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Accessibility of Educational Materials for Undergraduates with Visual Impairments: An Ongoing Study

Oluwafisayo Ilemobola Oke

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Oluwafisayo Oke

Bowling Green State University

Abstract

Persons with visual impairments in Nigeria are known for making demands for access to information that suit their reading interests (Adetoro 2014). The provision of such services is rendered by public libraries (Adetoro 2010; Atinmo 2007). However, public libraries are confronted with surmounting the challenge of high demands for alternative educational formats (Adetoro 2010). Much of the research that have been carried out relating to access of alternative educational materials have been focused on secondary school aged participants and older adults leaving out college age individuals. They also deployed quantitative methods of data collection which only show a numbered representation of participants. This research seeks to explore the lived experiences of a population that is not well represented in existing studies—college age students through semi-structured interviews.

Keywords: undergraduates with visual impairments, Nigeria, educational materials

Background to the Study

  The need to study how undergraduates access educational materials arose from the dearth in literature and research relating to this demographic of people. Existing research, both originating from Nigeria and international, tend to focus on children 0-15 years or older adults 40 years and older. Hence, not much data is available on individuals between the ages of 16-39. This is not necessarily surprising because African countries "were victims of exploitative and dehumanizing British colonialism" (Otoghile & Obakhedo, 2011 p. 132). Thus, Africa still grapples with the after effects of colonialism. In this paper, I have set out to examine disabilities in an African setting—this is further discussed in the Post-colonial theory section.

  Studying disabilities in Post-colonial Africa is pertinent because colonialism led to a change in the overall educational system that existed before the incursion of colonialists (Obiakor 2011). I hope to highlight the daily lives of students with visual impairments in a higher educational institution that was not necessarily designed to cater to their needs within an African country in which issues relating to accessibility is a relatively new discourse.

Post-colonial Framework

As stated earlier central to this study is the need for exploratory research situated within the worldview and lived experiences of persons with visual impairments. This is in tandem with Mertens (2008) who argues that it is of moral importance that the needs and lived experiences of local communities be attended to within a post-colonial perspective for transformation to take place. Also, Lincoln and Gonzalez (2008) have recommended the need to deploy educational research practices that are liberatory and democratic. Referring to the context of the United States, Lincoln and Gonzalez (2008) posit the necessity for Western scholars whose works do not take into cognizance populations of peoples that have been historically colonized, to reflect on and question their paradigms, assumptions and research practices. They also mentioned the imperativeness of Western scholars to develop inclusive research practices and develop strategies together with their non-Western and non-English-speaking counterparts to promote a democratic and social justice inclined research practice.

In this study, I hope to contribute to scholarly work within the purview of disability studies through the lens of post-colonialism with the intent of influencing policy. Since researchers' reports are deemed to be their contribution to the policy process, the implication is that policy research plays an imperative role for change to occur in society (Westhuizen 2013). This is a focal point in post-colonial theory which is a multi-faceted one that is concerned with plurality of voices. It is concerned with the worldview of oppressed, dominated and marginalized peoples (Hammer 2004). This is so because authors have contributed toward expressing understandings of discrimination and prejudice in post-colonial communities (Grosofoguel 2007; Odora 2009). Hammer (2004) further states that it deconstructs presumptions about the nature of both language and text through critique of cultural hegemony and narratives of "dominant, white, Christian, Western, patriarchal, heterosexual thought."

Hence, this paper presents the principle of "Ubuntu" which is a guiding principle in many African societies. Kathard and Pillay (2013) state that, "Ubuntu is an African consciousness characterized by interconnectedness of people, their communalism, solidarity, generosity, compassion and care" (p. 86). Hence, Ubuntu as a philosophical concept relates to being a person that is associated with other persons in an interrelated society where emphasis is placed on empathy, cooperation and sharing to resolve common problems (Murithi 2009; Shanyanana et al 2016 p. 107). Individuals living in societies that embrace the tenets of Ubuntu would be distinguished by regarding others with fairness and treating them with justice (Letseka 2000). In essence, we can surmise that Ubuntu emphasizes a culture of community, mutual relationships and of caring and sharing with one another. Thus, this presents opportunities for inclusion in which all members of the community are involved in decision making (Shanayanna 2017). A central theme to the works of scholars (Bessler 2008; Broodryk 2002; Metz 2007; Metz & Gaie 2010) is the conviction that Ubuntu is a moral theory. This means that it serves as a uniting value of morality in times of adversity (Teffo 1994) which elucidates the inter-connectedness, common humanity and the responsibilities that come with this connection (Bessler 2008).

