CHALLENGES OF INFORMATION ACCESSIBILITY AND UTILISATION IN THE 21ST CENTURY: THE CASE OF DISADVANTAGED STUDENTS IN FEDERAL COLLEGE OF EDUCATION (SPECIAL), OYO, NIGERIA

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Abstract

This study investigated the challenges of information accessibility and information utilisation in the twenty-first century among Disadvantaged students in Federal College of Education (Special) Oyo, Nigeria. Descriptive survey research design was employed for the study while total enumeration method was used to select two hundred and twenty disadvantaged students. Two research questions were generated and answered. A self-designed structured questionnaire was used to gather data for the study. Data were analysed using frequency counts, simple percentages and Multiple Regression Analysis. The study established that information accessibility had a positive significant relationship with information use and it alsorevealed that negative attitude of members of library staff was the major barrier to information access and use by the students with disabilities. Based on the findings, it was recommended that institutional and public libraries should be made accessible to individuals with disabilities through the provision of necessary accessible resources and that government should ensure sufficient provision of information materials in alternative formats for the use of students with disabilities. Similarly, it was recommended that members of library staff should be trained on the effective and decent ways to handle disadvantaged students who want to use library facilities.

Keywords: Accessibility, disadvantaged, information, need, special, students, utilization.

Introduction

Information accessibility and information utilisation among the disadvantaged students in tertiary institutions in Nigeria are key areas that have not been given public prominence by scholars and researchers over the past few decades. Information is recognised as a powerful force in shaping the twenty-first century and in breaking the barriers to knowledge. It is the gateway to knowledge because it provides a basic condition forlife-long learning. Man's development and survival in modern day society depends on his ability to access and utilise his information needs for problem solving, planning and decision making.

Surprisingly, though everyone seems to know what information connotes, no one has been able to come up with an all-embracing definition of information. Muhammed (2011) described information as anything which adds to knowledge, ideas, skills and experience positively or negatively, and which assists a receiver to make a decision immediately or later. Popoola (2008) described information as that which reduces the users' level of uncertainty in a particular decision-making. On the other hand, Bitagi (2013) opined that information is news that comes to the receivers for the first time and which enables them to take action according to expectation.

As important as information is to everyone, it is very difficult to be accessed by individuals with varying forms of disability such as visual impairment, hearing impairment and mobility impairment amongst others despite the much-talked about technological advance. Lack of access to information daily confronts individuals with disabilities, severely limiting their opportunities for employment, education, entertainment or leisure and independence. Disability causes unspeakable personal challenges such as emotional disturbance, loneliness, depression, loss of confidence, self-doubt, restlessness and undue aggression to name just a few. Besides, it is an important factor alongside gender, race and caste that interacts to impoverish people and keep

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them poor. It has been established that many persons with disabilities face economic inequity, illiteracy, cultural isolation, and discrimination in education, employment and in the broad range of societal activities (American Library Association, 2017)

The World Health Organisation (WHO) stated that about 17% of the world population is disabled and that this number is likely to increase in the near future due to various factors. Similarly, the World Health Organisation (WHO) estimated the number of people with disabilities in Nigeria to be 19 million or 20% of the country's population. In contrast, Adamu (2009) claimed that the number must be much higher than that. Since there are only a few surveys that collect information to identify persons with disabilities in Nigeria, an accurate number is almost impossible. Nonetheless, the above statistics underscores the necessity to address the challenges encountered by this segment of the population.

Unquestionably, access to information and knowledge has become the defining characteristics of the modern day society because everyone needs sufficient information to participate effectively in societal activities. Disadvantaged students in tertiary institution face insurmountable problems when attempting to access information for their academic and other purposes. They are weighed down by time constraints, frustrated by non-existent reading materials in suitable format, hindered by lack of independence and discouraged by uncaring attitudes of others (Sehic and Tanackovic, 2009, 2013). Lack of access to information has long been recognized as a significant barrier to the effective integration of individuals with disabilities in society and a major source of frustration for them in their attempt to get information for everyday problem solving. Besides, access to information, in many cases, is based on informal social and political networks meaning that relatively powerless people such as individuals with disabilities do not have easy access to information that can help bring about a change in their situations.

