the region was appropriate to analyze the differences related to library facilities and adherence to the regulatory standards. Large numbers of universities and the relative stability in the area also were beneficial in good data collection and valuable analysis.

The study population was the total number of fourteen in the South East of all the private universities and because the number was manageable, the whole population was researched without sampling. Two key tools were used in data collection; an observation checklist and a structured interview guide which were developed using the minimum standards and guidelines of Librarians Registration Council of Nigeria (LRCN). The LRCNSG observation checklist had 96 items that were divided into four clusters that included the accommodation and space, furniture and equipment, information resources, and ICT facilities. The answers were noted to be either available or not. LRCNGIS interview guide was developed to seek extensive information about the university librarians and included the following aspects in the interview guide; staffing, services, funding, ICT, management and preservation practices.

In order to achieve the validity, the instruments were evaluated by the specialists in Library and Information Science and Measurement and Evaluation, who evaluated their clarity, relevancy and coverage. Their comments were used to make adjustments to the instruments to enhance quality. The reliability was also achieved by carrying out a pilot test in a local university that was out of the study area. Cohen Kappa statistics were used to analyze the results, which demonstrated that there was moderate to near-perfect agreement among various clusters of the checklist and very high agreement of the interview tool, which is a sign of a good internal consistency. The researcher used a visit to individual libraries of universities to conduct data collection. This method gave the opportunity to observe first hand the facilities and have direct contact with the librarians via structured interviews. This intimate involvement added to the data collected, making it more precise and detailed. To analyze, the research used some simple percentages in finding the compliance levels with LRCN standards. The responses given during the interview were grouped together, summarized and provided in a frequency table to show patterns and trends.

There was a definite rule of interpretation: libraries which had a 70% or higher compliance rate were deemed to have fulfilled LRCN standards whilst those with a lower rate were considered to have failed to reach the necessary standards. In general, the methodology offered a rigorous and logical system of evaluation of the way in which the private university libraries in South East Nigeria fulfilled the set standards in terms of space, facilities, and services.

3. Results and Discussion

The result presented in Table 1 shows that out of the 23 aspects of accommodation and space requirements, 15 (65%) were available in majority (over 50%) of private university libraries in the South East, Nigeria. This implies that accommodation and space requirements provided by private university libraries in South East, Nigeria moderately aligned with the requirements stipulated in LRCN minimum standards and guidelines.

Table 1. Percentage Distribution of Accommodation and Space Requirements in Private University Libraries in South East, Nigeria

S/N	Items	Available		Not Available		Remark
		N	%	N	%	
1	Space for staff offices	12	80	3	20	Available
2	Conducive reading area for at least 40% of the total user population	11	73	4	27	Available
3	Conducive and secured space for information resources and ICTs	11	73	4	27	Available
4	Space for technical services (acquisitions, Cataloguing, collection development, bindery etc)	13	87	2	13	Available
5	Provision for cooling system	14	93	1	7	Available
6	Space for staff common room with canteens for staff and users	2	13	13	87	Not Available
7	Space for toilet facilities and other conveniences	13	87	2	13	Available
8	Space for staff seminar room	8	53	7	47	Available
9	Building that meet acoustic requirements such as being noise free	7	47	8	53	Not Available
10	Library building and service points designed to accommodate people with special needs	4	27	11	73	Not Available
11	A unit of study area/carrel that occupy between 2.5-4 square meters	9	60	6	40	Available
12	A unit of stack area of books that shall be at least 10.75 square meters	7	47	8	53	Not Available
13	Uninterrupted Power supply	5	33	10	67	Not Available
14	Internet Connectivity	13	87	2	13	Available
15	Space for exhibition	7	47	8	53	Not Available
16	Relaxing area for users	8	53	7	47	Available

S/N	Items	Available		Not Available		Remark
		N	%	N	%	
17	Parking space for staff and users	15	100	0	0	Available
18	provision for emergency exits	8	53	7	47	Available
19	Provision for security outpost	9	60	6	40	Available
20	Provision for users' children reading space	2	13	13	87	Not Available
21	Security/disaster management policy	5	33	10	67	Not Available
22	Library building centrally located	10	67	5	33	Available
23	Library building accessible via good road network	13	87	2	13	Available

The results of Research Question showed that the accommodation and space requirement in the private university libraries in South-East Nigeria moderately coincide with the Librarians Registration Council of Nigeria (LRCN) minimum requirements and guidelines, where 65% of the facilities required are found in most of the libraries. This implies that even though much has been done to ensure that the required standards are achieved there are still significant gaps in key areas of library facilities.