In contemporary African thinking, the concept of Ubuntu has been suggested as a way of thinking about disability and is widely drawn upon in the post-colonial context (Chataika & McKenzie 2013; Kathard & Pillay 2013). Berghs (2017) postulates Ubuntu as a way of thinking about disability in which impairment encompasses both biological and spiritual diversity that have shared meanings for society to make and remake together as "human collective." Ubuntu as a culture and African philosophy lies at the crux of debates as to whether it can be instrumental in promoting inclusionary practices in higher education institutions in Africa. There exists an imbalance between the understanding of Ubuntu as a theoretical worldview and practices in institutions of higher education which is

pronounced by the meager representation of marginalized groups (Shanyanana et al 2016). The extent to which collective decision making is effective has been debated on the premise of who comprises the collective. For example, scholars such as Van Zyl argue that factors such as female gender or age could limit participation in the decision-making process (Van Zyl 2011).

Finally, Shanyanana (2016) argues that if higher education in Africa supports Ubuntu, nobody should be excluded and that all voices be heard in policy, practices and decision making (p. 107-8). Therefore, it is imperative that higher education institutions uphold the democratic tenets of inclusion in Ubuntu by acting on the notion that everyone is an equal member of the community (p. 108).

Prevalence of Visual Impairment

According to the International Classification of Diseases- 10 (2006), the World Health Organization classifies vision function into four broad categories: normal vision, moderate vision impairment, severe vision impairment and blindness. Moderate vision impairment and severe vision impairment can also be grouped together under the term "low vision". When low vision is taken together with blindness; it represents all forms of visual impairments (WHO Vision impairment and blindness 2017). For the purpose of this study, the term "visual impairments" will be used to refer to all forms of lesser visual acuity ranging from moderate vision to blindness.

Bourne et al (2017) studied the trends in the global incidence of visual impairments by conducting a systematic review and meta-analysis of population- based data that were published between 1980 and 2015. The study showed that the estimated number of blind people worldwide increased by 17.6% from 30.6 million in 1990 to 36.0 million in 2015.

In tandem with this, the World Health Organisation (2017) further reports that 15 years and below are at higher risk of visual impairment. Nineteen million children below age 15 are vision impaired with about 1.4 million in irreversible blindness. While twelve million of these have a vision

impairment due to refractive error. More than 80% of all vision impairments can be prevented or cured. Hence, there has been progress recorded over the last 25 years such as government establishments that catered to prevention and control of vision impairments, integration of quality health services into primary and secondary health care systems and school-based education and campaigns to raise awareness and provide education about vision function importance (WHO, 2012). The World Health Organisation (2017), reports that persons aged 50 and over, constituting 81% of people that are blind and have moderate to severe vision impairment. By 2050, the number of persons with visual impairments might triple due to population growth and aging. Hence, available large-scale data presents information centering on the prevalence of visual impairments among older adults. Given the dearth of data on issues relating to persons with visual impairments within the range of 20-39 years especially in Africa, the research presented in this study seeks to contribute to knowledge and scholarship with regards to college-age students.

Access to Resources for Persons with Visual Impairments in Higher Education Institutions

In Nigeria, visually impaired persons attend all educational institutions at various levels. Government policy on provision of equitable education for all children regardless of disability has helped provide an impetus for the need to produce educational materials in alternative formats for visually impaired students (Atinmo 2007). Based on the need to create wider avenues, both national and international, of information resources for persons with visual impairments, Atinmo (2007) carried out a project to identify the location and availability of resources in order to create a library database for access and retrieval of these resources. The project also sought to create a template for database entry which could be replicated by other developing countries. Educational institutions, state libraries and non-governmental organizations serving persons with visual impairments were surveyed in the 36 states

and the Federal Capital Territory, in Nigeria. Despite the fact that there is no national library service, a variety of organizations seek to cater to the needs of persons with visual impairments and blindness.

Atinmo (2007) identifies four broad categories of institutions that carry out these functions: 1) Federal Government- government participation in library services is not extensive. However, the government has participated through establishment of higher education institutions to train special education teachers; 2) State Library Services- these are public libraries, which are overseen by the State Ministry of Education. Of the 36 states in Nigeria, only three- Oyo, Imo and Abia provide library services to students with visual impairments. These state libraries receive donations of Braille books and make them available but do not produce books. 3) Special Schools for the Blind- there exists only a handful of schools that cater exclusively to the visually impaired. One such school is the Pacelli School for the Blind in Lagos State; they transcribe books into Braille for their students. 4) Nongovernmental Organizations (NGOs)- three major NGOs in Southwest Nigeria and two in the North are influential in the production of materials for visually impaired and blind students. An example is the Anglo Nigeria Welfare Association for the Blind (ANWAB) which produces Braille by computer and they also provide library services. It has a collection of 200 titles in Braille and 200 audio tapes which cover different areas for adults, children and undergraduates from the University of Lagos. In the North, Gindiri Materials Center for the Visually Handicapped (GMCVH) produces Braille books in English and Hausa which are then sold at low cost to students.

