

Inclusive Library Services in Nigerian Universities: A Study of Visually Impaired users' access to Information Resources

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Abstract

This study examines the availability, accessibility, and challenges of library resources for visually impaired users in university libraries across North Central Nigeria, focusing specifically on the perspectives of library personnel. Through a descriptive survey, data was collected from library staff at various institutions to assess the extent to which specialized resources and services, such as Braille materials, talking books, and magnifiers, are available and accessible to visually impaired students. The findings indicate that while some general resources, such as internet access and computers, are accessible, there are significant gaps in the provision of specialized resources and services. Additionally, challenges related to infrastructure and staff competence were identified, including inadequate training in assistive services and the presence of outdated resources. These barriers hinder the full utilization of library materials by visually impaired students, limiting their academic opportunities. The study recommends that university libraries invest in specialized services and assistive technologies, upgrade their physical infrastructure, and implement ongoing staff training programs to improve service delivery. These steps are essential to creating a more inclusive and equitable learning environment for visually impaired students in Nigerian universities.

Keywords: Visually Impaired, Library Resources, Accessibility, Assistive Technologies, University Libraries

Introduction

University libraries are pivotal to academic development, serving as knowledge centres that support learning, teaching, and research. In an age where equity and inclusion are increasingly prioritised in educational discourse, the role of libraries in ensuring fair and equal access to information for all users, including those with disabilities, has become more prominent (Dei & Asante, 2022). Fairness in access to knowledge means more than opening library doors, it means making sure everyone, regardless of physical, sensory, or cognitive challenges, can truly use what's inside. Inclusive library services reflect this commitment by intentionally designing collections, systems, and services that meet the needs of all users.

Inclusive library services refer to the deliberate planning, development, and implementation of library systems, collections, facilities, and practices that accommodate users with diverse needs, including those with physical, sensory, or cognitive impairments (Muhammed & Nwachukwu, 2023). These services ensure that every user, regardless of disability status, has equitable access to information and knowledge resources that support academic and personal development (Ezeabasili & Umeji, 2021; Muhammad & Nwachukwu, 2023), aligning with the global shift in higher education from treating disability inclusion as an afterthought to actively dismantling structural, attitudinal, and technological barriers to full participation.

Globally, higher education systems have shifted from integrating students with disabilities as an afterthought to proactively removing structural, attitudinal, and technological barriers to participation. This global movement is reinforced by frameworks such as the United Nations' SDG 4, which promotes inclusive and equitable quality education (Saini et al., 2022), and SDG 10, which advocates for reduced inequalities principles that are particularly relevant to visually impaired users, who often rely on assistive technologies such as screen readers, braille texts, DAISY books, and audiobooks to access academic content (Winkelstein, Bolt, Asplund, Nomura & Uvodić, 2024)). Their information needs are not fundamentally different from those of sighted peers, yet the format and medium of access require special consideration.

Farooq and Mansoor (2021), observed that inclusive library services are not only about providing physical access to buildings but also about ensuring that information resources are available in accessible formats and that library environments are conducive to equitable learning experiences. Moreover, support systems such as disability units, collaborative partnerships, and staff training in assistive technology usage have been recognised as vital elements of effective inclusion (Okoye, 2024). However, in Nigeria, support structures for visually impaired students are often underdeveloped or entirely lacking, leading to limited access to information and diminished academic outcomes. Many university libraries in Nigeria still fall short of providing inclusive services specifically tailored to the unique needs of visually impaired users (Aramide, Lawal & Odunlade, 2018). The availability of information resources alone does not guarantee accessibility; it must be accompanied by user-friendly formats, functional assistive technologies, and staff who are adequately trained to support visually impaired users effectively.

Inclusive library services refer to the intentional design, development, and implementation of library systems, facilities, resources, and practices that accommodate users with diverse needs, including individuals with visual, physical, and cognitive impairments. This concept goes beyond mere physical access to include equitable participation and engagement in academic activities through library support (Ezeabasili & Umeji, 2021). According to Moirangthem and Phuritsabam (2021), inclusivity in library services is anchored on the principle that all users, regardless of ability, should enjoy the same opportunities to access and benefit from information resources. University libraries serve as central hubs for academic development, research support, and information dissemination. Therefore, ensuring inclusivity within these spaces is essential to advancing equitable learning outcomes. UNESCO (2020) affirms that inclusive educational environments are those that identify and remove barriers to learning while promoting access and participation for all students.