The fact that most libraries have focused on basic operational needs is evidenced by the fact that a majority of them have basic functional spaces like staff offices (80%), reading space (73%), information resources and ICT's space (73%). This result was in line with Chukwuji, Tsafe, and Ejezie (2021) who indicated that libraries in Nigerian universities usually that offer the necessary space to facilitate academic and administrative activities. Equally, Akinola (2019) noted that proper space of reading and technical services is the backbone in assisting with the development activities of acquisition and collection. Conversely, Obiamalu and Echedom (2022) discovered that certain libraries in South-East Nigeria are still grappling with insufficient infrastructure especially in service provision to the increasing number of users.

The fact that it provides technical service areas (87%) and cooling systems (93) is yet another indication that it conforms to the LRCN standards in ensuring conducive working environments. This observation correlates with that of Barfi et al. (2023) who emphasized that a favorable physical environment plays a key role in improving the quality of library services. Similarly, in a related study, Adam (2017) also observed that environmental comfort, such as the ability to control the ventilation and temperature, is one of the factors that affect user satisfaction. Nonetheless, conversely, Osagie and Orheruata (2013) pointed infrastructural gaps present in some libraries in the Nigerian universities as a result of poor funding implying that funding may be the cause of the gaps experienced in some institutions.

In spite of these strengths, the results obtained showed significant gaps in the specialized and user-centered spaces. An example is only 13 percent of libraries made available staff common rooms with canteens and the same number made available spaces to users children. The result is in contrast with Yasin (2025) who has highlighted the relevance of inclusive and supportive settings within modern library systems to improve the involvement of users and productivity of staff members. A similar investigation conducted by Zhu and Xie (2023) revealed that users were more and more demanding that libraries have various and versatile spaces that can be used in different ways, such as relaxing and learning together.

It was also found that only 47% of the libraries satisfied acoustic requirements and thus more than half of the libraries are not noise-free. This observation was in line with the observation of Majidi, Saradj, and Khanmohammadi (2023) who observed that ineffective acoustic design adversely impacts on the concentration of users and the overall experience in the library. In the same way, Parvez et al. (2022) highlighted that physical conditions, such as noise control, are critical to efficient learning conditions. Conversely, the current situation has seen a disconnect between local practice and global standards in the prioritization of acoustic design as an important element of user satisfaction as seen in some libraries in developed contexts.

The other important discovery is that the provision available to users with special needs is limited with only a quarter of the libraries providing this need (27%). This means that there is a great lack of inclusiveness. This observation is contrary to the recommendations of Obro (2022) who emphasized on accessibility in library facilities as a means of providing equal access to information resources. Similarly, in another study, Basantes-Andrade et al. (2022) stressed that the contemporary educational standards presuppose the inclusion of the principles of inclusive design in the institutions to support the needs of various groups of users. This is because many libraries do not have such provisions, implying that they are partially adhering to the LRCN standards regarding accessibility.

The results also indicated that provision of sufficient stack space and exhibition space was only done by 47 percent of libraries. This implies that there is a constraint of space into which to expand the collection and user interaction activities. This observation conformed to that of Veremchuk et al. (2021), who reported that

lack of space to store collections could be detrimental to organization and use of information resources. Conversely, Fabunmi (2022) argued that print and non-print materials need sufficient physical and online space that facilitates the research production, meaning that space limitation could influence the scholarly production.

On infrastructure supporting technology, the research concluded that internet connection was available (87%), whereas power supply (uninterrupted) was only available in 33% of the libraries. To some extent, this observation is similar to the results of Ezecheta (2022) who noted the growing presence of ICT facilities in Nigerian academic libraries but the absence of their effective use due to unreliable power supply. On the same note, Fidelis (2018) emphasized the importance of good electricity to efficient ICT based services. Igbo and Imo (2017) pointed out that power inconsistency, conversely, is a key issue affecting the use of electronic resources within libraries in Nigeria, which also serves to support the importance of the given result.