Literature suggests that information accessibility is a key factor in information use. This view is borne out of the fact that no one uses information that he does not need or that is inaccessible. The concept of information use has diverse connotations. Cole (2008), for instance, described information use as the interpretation and codification of environmental stimuli whereby the human organism creates new and adapted knowledge structures. Uhegbu (2007) asserted that information use is the actual putting into appropriate use of acquired information. In the same vein, Savolainen (2009a) viewed information use as how people approach sources of information and adapt information available to them. Disadvantaged students use information for such purposes as seeking answers to problems, reducing uncertainty, bridging gaps, understanding (making sense) and coping with life. Chima and Nwokocha (2013) pointed out that every use of information is goal-oriented: it must aim at solving a problem or enhancing a better understanding of an already known situation. Disadvantaged students also need to access information to be sufficiently well-informed and to be able to participate fully as citizens; they need to know about their rights and entitlements. They need access to information about employment, health services as well as about coping skills, physical and economic survival. Similarly, they need access to information that will enable them to make rational choices as consumers and that will support them in their learning and in their leisure as well as information that would support their political consciousness as people with disabilities.

Accessibility generally is the degree to which a system is usable by a wide range of users as far as possible (Nwachukwu, *et al* 2014). Access to information, therefore, refers to all the provision and use of retrieval-based information services. Mathiesen (2014) opined that one has access to information when one has the freedom or opportunity to obtain, to make use of and to benefit from that information. The concept of information accessibility is very important specifically as it focuses on people with disabilities and their access to entities, often through the use of assistive devices such as screen readers, web browsers and other technological formats. It is one thing for

the information resources to be available and it is quite another thing entirely for it to be accessible. Whatever is available but not accessible is useless because it is only what is accessible that is useable. It is quite unflattering that everything from course materials, newspapers, magazines, and television programmes to the operation of personal computers and public terminals such as Automated Teller Machine (ATM), information Kiosk and household appliances are designed for the use of students or individuals without disabilities. This situation seriously negates the ability of students or persons with disabilities to access useful information and essential services to cope with challenges of modern complex life.

The problem of access to information by disadvantaged students emanates not only from the scarcity of information materials in alternative formats but it is also the result of the negative attitudes of members of society. Disadvantaged students need to access information through the utilization of a wide variety of formats and resources to be able to make sense of their learning. Adetoro (2011) reported that information materials for students with visual impairment, for instance, become useful only when they are transcribed into alternative formats. However, for information to be effectively accessible, it must first be properly organized because information organization enables information access and use through systematic user-centred description, categorization, storage, retrieval and preservation (Atinmo, 2012).

The ultimate purpose of using or utilizing information is to satisfy the seekers' needs. Because users' information needs are varied, their satisfaction amounts to a high level achievement for them. Users' satisfaction is influenced by the means of accessing information. Without good information communication channels, accessibility will be difficult and its utilization impaired. Therefore, effective channel of communication is paramount to the utilisation of information for users' satisfaction. Chima and Nwokocha (2013) asserted that the efficacy of the principle of information utilization is anchored on its ability to satisfy the needs of all seekers including those with disabilities.

Researches have shown that higher information accessibility leads to higher usage of information and higher perceptions of ease of use. In the setting of a news website, for example, the quality of information was found to have a positive effect on perceived usefulness. Individuals with disabilities have low information accessibility as well as limited access to the communication channels like bulletin boards and chat rooms, and thus reap few of the benefits that the channels bring. Apart from communication channels, information accessibility in other forms has also been found to be important. Access level has been observed to affect the choice and use of information system. Higher information accessibility through greater information access and proper organization should frustrate users less and lead to higher perception of ease of use.

Traditionally, access to information for disadvantaged students has largely been mediated by teachers, family members, friends, helpers, caregivers and non-governmental organisations as well as through the use of assistive devices such as radio, braille, large prints, tape recorder, talking books, audio cassettes, CCTV, text messages, relayed services, websites, CD, DVD and smart phones. However, the emergence of Information and Communication Technologies (ICTs) seems to have made information access and use a bit easier for persons with disabilities generally. ICTs include any common devices or applications such as radio, television, cellular phones, computers, satellite system as well as network hardware and software, and associated services. ICTs, when available and accessible, can serve as critical enablers that allow persons with disabilities to realize full and effective opportunities to participate on the basis of equality in all aspects of society and development (UN, 2012). In addition, ICTs can help persons with disabilities to have a quality access to information, knowledge and independent living. For effective ICTs accessibility and utilization, Disadvantaged students need to bear in mind the three

basic principles namely the ability to perceive the needed technologies, the ability to understand them and the ability to operate them (UN, 2012).

One obvious source from which disadvantaged students can access information for use is the library. The library is the heart of academic and research activities, and it plays an important role as a vehicle of formal and informal education by providing access to a collection that is wide enough to accommodate the interests of its diverse users. Beyond that, the library greases the wheels of knowledge by helping people to consult human records more easily and effectively using what they find to improve themselves and their communities. However, in Nigeria, many disadvantaged students in tertiary institutions have negative perception about library services because the information resources that are necessary for their reading, research and recreation are not often available.