For visually impaired users, inclusive services often include specialised materials such as braille books, screen readers, DAISY books, audiobooks, tactile graphics, and accessible digital databases (Alabi & Mutula, 2020). Access, in library and information science, refers to the right and ability of users to locate, retrieve, and utilise information resources. For visually impaired users, accessibility encompasses both the physical

and technological adaptations required to engage with content effectively (Ailakhu, 2022). This includes availability of assistive technologies, accessible formats of information, trained staff, and barrier-free environments. Accessibility is also influenced by usability. A resource may be present but rendered inaccessible due to poor design, lack of user support, or absence of necessary assistive tools. Therefore, effective inclusive service delivery relies not only on resource acquisition but on integrated support systems, staff competencies, and continuous evaluation of user needs

The discourse on inclusive library services has garnered increasing attention across scholarly literature, reflecting a growing concern for the equitable inclusion of visually impaired users in academic environments. In Nigeria and beyond, researchers have explored the availability, accessibility, and challenges associated with library services for users with visual impairments, exposing critical gaps and pointing towards urgent reform. Williams-Ilemobola and Unegbu (2021) examined the use and satisfaction of library services among physically challenged individuals in federal universities in South-West Nigeria. Their study underscored a recurrent issue: the inadequacy of relevant materials and the absence of up-to-date books and journals. These challenges significantly limit the ability of physically challenged users to access and utilise information resources effectively, resulting in diminished academic engagement and satisfaction.

Horsefall and Opara (2023) extended this line of inquiry by investigating the availability of information resources specifically for visually impaired students across 20 university libraries in Nigeria. Adopting a descriptive survey design, the researchers employed a self-constructed online questionnaire distributed to librarians, yielding 40 valid responses. Their findings revealed a troubling scarcity of inclusive resources for visually impaired users, indicating a systemic shortfall in supporting inclusive education. The study concluded that the integration of such resources is critical not only for user satisfaction but also for enhancing librarians' competencies in delivering inclusive services. Similarly, Onifade and Babarinde (2020) focused their study on the Oyo State School for the Blind in Ogbomoso, Nigeria, assessing the provision of library resources and services to visually impaired students. Their research painted a stark picture: essential materials such as large print books, playback machines, talking books, tape recorders, screen readers, and audio-descriptive videos were either absent or grossly underprovided. This lack of resources fundamentally hindered the educational experience and autonomy of the students involved.

In Iran, Sedighi, Isfandyari-Moghaddam, and Zarei (2020) explored user interface criteria of digital library services for the blind and visually impaired from the viewpoint of blind digital librarians themselves. Through a structured questionnaire, they identified “different formats of library resources” as the most valued feature, while the “ability to organise the screen” received the lowest rating. This study highlights the critical role of interface usability in shaping the accessibility experience of digital libraries.

Accessibility remains a focal point of empirical investigation. Phukubje and Ngoepe (2017) studied the ease of use and access to library services for students with disabilities at the University of Limpopo in South Africa. Employing surveys, interviews, and observations based on the IFLA checklist, they found that, despite the existence of a special library unit aligned with international best practices, user satisfaction remained low. The main impediments included limited conversion of materials into

accessible formats and insufficient human resources, with only one librarian managing the entire unit. Kwafoa (2019) provided further insight from Ghana, where the infrastructural readiness of academic libraries for visually impaired students in public universities was evaluated. Combining survey and case study methodologies, the study included visually impaired students, their association leaders, and academic librarians. Results showed that most library buildings were not disability-friendly, forcing visually impaired students to rely heavily on sighted peers for navigation and access—thereby undermining their independence and right to self-guided learning. Kiruki (2021) investigates the usability and accessibility of library websites for students with physical and visual impairments. The study used a mixed-methods approach using a survey research design. According to the study's findings, every library has a website. However, neither the websites nor the information they included were tailored to people with impairments. The layout of the website also presented a number of accessibility issues. The investigation came to the conclusion that public university libraries' websites were inaccessible to and ineffective for use by people with impairments.

The usability of inclusive materials, the competence of library personnel, and the proper functioning of adaptive technologies are all critical to delivering effective inclusive services (Obim & Akpokurerie, 2022). Librarians are pivotal in this process not only in acquiring and managing accessible resources but also in providing orientation, designing inclusive services, and fostering a welcoming environment (Ezeabasili & Umeji, 2021). Countries like South Africa and Australia have made notable strides in enhancing inclusive library services for visually impaired users, providing useful benchmarks for best practices. Phukubje and Ngoepe (2016) in South Africa, for example, highlighted the importance of a dedicated service unit for visually impaired students. However, despite this, students expressed dissatisfaction due to limited accessible materials and understaffing. Similarly, in Australia, Mrva-Montoya, Kaeding, and Chen (2025) identified barriers such as gaps in staff expertise, insufficient funding, and a lack of clear demand from the print-disabled community. These challenges emphasize the importance of investing in resources and staff competence to meet the needs of visually impaired users effectively.