Mixed results were also noted with security and safety provisions. Although two-thirds of libraries (60 percent) had security outposts and a majority (53 percent) of libraries had emergency exits, only one-third of libraries (33 percent) had security/disaster management policies. This observation was consistent with the findings of Farid, Warraich, and Iftikhar (2025) who highlighted the need to have formal policies to govern the risks and assure information security in academic libraries. Conversely, Uzougbo, Ikegwu, and Adewusi (2024) posited that conformity to security standards involves physical infrastructure and policy frameworks and therefore the lack of policies in most libraries is a significant implementation gap. The presence of parking spaces (100%), and good road accessibility (87) means that majority of libraries are easily accessible by the users physically. The discovery is in line with the opinions of Adigun and Tella (2021), who insisted that access to library facilities is a factor that determines the usage and user satisfaction. However, as opposed to this, Kumar and Mahajan (2019) reported that accessibility is only incomplete without proper internal facilities and services implying accessibility should be balanced with functional infrastructure.

The medium compliance rate in this research is in line with the wider evaluation models. Stufflebeam and Zhang (2017) have also supported this finding and pointed out that evaluation processes tend to point at partial adherence to standards, and areas of improvement. In a similar manner, Levy-Feldman (2025) observed that assessment is obligatory in establishing gaps and fostering betterment in educational organizations. In a similar view, OECD (2012) emphasized that the institutional effectiveness and the attainment of desired results require continuous assessment to improve the performance of institutions. Moreover, the results can be construed in the framework of the implementation theory. Nilsen (2020) claimed that the implementation of standards is most effective when a variety of factors are taken into account, such as the organizational capacity, resources, and policy enforcement.

The medium level of consistency in this research indicates that although the private universities are trying to adhere to the standards of LRCN, some obstacles like funding issues, infrastructure and policy gaps are impeding the implementation process. The findings of this study have important implications for educational quality, employability, inclusivity, and institutional development in private university libraries in South East Nigeria. The moderate alignment of library accommodation and space with LRCN standards suggests that while basic facilities exist, significant gaps may limit effective teaching, learning, and research. Adequate library environments are essential for entrepreneurship education and global competitiveness, as emphasized by Oguejiofor et al. (2022). Similarly, inadequate ICT and learning spaces may restrict students' acquisition of digital marketing and self-employment skills highlighted by Okoro et al. (2025) and reduce job readiness linked to artificial intelligence competencies (Onyiorah, 2025). The absence of inclusive facilities also raises concerns about equitable access to education, as inclusive infrastructure is vital for national development (Iwuno, 2025).

Furthermore, weak ICT infrastructure reduces institutional resilience during crises, aligning with concerns on digital continuity raised by Obikeze et al. (2022). Staff productivity may also be affected, as supportive environments are critical for efficiency and service delivery (Chukwurah et al., 2020; Mbuba, 2022). Additionally, strengthening library systems through partnerships can improve compliance and efficiency, as supported by Obi et al. (2026). From a legal and institutional perspective, adherence to standards is necessary for credibility and quality assurance in higher education (Udensi & Okosa, 2025). Overall, improving library space and facilities is essential for enhancing learning outcomes, staff performance, and national development.

4. Conclusion

The research found out that space and accommodation requirements of the South East Nigerian private university libraries were just moderately consistent with the minimum standards and guidelines stipulated by the Librarians Registration Council of Nigeria (LRCN). Despite the large number of libraries that offered the basic facilities like staff offices, reading spaces, ICT spaces and basic infrastructure, many of the important elements that would result in an ideal functioning of the library were either poor or totally absent. Significant gaps were evident in the following aspects, accessibility of the users with special needs, continuity of power supply, disaster, acoustic standards and the delivery of special facilities such as exhibition areas and the reading areas of children.

These lapses are indicative that although the private universities have done commendable work to build their library facilities, adherence to the regulatory standards is not full. The discrepancies in provision imply the differences in funding, priorities in planning and institutional investment in library development. Since the library is central in assisting teaching, learning and research, these flaws can hamper the success of these institutions in meeting their academic goals. Thus, the paper has highlighted the importance of enhancing investment in the library infrastructure and strict compliance with LRCN standards by the management of the private university and other interested parties. Constant surveillance, good planning, and inclusive and flexible space designs are all-important in enhancing compliance. Increasing accommodation and space will not only satisfy the regulatory requirements but also enhance a more favorable and fair learning atmosphere to everybody using it.

