

PERCIEVED ACCESSIBILITY AND USAGE OF INFORMATION RESOURCES BY SPECIAL NEEDS STUDENTS FOR SUSTAINABLE DEVELOPMENT IN UNIVERSITIES IN NORTH-CENTRAL NIGERIA

By

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Abstract

This study investigated perceived accessibility and usage of information resources by special needs students for sustainable development in universities in North-central Nigeria. Descriptive research design was used and the population of the study comprises 162 special needs students of public universities located in North-central geopolitical zone. The total population was used as it is small to manage. Self-structured questionnaire was used for data collection. The study revealed that provision of equal access to building infrastructures, training opportunities, involvement of students in some managerial activities, maintaining statistical data and provision of equal access to information resources are factors for sustainable development in the universities with average weighted means of 3.45. It further indicated that there was a fairly positive perception of accessibility and usage of information resources by special needs students on sustainable development in universities with the average weighted mean of 2.43. The study identified challenges related to negative attitudes of staff, inadequate skills of both staff and special needs students and institutional issues, hence it was so significant with average weighted means of 2.71. The study recommended training of library staff, awareness campaign on the available information resources, Orientation of Special Needs Students, provision of essential resources, sound architectural designs and overhauls of the institutions' infrastructures to be accessible to all students, regardless of their abilities.

Key Words: Accessibility, Information resources, Special Needs Students Sustainable Development, Usage.

Introduction

Libraries are broadly divided into four types: Academic, Special, Public and National Libraries. Academic Libraries exist to support the academic activities of their parent institutions. According to Ashikuzzaman (2016) an academic library is the library which is attached to academic institutions like schools, colleges, and universities. Those libraries attached to the universities are referred to as University Libraries. They are meant to support the academic activities of the university. Provision of access to information resources is one of the fundamental functions of the university libraries. All the avalanche information resources in the university library will mean nothing if access is not granted. Therefore, all the university students regardless of level, status and stature are expected to access and use the required information resources available in the University Library. Onye (2016) define accessibility as the extent to which library user obtains services use or retrieves information from the library either in print or electronically. Therefore, accessibility is a means by which users can identify, locate, retrieve or use library resources and services.

If the information resources are not well organized by the library, access could not be made. Agyeiku (2021) asserts that learning materials might be available, that is the library has acquired them, but inaccessible due to poor cataloguing, poor arrangement of resources on shelves, poor labeling of book resources, and in a case of electronic resource, inaccessibility can be caused by electricity outages, low bandwidth and lack of information literacy skills. Therefore, access to information resources involve to remove barriers that might impede users, including the special needs students in gaining access to information resources for sustainable development in universities. However, one of the most challenged sets of library users are the ‘special needs’ otherwise known as persons with

disabilities (PWD). Persons with disabilities are categories of people with defect or abnormality either structural or psychologically to the extent that it is easily noticed and hinders the individual from carrying out daily-activities without the assistance from others.

Statement of the Problem

Sustainable development of any society is not feasible without an inclusive qualitative education system. The education system is not viable without the library which provides relevant information to users including those with special needs. Naturally, the percentage of persons living with impairments is growing as world's population increases. Over 80 million people living in Africa has one form of disability or the other (United Nations Economic Commission for Africa, 2016). Taking into account the ever-increasing number of persons living with disabilities in tertiary institutions like universities, it is crucial that practical measures are taken by universities to cater for their needs by making provisions for them to gain access to inclusive meaningful information for their self-actualization and sustainability. It is against this backdrop the researchers deemed it fit to investigate the accessibility of information resources by special needs students for sustainable development in universities in north-central Nigeria.

Research Questions

1. What are the perceived factors of sustainable development for special needs students in universities in North-central Nigeria?
2. What is the perceived accessibility and usage of information resources in formats that are accessible and useable by special needs students on sustainable development in universities in North-central Nigeria?

3. What are the challenges of accessibility and usage of information resources in formats that are accessible and useable by special needs students for sustainable development in universities?

Literature Review

Accessibility generally means the practice of making information, activities, or environments sensible, meaningful, and usable for as many people as possible including users with special needs. Nkiko *et al.* (2020) investigated the accessibility of library facilities by wheelchair users in four different kinds of libraries in Lagos State, Nigeria. The researchers found that even though people on wheelchair are supposed to be among the users of library resources and services, the facilities and resources in Nigerian libraries for this group are found to be highly unsatisfactory. Similarly, Ayoungh *et al.* (2020) investigated Access to library services and facilities by persons with disability: insights from academic libraries in the Upper East Region of Ghana. The target populations for the study were persons with diverse forms of disability, head librarians, special librarians and library staff. The researchers found that though, most library staff opined that they were aware of disability issues, they indicated that they had no knowledge of some of the services librarians could offer, alternative formats and assistive technologies for PWDs.