Undoubtedly, academic libraries in Nigeria still face significant challenges in this light. Osadebe, Onuigbo and Ewa (2019) and , Abdusalam, Aina, Issa and Fajonyomi (2023) found that insufficient funding, weak institutional support, inadequate infrastructure, and limited staff training hinder the provision of inclusive services. Although there are national inclusive education policies, most university libraries lack the necessary infrastructure, technologies, and expertise to cater to visually impaired students adequately. Addressing this gap is essential for strengthening inclusive education frameworks in Nigerian universities. It is against this background that the present study was conceived. The study aims to investigate the types of information resources available to visually impaired users, determine the level of access they have to those resources and the challenges they encounter in using library facilities in selected Nigerian university libraries. The findings are intended to inform strategies that will enhance the responsiveness of university libraries to the needs of all learners and contribute to national and global educational development goals.

Statement of Problem

University libraries are established to support teaching, learning, and research by ensuring equitable access to information resources for all students. For visually impaired students, this access is particularly crucial for academic success, promoting independence, and enabling full participation in university life. While some university libraries may possess accessible

collections such as braille texts, large print materials, and digital formats compatible with assistive technologies the actual usability and integration of these resources remain unclear. A significant gap exists between the availability of inclusive information resources and their effective accessibility and utilisation by visually impaired users. The crux of the problem lies in the limited understanding of how well university libraries in North central Nigeria are meeting the specific information needs of this user group. This study therefore seeks to examine the extent of availability and accessibility of information resources for visually impaired users, assess the quality of service delivery by librarians, and identify the key challenges faced by university libraries in supporting inclusive access to information.

Purpose of the Study

The main aim of the study is to investigate the availability and accessibility of inclusive library services in supporting visually impaired users' access to information resources in selected Nigerian university libraries. The Specific objectives are to:

1. examine the types of information resources available to visually impaired users in selected university libraries.
2. Find out the level of accessibility of available library resources for visually impaired user in selected university libraries.
3. To examine the relationship between the availability and accessibility of information resources for visually impaired users in university libraries in in selected university libraries.
4. identify the challenges faced by university libraries in providing inclusive services and resources to visually impaired users in selected university libraries.

Research Questions

The following questions guided the conduct of this study:

1. What types of information resources are available to visually impaired users in selected university libraries?
2. To what extent are the available library resources accessible to visually impaired users in selected university libraries ?
3. What is the relationship between the availability and accessibility of information resources for visually impaired users in university libraries in selected university libraries ?
4. What are the major challenges faced by university libraries in providing inclusive services and resources for visually impaired users in selected university libraries ?

Methodology

This study employed a descriptive survey research design to examine the availability, accessibility, and challenges associated with inclusive information resources for visually impaired users in university libraries across North Central Nigeria. The descriptive survey research design was suitable for gathering quantifiable data and understanding current practices without manipulating variables. Six university libraries were purposively selected based on their enrolment of visually impaired students and institutional efforts toward inclusive education. The study population comprised library staff across. Six universities, University of Abuja, University of Jos, Federal University

of Technology Minna, Kogi State University, Federal University of Lafia, and Nasarawa State University, from which a representative sample of 350 was selected using simple random sampling. Data were collected using a structured questionnaire developed from the research objectives and literature review. The instrument included closed-ended and Likert-scale items assessing the availability, accessibility, and challenges related to inclusive resources. It was validated by experts and pilot-tested in a university not included in the main study. Responses were rated on a four-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree) and analysed using descriptive statistics such as frequencies and percentages to identify patterns. Ethical standards were observed, including informed consent, confidentiality, and voluntary participation.

Findings

This section presents the findings from data gathering and analysis in response to the research objectives.