Author Contributions

All authors have equal contributions to the paper. All the authors have read and approved the final manuscript.

Funding

No funding support was received.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/ or publication of this article.

Data Availability

The datasets generated during and/ or analyzed during the current study are available from the corresponding author on reasonable request.

Declaration on AI Use

The authors declare that no artificial intelligence (AI) or AI-assisted tools were used in the preparation of this manuscript.

References

- Abdelrahman, M. M., & Miller, C. (2022). Targeting occupant feedback using digital twins: Adaptive spatial-temporal thermal preference sampling to optimize personal comfort models. *Building and Environment*, 218, 109090.
- Adam, R. (2017). Assessment of library service quality and user satisfaction among undergraduate students of Yusuf Maitama Sule University (YMSU) library. *Library Philosophy and Practice*, 1675.
- Adigun, G. O., & Tella, A. (2021). User education and information literacy instruction as determinant of use and satisfaction with library services. *Journal of Library & Information Services in Distance Learning*, 15(2), 99–128.
- Akande, O. K., Adegbenga, A. O., Akeremale, I. D., Haruna, A. G., Anikor, E. M., & Makun, C. Y. (2024). Towards sustainable redesign of academic library buildings in Nigeria: Case for remodeling higher institution library buildings to meet 21st century users' expectations.
- Akinola, S. A. (2019). An assessment of acquisition and collection development activities in academic libraries. *Library Philosophy and Practice*, 1–19.
- Allen, F. R., & Moyer, M. (2021). A library seating census: Gathering seating occupancy data in an academic library to reveal furniture preferences and inform future planning. *The Journal of Academic Librarianship*, 47(5), 102427.
- Barfi, K. A., Parbie, S. K., Filson, C. K., Teye, M. V., Kodua-Ntim, K., & Ayensu, E. (2023). Assessing the quality of services at an academic library. *Heliyon*, 9(12).
- Basantes-Andrade, A., et al. (2022). Standards of teacher digital competence in higher education. *Sustainability*, 14(21), 13983.
- Beriliy, B. W. B. (2025). User satisfaction with academic library facilities and transformative education support: The case of the University of Bamenda, Cameroon. *Multidisciplinary Journal of Law, Education and Humanities*, 2(2).
- Chukwuji, C. N., Tsafe, G. A., & Ejezie, J. K. (2021). Evaluating quality assurance in North-West university libraries in Nigeria. *Jewel Journal of Librarianship*, 16(1), 27–42.
- Chukwurah, C. D., Uzor, O. A., Iwuno, J. O., & Chukwueloka, C. S. (2020). Capacity building and employee productivity in the Nigeria public sector: A study of Anambra State Civil Service Commission, Awka. *Global Journal of Political Science and Administration*, 8(5), 52–64.
- Ezecheta, W. E. (2022). Availability and utilization of ICT facilities in academic libraries. *Library Philosophy and Practice*, 7171.
- Fabunmi, S. O. (2022). Use of print and non-print resources as factors influencing research productivity of librarians in private universities in Southwest Nigeria. *FKJOLIS*, 8(1).