An important construct that is often linked to information accessibility and information use is information seeking behaviour. Literature is replete with information seeking behaviour of the general population but not much is known about information seeking behaviour of individuals with disabilities. Information seeking behaviour is the consequence of a felt information need by a user who may then make demands upon formal and informal information sources or services to satisfy the need (Oketunji and Oketunji, 2016). It is concerned, among other aspects, with understanding how people seek and use information, and the channels they use to get information. Naturally, people differ in the ways they seek and use information as a result of different contexts, demographic characteristics, motivations, and source preference. In seeking and using accessible information, Disadvantaged students tend to put more value on the information quality and reliability than on the level of effort and time needed to find the information and adapt it for use (Sehic and Tanackovic, 2013).

The motivation for this study which was carried out in Federal college of Education (Special) Oyo arose from the fact that disadvantaged students represent a user group that has been largely understudied in information access literature, thus making it difficult for parents, teachers and scholars to understand their information needs and their information seeking behaviour. The study was guided by the following research questions:

Research Questions
1.   What is the relationship between information accessibility and information utilisation among students with disabilities?
2.   What are the barriers encountered by disadvantaged students in accessing information?

Methodology
The study employed descriptive survey research design. The population comprised one hundred and forty students with hearing impairment, seventy students with visual impairment and ten students with mobility impairment. Total enumeration method was used to select the participants.

Research Instrument
A self-designed structured questionnaire was used to collect data. The face and content validity of the instrument was determined with the help of some test construction experts. In addition, the instrument was subjected to the Cronbach's Alpha method of reliability measure through a pilot test to twenty (20) disadvantaged students outside the scope of the study to determine its reliability co-efficient. The co-efficient of 0.81 was obtained showing that the instrument was reliable.

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Data Collection and Analysis

The researchers engaged the services of two research assistants to help in administering the questionnaire to the participants in the study location. The data collected were analysed using frequency counts, simple percentages and Multiple Regression Analysis.

Results

Table 1: Significant relationship between information accessibility and information use

Variable	Mean	Std. Dev.	N	R	P	Remark
Information accessibility	18.818	3.335				
			220	.163*	.016	Sig.
Information use	14.090	3.137				

*Sig. at 0 .05 level

Table 1 above shows that there was a positive significant relationship between information accessibility and information use among disadvantaged students($r = .163*$, N = 220, p<.05).

Table 2: Barriers to information access by disadvantaged students in FCE Oyo

S/N	Barriers	SA	A	D	SD	Mean	S.D.
1	Negative attitudes of library staff members are a major problem.	195 / 88.6%	25 / 11.4%	0 / 0.0%	0 / 0.0%	3.45	.318
2	Scarcity of materials in alternative formats affects me negatively.	172 / 78.2%	36 / 16.4%	9 / 4.1%	3 / 1.4%	3.11	.608
3	Discriminatory attitudes of members of society hinder many disadvantaged students from accessing useful information.	146 / 66.4%	71 / 32.3%	3 / 1.4%	0 / 0.0%	3.11	.506
4	Physical accessibility to the library or school buildings is a key concern.	103 / 46.8%	102 / 46.4%	9 / 4.1%	6 / 2.7%	3.09	.694

The Table 2 above shows that the major barrier to information access by disadvantaged students was negative attitude of library staff members with mean of 3.45

Discussion of Findings

The findings revealed that there was a positive significant relationship between information accessibility and information use as shown in Table 1. This result supports the views of Mathiesen (2014) that one has access to information when one has the freedom or opportunity to obtain, to make use of and to benefit from that information. Discussion on information access often suggests that it depends not only on the availability of information but also on the capability of the individual to effectively use the information. However in order for the information to be accessible, it must be available, findable, reachable, comprehensible and useable. It was also found out that negative attitude of members of library staff was the major barrier to information access by disadvantaged students. This is supported by Eskay and Chima (2013) who noted that persons with disabilities are generally viewed as abnormal and are often excluded from the main stream of public services including library and information provision.

Conclusion and Recommendations

The current study contributed to extant literature by addressing the relationship between information accessibility and information use among disadvantaged students in FCE, Oyo, Nigeria. Important conclusions were drawn from the study. Information accessibility had positive relationship with information use. Overwhelming majority of the disadvantaged

students believed that negative attitude of members of library staff was the major barrier to their information access. Based on the findings of the study, the following recommendations were made: All institutional and public libraries should be made accessible to individuals with disabilities through the provision of necessary accessible resources; Members of library staff should be trained on the effective and decent ways to handle disadvantaged students who want to use library facilities; Members of society should be more accepting of challenges experienced by the individuals with disability and find a way of assisting them to access needed information; Government at different levels should ensure adequate stocks of information materials in electronic and alternative formats for all users with disabilities in all libraries.

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