Table 4.3: Availability of information resources visually impaired users (N=310)

Library Resources	M	S.D	Rank	Decision
Internet facilities	0.98	0.008	1 st	Accepted
Computers for library patrons	0.92	0.016	2 nd	Accepted
Talking book	0.12	0.018	17 th	Rejected
Magnifier	0.17	0.021	9 th	Rejected
Recorded catalogue	0.09	0.017	21 th	Rejected
Audio books	0.14	0.020	12 th	Rejected
Braille encyclopedia	0.11	0.018	18 th	Rejected
Ear phones	0.12	0.018	15 th	Rejected
Braille textbook	0.11	0.018	19 th	Rejected
Braille journals	0.14	0.020	13 th	Rejected
Braille map/atlas	0.16	0.021	11 th	Rejected
Microphones	0.22	0.024	5 th	Rejected
Listening room	0.23	0.024	4 th	Accepted
Private study areas	0.19	0.022	8 th	Rejected
Audio dictionary	0.24	0.024	3 rd	Accepted
Talking calculator	0.20	0.023	7 th	Rejected
Periodicals in audio formats	0.12	0.018	20 th	Rejected
Anglo-American Cataloguing Rule 2 (AACR2)	0.12	0.018	16 th	Rejected
Library of Congress Cataloguing Scheme	0.16	0.021	10 th	Rejected
Assistive devices	0.12	0.019	14 th	Rejected
CD shelve	0.22	0.0245	6 th	Rejected

Data in Table 4.3 presents responses on the availability of information resources for visually impaired users in university libraries. The results show that internet facilities (0.98) and computers for library patrons (0.92) ranked 1st and 2nd respectively, indicating that these are the most available resources and were accepted as adequately provided. Also accepted were audio dictionary (0.24) and listening rooms (0.23), suggesting that a few institutions have made modest efforts towards inclusiveness. On the other hand, the majority of assistive resources were found to be largely unavailable. Recorded catalogue (0.09), periodicals in audio formats (0.12),

and braille textbooks (0.11) were among the least available resources. These findings point to a substantial gap in the provision of specialised inclusive resources for visually impaired users in the libraries surveyed.

Table 4.4: Accessibility of information resources to visually impaired users (N=310)

	M	S.D	Rank	Decision
Accessibility of Library Resources				
Internet facilities	2.21	0.98	2 nd	Accepted
Computers for library patrons	2.12	0.78	4 th	Accepted
Talking book	1.93	0.86	10 th	Accepted
Magnifier	1.95	0.85	8 th	Accepted
Recorded catalogue	1.94	0.95	9 th	Accepted
Audio books	2.12	0.96	5 th	Accepted
Braille encyclopedia	1.97	1.09	7 th	Accepted
Ear phones	1.70	0.97	17 th	Rejected
Braille textbook	1.72	0.85	16 th	Rejected
Braille journals	1.65	0.96	19 th	Rejected
Braille map/atlas	1.77	0.81	14 th	Rejected
Microphones	1.94	0.90	9 th	Accepted
Listening room	2.27	0.90	1 st	Accepted
Private study areas	1.92	0.87	11 th	Accepted
Audio dictionary	1.91	0.99	12 th	Accepted
Talking calculator	1.75	0.74	15 th	Rejected
Periodicals in audio formats	1.74	1.00	13 th	Rejected
Anglo-American Cataloguing Rule 2 (AACR2)	1.99	0.87	6 th	Accepted
Library of Congress Cataloguing Scheme	1.56	0.77	21 st	Rejected
Assistive devices	1.67	0.81	18 th	Rejected
CD shelve	1.74	0.80	13 th	Rejected

Data in Table 4.4 provides insight into the accessibility of library resources for visually impaired users. Findings indicate that listening rooms (2.27) and internet facilities (2.21) ranked 1st and 2nd respectively, suggesting they are the most accessible resources in the libraries surveyed. Other resources found to be accessible include computers for library patrons (2.12), audio books (2.12), and AACR2 (1.99). Despite this, a significant portion of inclusive resources were not easily accessible to visually impaired users. Resources such as the Library of Congress Cataloguing Scheme (1.56), braille journals (1.65), and assistive devices (1.67) were among the least accessible. These results suggest that while basic digital tools are relatively accessible, there is still a considerable gap in access to specialised formats and assistive aids.

Table 4.6: Challenges of library service delivery to visually impaired users (N=310)

	M	S.D	Rank	Decision
Items				
Inadequate building facilities and physical infrastructure	3.10	0.89	5 th	Accepted
Absence of automatic doors for easier access	2.10	0.94	10 th	Accepted

Limited financial and human resources	3.05	0.92	7 th	Accepted
Insufficient assistive technology and adaptive equipment.	3.11	0.83	4 th	Accepted
Inadequate funding for library services and resources	3.20	0.76	2 nd	Accepted
Absence of trained personnel knowledgeable in assistive services	3.00	0.83	8 th	Rejected
Availability of outdated resources	3.36	0.85	1 st	Accepted
Erratic power supply	3.15	0.73	3 rd	Accepted
Inadequate user skills and training for visually impaired students	2.95	0.75	9 th	Rejected
General lack of support resources in libraries	3.11	0.89	4 th	Accepted