Information Resources are the information bearing items that are both in print and non-print format. According to Akanwa (2016), information resources in the library are categorized into three main headings: Books, Audio visuals or Multisensory materials, and Electronic Information Resources. The print resources are known as book resources or book materials; the non-print resources are known as audio visuals; while electronic information resources are information resources that are stored electronically and can be

accessed and retrieved through electronic systems and networks (Akanwa & Udo-Anyanwu, 2017). These information resources are made available in the library for use by all categories of users including those with special needs.

In the same direction, Anaobi and Lawal (2021) asserts that librarians within university libraries have the responsibility of providing exceptional services by performing a variety of tasks such as information analysis and interpretation, packaging and dissemination of information among other things. Access to information resources for all can be made possible through use of assistive tools and technologies. The commonly used technological devices include braille books, talking books, playback machines, audiotapes and screen readers (Okonoko and Ufuoma, 2023). The term "assistive technology" according to Ezeala (2023) has usually been applied to computer hardware and software and electronic devices. Thus, constitutes chunk of information resources by the library. The Assistive Technology Industry Association classifies assistive technologies as any item or piece of hardware, software, or product system that can increase, maintain, or improve the functional capabilities of persons with disabilities (Idiodi and Urhiewhu, 2023).

The concept '**special needs person**' is a generic term connoting people with disabilities. These group of persons include the visually, hearing, speech, physical and health impaired, intellectually impaired, learning disabled, and emotional/ behavioural disordered (Omiegbe and Ezehi, 2023). Thus, the term 'special needs' could be used interchangeably with persons with disabilities (PWD), physically challenged or handicapped. As such, the term 'special needs students could mean the umbrella term for students with physically or mentally challenged by medical, spiritual and social effects. Ibrahim (2019) defined 'special needs' as those who deviate from the ordinary person such that they require special attention, to areas that could make life more meaningful and worth living. Uzor

and Ugah (2023) asserts that special needs person includes all persons who, for whatever reasons, are failing to benefit from their right. Sequel to the above definitions, special needs students are students who have the ability and the intelligence to effectively performed but because of impairment, are denied the required services to perform well. The impairment that befalls them may require assistant in form of device or fellow human being, making their needs special as the name suggests, special needs students.

University Libraries are one of the types of Academic Libraries. Academic libraries are those libraries established to serve universities, polytechnics, colleges, schools and all other institutions forming part of, or associated with educational institution (Nwachukwu, 2017). Those academic libraries that are attached to serve universities are refers to as University Libraries. Ashikuzzaman (2023) define university library as a specialized facility within a university or college that serves the academic and research needs of its students, faculty, and staff. Consequentially, university libraries are responsible for provision, organization, preservation and dissemination of information to university students without discrimination.

Sustainable Development is the state of development that is lasting, stable and continuous towards improving the life of man on the planet, earth. Nkata (2020) asserts that sustainable development is the capacity to improve the quality of human life while living within carrying capacity of supporting the ecosystem with the aim to improve the quality of human life and enable people to realize their potentials, and live lives of dignity and fulfillment. Sustainable development in universities therefore is the improvement on equal access to learning, research activities and social interaction amongst students regardless of their abilities.

Methodology

Descriptive research design was adopted for the study. The population comprises 178 special needs students, the mobility and visually impaired in 13 public universities in North-central Nigeria. Complete enumeration was used because of the manageable size of population. The instrument for data collection was structured questionnaire. The researchers used descriptive statistics of frequency counts, percentages and mean to provide answer to research questions applying the Statistical Package of Social Science (SPSS) version 24.

Results and Discussion

Research question 1: What are the perceived factors of sustainable development for special needs students in universities?**Table 1:**

Perceived factors of sustainable development for special needs students in universities

S/N	Item Statements	SA (4)		A (3)		D (2)		SD (1)		N	FX	Mean	Decision
		Fq	%	Fq	%	Fq	%	Fq	%				
1	Provision of equal access to building infrastructures in universities	155	95.7	7	4.3	0	0	0	0	162	641	3.96	High perception
2	Provision of equal access to information resources in universities	94	58.0	41	25.3	27	16.7	0	0	162	553	3.41	Low perception
3	Provision of assistive technologies to promote accessibility and use of facilities or information resources by special needs students in universities	109	67.3	7	4.3	30	18.5	16	9.9	162	533	3.29	Low perception
4	Provision of social amenities to all categories of students in universities	108	66.7	5	3.1	36	22.2	13	8.0	162	532	3.28	Low perception
5	Updating curriculum for inclusive educational system in universities	110	67.9	3	1.9	49	30.2	0	0	162	547	3.38	Low perception
6	Provision of a balanced library collection for special needs students in universities	113	69.8	3	1.9	26	16.0	20	12.3	162	533	3.29	Low perception