- Farid, G., Warraich, N. F., & Iftikhar, S. (2025). Digital information security management policy in academic libraries. *Journal of Information Science*, 51(4), 1000–1014.
- Fidelis, A. (2018). ICT usage in university libraries. *University of Dar es Salaam Library Journal*, 13(2), 3–17.
- Frischer, R., Krejcar, O., Maresova, P., Fadeyi, O., Selamat, A., Kuca, K., Tomson, S., Teixeira, J. P., Madureira, J., & Melero, F. J. (2020). Commercial ICT smart solutions for the elderly: State of the art and future challenges in the smart furniture sector. *Electronics*, 9(1), 149.
- Igbo, H. U., & Imo, N. T. (2017). Electronic information resource sharing in Southern Nigeria. *African Journal of Library, Archives and Information Science*, 27(1), 77–91.
- Iwuno, J. O. (2025). Aspiration for academic inclusivity and national development: A study of Anambra East local government. *International Journal of Education Research and Scientific Development*, 7(2), 188–200.
- Jain, S. J., & Behera, P. K. (2023). Visualizing the academic library of the future based on collections, spaces, technologies, and services. *International Journal of Information Science & Management*, 21(1).
- Levy-Feldman, I. (2025). Role of assessment in improving education. *Education Sciences*, 15(2), 224.
- Mahmood, K., Rehman, S. U., & Ashiq, M. (2023). The users' expectations of library service quality in the college libraries of Pakistan: A LibQUAL study. *Performance Measurement and Metrics*, 24(1), 51–66.
- Majidi, V., Saradj, F. M., & Khanmohammadi, M. A. (2023). Explaining the quality of the architectural space in academic libraries based on user preferences. *Bagh-e Nazar*, 20(122), 29–52.
- Mbuba, F. (2022). The bravo of human capital development and employee productivity in the Ministry of Information, Awka. *International Journal of Academic Information Systems Research*, 5(2), 82–92.
- Nilsen, P. (2020). Making sense of implementation theories, models, and frameworks. In *Implementation Science 3.0* (pp. 53–79). Springer.
- Obi, Y. M. V., Iwuno, J. O., & Okoye, A. T. (2026). Public-private partnerships and efficiency of solid waste management in Nigeria: Evidence from Anambra State. *International Academy Journal of Humanities and Social Sciences Annals*, 4(1), 1–13.
- Obiamalu, A., & Echedom, A. (2022). Assessment of university libraries in Southeast Nigeria. *UNIZIK Journal of Research in Library and Information Science*, 6, 45–65.
- Obikeze, O. S. A., Ananti, M. O., & Iwuno, J. O. (2022). COVID-19 and public sector management in Africa: Exploring the use of social media platforms. *ANSU Journal of Arts and Social Sciences*, 9(1), 58–74.
- Obro, S. (2022). Accessibility and usage of school library materials and facilities by social studies teachers in Sapele Metropolis. *Library Philosophy and Practice*.
- OECD. (2012). *Evaluation and assessment frameworks for improving outcomes*.
- Oguejiofor, C. S., Nzeribe, P. U., & Onyiorah, B. O. (2022). Entrepreneurship education for employability and global competitiveness in the new normal. *COOU Journal of Educational Research*, 7(1), 233–240.
- Okoro, F. A., Onyiorah, B. O., & Emeasoba, N. C. (2025). Business educators' perception of search engine and email marketing skills required for self-employment. *International Journal of Business and Entrepreneurship Education*, 2(2), 90–100.
- Onyiorah, B. O. (2025). Artificial intelligence skill development as a predictor of job readiness. *Journal of Investment Development, Economics and Accounting*, 2(2), 114–126.
- Osagie, R., & Orheruata, M. (2013). Budgeting and funding of the library at the University of Benin. *Education*, 134(2), 195–200.
- Parvez, M. S., Tasnim, N., Talapatra, S., Kamal, T., & Murshed, M. (2022). Are library furniture dimensions appropriate for anthropometric measurements of university students? *Journal of Industrial and Production Engineering*, 39(5), 365–380.
- Prastyabudi, W. A., & Latifah, S. A. (2024). Measuring library service excellence: Integrating SERVQUAL with accreditation standards. *Journal of Advances in Information and Industrial Technology*, 6(2), 131–142.
- Stufflebeam, D. L., & Zhang, G. (2017). *The CIPP evaluation model: How to evaluate for improvement and accountability*. Guilford Press.
- Udensi, B., & Okosa, C. B. (2025). Contemporary issues on repugnancy test doctrine in Nigeria. *COOU Law Journal*, 9(1).
- Uzougbo, N. S., Ikegwu, C. G., & Adewusi, A. O. (2024). Cybersecurity compliance in financial institutions. *International Journal of Science and Research Archive*, 12(1), 533–548.
- Veremchuk, O. V., Pavlenko, T. S., Nikolaienko, Y. M., Matviichuk, O. Y., & Kozhedub, O. V. (2021). Evaluación de la calidad y eficiencia de los recursos de información. *Revista de la Universidad del Zulia*, 12(35), 532–549.
- Yasin, H. (2025). School library administration management. *Madako Elementary School*, 4(1), 97–115.
- Zhu, Q., & Xie, X. (2023). Users' needs and expectations of immersive learning spaces in an academic library. *Journal of Librarianship and Information Science*, 55(2), 371–382.