The notion by different groups, non-profits and international organizations that access to the internet is a human right has presented a case for making online accessibility for persons with disabilities a human rights issue and social justice concern. Access to information also engenders making informed choices which can result in a more buoyant economy for countries (Ng'ang'a 2004 p. 130). For the duration that the internet has been around, persons with disabilities have been subjected to exclusion

more than any other groups of people due to a range of hindrances that stem from social bias, socioeconomic challenges, inaccessible design choices and incompatible software with assistive technology (Jaeger et al 2015). The United Nations standard rules on the equalization of opportunities for persons with disabilities (1993) and the UNESCO public library manifesto (1994) declare that information is a right for persons with disabilities. Persons with visual impairments do not have equal access to information which places them at a disadvantage. However, with access to information through public libraries, it is possible for a change to occur in the experiences of persons with visual impairments (N'gan'ga 2004). This means that libraries have an important role to play in promoting an inclusive society (Adetoro 2015). Since the government has not given attention to or invested in providing information service to persons with visual impairments, this responsibility has been borne by NGOs. Thus, NGOs control the kind of services available. Despite this, there is a mismatch between the informational and educational needs of persons with disabilities and what is provided.

In a study designed to find out the level of availability of alternative formats for visually impaired adults in selected libraries in Nigeria and the access to alternative formats by visually impaired adults and students in selected libraries in Nigeria, Adetoro (2012) found that the only alternative format that was available was Braille; however, these cannot be accessed by users. There is sparse availability of audio books and large print because of the high cost of sound proof studios, conversion equipment and lack of volunteer readers.

In Nigeria, public libraries have served as a long-standing way of accessing information. Hence, it is necessary for them to provide services that cater to the needs of all members of the populace as required. Given that persons with visual impairments in Nigeria have been known to demand access to information that matches their interests and needs, there has been a shortfall of meeting this demand for alternative formats of accessing information (Adetoro 2014 p. 49). Although there has been evidence

that Nigerian public libraries play an integral role in the provision of information to persons with visual impairments, there is sparse data on the current state of information provision to persons with visual impairments.

To fill this gap, Adetoro (2014) conducted a study to determine alternate reading materials available for persons with visual impairments in Nigerian public libraries, find out if persons with visual impairments find these formats accessible and determine how much alternative formats are utilized by persons with visual impairments. The study showed that available materials are insufficient and lack variety. Further, audio recordings, large print materials and electronic resources are in short supply. This is attributed to lack of government funding. Government contribution only comes in form of payment of staff salaries; there is not much committed to facilities and materials. Due to this lack of materials, users have to arrange with private organizations for the desired materials. Hence, rather than being a place where individuals access information, public libraries only function as a space for studying (Adetoro 2014 p. 55).

Method

I seek to explore daily the lives of undergraduates with visual impairments at the University of Lagos, Nigeria (UNILAG). I am not seeking for this study to be necessarily one for generalization but one that explores the lived experiences of participants as students especially within a university that does not primarily cater to persons with disabilities. Participants are undergraduates currently enrolled at the University of Lagos, a leading public university in Southwestern, Nigeria.

The UNILAG library provides services to students with visual impairments, hence, I sought permission to recruit participants from through the library's database. To do this, I provided evidence of approval from Bowling Green State University and a letter asking for permission to access students' contact information which is solely for research purposes. The only criteria for participation was that

students had to be visually impaired. Participants are in different levels of undergraduate education and varying programs across campus.

I am yet to interview participants for this study as a result of unprecedented delays in receiving approval from UNILAG library. However, I will discuss how data will be collected and analyzed. The data collection process involves conducting semi-structured interviews done via telephone. I intend to interview a minimum of 10 participants; interviews will continue until no new information is being generated. The interviews will cover demographic information such as year in school, age and gender. Specific interview questions include: How do you access educational materials? What formats are these educational materials available to you? How easy is it to access different formats of materials? How useful are the materials available to you? How are classrooms structured? What efforts do teachers make to include you in classroom activities? How do teachers ensure that you have access to homework and other out-of-classroom materials? The recorded interviews will later be transcribed and coded into themes.

Informed consent is given when participants respond "Yes" after the consent document has been read to them, the interviews are recorded. This also guarantees participants' confidentiality since they do not have to sign physical copies. To further guarantee confidentiality, participants will be informed that pseudonyms will be used if I need to refer to specific statements made.

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