7	Training opportunities for the staff to promote the provision of information resources and services for special needs students in universities	115	71.0	47	29.0	0	0	0	0	162	601	3.71	High perception
8	Continuous orientation for special needs students on how to access and use information resources and services in universities	102	63.0	35	21.6	25	15.4	0	0	162	563	3.48	High perception
9	Involvement of students in some managerial activities to promote management and students' relationship	108	66.7	54	33.3	0	0	0	0	162	594	3.67	High perception
10	Maintaining statistical data collection and monitoring to ensure accountability and implementation of sustainable developmental initiatives in universities	99	61.1	38	23.5	25	15.4	0	0	162	560	3.46	High perception
11	Strict implementation of policies for students with special needs to promote freedom of speech, association and pursuit for knowledge	108	66.7	5	3.1	31	19.1	18	11.1	162	527	3.25	Low perception
12	Peaceful co-existence and harmonious living without discrimination of any kind in universities	110	67.9	5	3.1	28	17.3	19	11.7	162	530	3.27	Low perception

Decision: Average Weighted Mean 3.45

Table 1 revealed that provision of equal access to building infrastructures; training opportunities; involvement of students in some managerial activities; continuous orientation; maintaining statistical data and provision of equal access to information resources are factors for sustainable development of special needs students in universities in North-central Nigeria with average weighted mean of 3.45. The findings agree with that of Potnis and Mallary (2021) who reported that the studied academic libraries belong to campus-wide systems where information technology services, disability support services, and university administrators, among other units collaborate to provide information services to disabled patrons. The findings also tally with that of Ndiweni *et al.* (2022) who found that great effort has been made to provide inclusive library services to students with disabilities.

Research Question 2: What is the perceived accessibility and usage of information resources in formats that are accessible and useable by special needs students on sustainable development in universities in North-central Nigeria?

Table 2: perceived accessibility and usage of information resources in formats that are accessible and useable by special needs students on sustainable development in universities

SN	Item Statements	VHI (4)		HI (3)		LI (2)		VLI (1)		N	FX	Mean	Decision
		Fq	%	Fq	%	Fq	%	Fq	%				
1	Table and keyboard tray that is adjustable; adaptive seating influence access to building infrastructures in universities	49	30.2	40	24.7	37	22.8	36	22.2	162	426	2.63	High influence
2	Special fitted lift to move persons inside influence access to building infrastructures in universities	85	52.5	38	23.5	3	1.9	36	22.2	162	496	3.06	High influence
3	Automatic-opening external and internal doors between the foyer and access gates; Adaptive switches influence access to infrastructures in universities	3	1.9	75	46.3	24	14.8	60	37.0	162	345	2.13	Low influence
4	Lift with several disabled friendly features such as additional buttons positioned for someone in a wheelchair influence access to building infrastructures in universities	4	2.5	3	23.5	24	14.8	96	59.3	162	274	1.69	Low influence
5	Wheelchairs, crutches; walker influence access to building infrastructures in universities	121	74.7	5	3.1	0	0	36	22.2	162	535	3.30	High influence
6	Access Ramps; Safety rails influence access to building infrastructures in universities	110	67.9	6	3.7	41	25.3	5	3.1	162	545	3.36	High influence
7	Braille books; perkins braille influence access to information resources in universities	108	66.7	32	19.8	13	8.0	9	5.6	162	563	3.48	High influence
8	Taped books influence access to information resources in universities	49	30.2	0	0	75	46.3	38	23.5	162	384	2.37	Low influence
9	Screen reader (Screen magnifying) influence accessibility of information resources by special needs students in universities	17	10.5	0	0	71	43.8	74	45.7	162	284	1.75	Low influence
10	Text enhancement software influence accessibility of information resources by special needs students in universities	0	0	0	0	39	24.1	123	75.9	162	201	1.24	Low influence
11	Teletouch influence accessibility of information resources by special needs students in universities	4	2.5	2	1.2	55	34.0	101	62.3	162	233	1.44	Low influence
12	Digicassete influence accessibility of information resources by special needs students in universities	3	1.9	3	1.9	60	37.0	96	59.3	162	237	1.46	Low influence
13	Talking calculator influence accessibility of information resources by special needs students in universities	72	44.4	0	0	25	15.4	65	40.1	162	403	2.49	High influence
14	Talking books influence accessibility of information resources by special needs students in universities	102	63.0	0	0	19	11.7	41	25.3	162	487	3.01	High influence
15	Synthetic text-to-speech software; iOS software influence accessibility of information resources by special needs students in universities	15	9.3	10	6.2	66	40.7	71	43.8	162	231	1.80	Low influence
16	Video or DVD books influence accessibility of information resources by special needs students in universities	78	48.1	38	23.5	20	12.3	26	16	162	492	3.04	High influence
17	Digital audio information system (DAISY) influences accessibility of information resources by special needs students in universities	91	56.2	3	1.9		29.6	20	12.3	162	489	3.02	High influence