Table 4.6 indicates the challenges of library service delivery to visually impaired users. The most reported challenge was the availability of outdated resources (3.36), followed by inadequate funding for library services and resources (3.20), erratic power supply (3.15), and insufficient assistive technology and adaptive equipment (3.11). Others include general lack of support resources in libraries (3.11), inadequate building facilities and physical infrastructure (3.10), and limited financial and human resources (3.05). Least rated were absence of trained personnel knowledgeable in assistive services (3.00), inadequate user skills and training for visually impaired students (2.95), and absence of automatic doors for easier access (2.10).

Table 7: Relationship between the availability and the accessibility of information resources for visually impaired users

Variables	Mean	Std. Deviation	N	r	p.value	Rmk
Availability of Information Resources	.2192	.25920	310	.051	.474	Not Sig
Accessibility of Information Resources	1.8986	.25463				

Table 7 shows the relationship between the availability and accessibility of information resources for visually impaired users. The Pearson correlation coefficient ($r = .051$) with a p-value of .474 indicates a very weak and statistically non-significant relationship between the availability and accessibility of resources. This suggests that the presence of information resources does not necessarily translate to their accessibility for visually impaired users in the studied university libraries.

Discussion of Findings

The findings of this study reveal a notable gap in the availability and accessibility of information resources for visually impaired users in university libraries across North Central Nigeria. While basic resources such as internet facilities and computers for library patrons were found to be relatively accessible, more specialized materials like Braille books, talking books, and magnifiers were largely unavailable or insufficiently provided. This reflects the challenges highlighted in previous studies, such as those by Osadebe, Onuigbo, and Ewa (2019), and Onifade and Babarinde (2020), who emphasized the increasing reliance on digital tools to enhance accessibility. Despite

the availability of general resources, specialized materials required for effective learning and research for visually impaired students, such as Braille textbooks, recorded catalogues, and talking calculators, were largely absent. These findings echo Abdusalam et al. (2023), who observed similar deficiencies in library services for visually impaired users, further highlighting the pressing need for universities to bridge the gap in providing comprehensive resources.

In terms of accessibility, while general resources like internet facilities were accessible, assistive devices and specialized services, such as Braille journals and talking calculators, were less so. The study found that the mere availability of resources did not guarantee accessibility, as physical infrastructure, staff training, and the lack of awareness about available services were significant barriers. This supports the conclusions drawn by Aderemi et al. (2020), who noted that accessibility is influenced not only by the availability of resources but also by factors such as staff competence and institutional commitment to inclusive education. Furthermore, the statistical analysis ($r = 0.051$, $p = 0.474$) indicated no significant correlation between the availability and accessibility of resources, underscoring that having resources available does not automatically ensure their accessibility. These findings are consistent with the work of Phukubje and Ngoepe (2016), who noted that the physical presence of resources alone is insufficient to meet the needs of visually impaired students without proper infrastructure, trained personnel, and awareness. Therefore, the study calls for universities to prioritize both the availability and accessibility of specialized resources, invest in staff training, and improve the physical and technological infrastructure to create a more inclusive library environment.

Conclusion

This study examined the availability, accessibility, and challenges of library resources for visually impaired users in university libraries across North Central Nigeria. The findings reveal that while some general resources, such as internet access and computers for library patrons, are available, there are substantial gaps in specialized resources such as Braille materials, talking books, and magnifiers. Additionally, the study highlights challenges related to the accessibility of these resources, with a significant number of visually impaired students unable to fully utilize available materials due to infrastructure and staff-related issues. The lack of trained personnel in assistive services, combined with outdated resources, further compounds these difficulties, limiting the academic opportunities for visually impaired users. These findings align with similar studies conducted in other regions, where infrastructural and resource-based challenges continue to hinder effective service delivery to visually impaired students.

Recommendations

In light of these findings, several recommendations are proposed to enhance library services for visually impaired users in Nigerian universities.

- i. University libraries should prioritize the provision of specialized services such as Braille materials, talking books, and other assistive technologies to ensure equitable access to information.

- ii. Libraries should invest in modern technologies, including screen readers, Braille embossers, and text-to-speech software, to improve the accessibility of digital resources.
- iii. Physical infrastructure of university libraries should be upgraded to include accessible features, such as automatic doors, ramps, and designated study areas, to facilitate easier access for visually impaired students.
- iv. Training programs should be implemented for library staff to enhance their knowledge and competence in assisting visually impaired users.

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