Average Weighted Mean 2.43

Table 2 shows the average weighted mean of 2.43 which indicated fairly positive accessibility. The findings were in conformity with that of Eligi and Mwantimwa (2017) whose study on ICT accessibility and usability to support learning of visually-impaired students found that ICTs support innovative learning, encourage independent learning, and promote participatory and collaborative learning. The findings also corroborates with that of Singh (2022) who revealed that most of the law faculties in the universities' investigated have well equipped facilities with assistive technologies accessible for persons with disability.

Research Question 3: What are the challenges to accessibility and usage of information resources in formats that are accessible and useable by special needs students for sustainable development in universities? **Table 3: Challenges to accessibility and usage of information resources in formats that are accessible and useable by special needs students for sustainable development in universities**

S/N	Item Statements	SA (4)		A (3)		D(2)		SD (1)		N	FX	Mean	Decision
1	The information resources are inadequate in format that are accessible and usable by special needs students in universities	95	58.6	29	17.9	10	6.2	28	17.3	162	515	3.18	High Perceived challenge
2	Lack of awareness on the availability of information resources in format that are accessible and usable by special needs students in universities	73	45.1	72	44.4	10	6.2	7	4.3	162	535	3.30	High Perceived challenge
3	Inaccessible infrastructure by special needs students is challenging	64	39.5	67	41.4	0	0	31	19.1	162	488	3.01	High Perceived challenge
4	Inadequate knowledge on how to access and use the information resources in universities	11	6.8	28	17.3	40	24.7	83	51.2	162	291	1.80	Low Perceived challenge

5	Inadequacy of programmes for training special needs students on accessibility and use of information resources	62	38.3	76	46.9	20	12.3	4	2.5	162	520	3.21	High Perceived challenge
6	Negative attitudes by library staff such as discrimination, deprivation and misconceptions, about disabilities	116	71.6	46	28.4	0	0	0	0	162	602	3.72	High Perceived challenge
7	Special needs students are always stereotyped that: People with disabilities are to be feared. They have always been associated with witchcraft.	115	71.0	31	19.1	9	5.6	7	4.3	162	578	3.57	High Perceived challenge
8	Library staff expects that special needs students should beg for any library service they require	23	14.2	16	9.9	9	5.6	114	70.4	162	272	1.68	Low Perceived challenge
9	Lack of supporting legislation/successful policy implementation on special needs students	30	18.5	0	0	3	1.9	129	79.6	162	255	1.57	Low Perceived challenge
Average Weighted Mean = 2.78													

Table 3 revealed enormous challenges affecting accessibility and usage of information resources by special needs students for sustainable development in universities with the average weighted mean of 2.78. The findings confirm with that of Ekom-Idorenyin (2023) that misconceptions result in negative attitudes which further heightens the propensity for stereotyping of people with disabilities, resulting in stigmatization, discrimination and deprivation. The observed findings underscore the multifaceted nature of challenges facing the accessibility and usage of information resources. The overall consensus suggests that these barriers significantly hinder the accessibility and usability of information resources for special needs students, impacting their educational development and sustainability in universities.

Recommendations

1. Universities should prioritize capacity building for staff. The training programmes should aim to address operational issues, dispel myths and misconceptions surrounding disabilities, and foster a culture of inclusivity and acceptance within the university community
2. Universities should design and implement inclusive awareness campaigns. for available resources as well as their knowhow.
3. University libraries should inculcate the policy of regular orientation programmes for special needs students on how to operate the available assistive technology devices
4. Universities should devise and execute a comprehensive action plan, targeting the provision of essential resources tailored to meet the diverse needs of students with mobility and visual impairments.

5. Efforts should be made by universities to address infrastructural issue like architectural designs and reconstruction of university library buildings to conform with acceptable standard for easy access by special needs students.

Conclusion

This study without doubt has led to the establishment of facts as regards the accessibility of information resources by special needs students on sustainable development in universities. It highlights indicis for sustainable development as equal access to university resources, staff training and inclusivity; fairly positive perception of accessibility and challenges such as negative attitudes of staff, institutional issues, inadequate knowledge and skills for both staff and special needs students. This resonates with previous research that has highlighted similar challenges globally, emphasizing the urgent need for comprehensive reforms in both policy and practice to ensure equitable access to library resources for all students, regardless of their abilities.

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