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ASSESSING INFORMATION-SEEKING BEHAVIOUR OF VISUALLY IMPAIRED STUDENTS USING WILSON'S MODEL OF INFORMATION BEHAVIOUR IN FEDERAL COLLEGE OF EDUCATION (SPECIAL), OYO

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ASSESSING INFORMATION-SEEKING BEHAVIOUR OF VISUALLY IMPAIRED STUDENTS USING WILSON'S MODEL OF INFORMATION BEHAVIOUR IN FEDERAL COLLEGE OF EDUCATION (SPECIAL), OYO

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Abstract

This study investigated the information-seeking behaviour of visually impaired students using Wilson's model of information behaviour in Federal College of Education (Special), Oyo, with a focus on assessing information needs, adequacy, and satisfaction of the visually impaired students. The study established that the information needs of visually impaired students include educational opportunities, information on personal development, the procedure for performing skills, and information on housekeeping and households. It was also established that preference for Braille has been on the decline in favour of talking book/audio recordings among the young in many countries. Visually impaired users' preference includes e-newspaper and magazine, e-book, interpersonal information sources, audio information material, internet resources, etc. Poor attitude of library staff to visually impaired, the little number of documents in Braille/audio, lack of computer with screen reader software, difficulty in listening to materials which were transcribed from print to audio form were some of the challenges faced by visually impaired students in using the library.

Introduction

Information seeking is an important part of the everyday life of people in a society. To obtain information, people use Web search engines, consult authorities, ask questions from friends, visit the libraries, read newspapers, and watch television, among others. Information is an important resource that contributes to the development of a society. Tella, James, and Olukemi (2017) indicate that this serves as the core for the development of knowledge, the basis for innovations, the resources for an informed citizenry, and as a result, becomes a key commodity for the progress of any society. Judgements are continually made by people about how useful a piece of information is to their particular needs. They actively construct meaning and form judgments about the relevance of the information to their goal based on different attributes and criteria. There are a lot of factors that determine the information-seeking behaviour of an individual or a group of individuals. It is very important to understand the purpose for which information is required, the environment in which the user operates, users' skills in identifying the needed information, channels and sources preferred for acquiring information, and barriers to information.

Wilson's model portrays the need to explore information-seeking context. The model allows people to be conceptualised as both individual entities and socially constructed entities, which is appropriate in the context of the theory in the disability field. There are various information behaviour models developed by Wilson over a period of time. Wilson's information behaviour models indicate that various factors influence specific information needs. Specifically, in Wilson's (1999) information behaviour model that comprehensively studied users from the perspective of their information needs, information seeking and information behaviour, the model was used as a framework for the study as it further allows for a description and explanation of user information behaviour. The model was found to be more applicable to the visually impaired than other models and it also was applicable within the Nigerian context. This model also portrays information-seeking behaviour arising as a consequence of a need. Fakunle (2020) citing Kuhlthau (1993) submitted that informationseeking behaviour evolves from an awareness of something missing, which necessitates the seeking of information that might contribute to understanding and meaning and fulfilling the user needs. To satisfy users' needs, Wilson (1999) submitted that the user makes demands upon formal or informal information sources or services, resulting in success or failure to find relevant information. If successful, the user can make use of the information found.

Fereydoon Azadeh and Shahrzad Ghasemii (2016) citing Wilson (2000) applied the process of information seeking as a pattern of problem-solving for the first time in 1983. Then, he presented his model of problem-solving in 1997 to integrate the research of this field. In his model of information seeking, searching, and using information are related to different processes of problem-solving. The processes of problem-solving are identifying the problem, the definition of the problem, expression of the problem (if necessary) Azadeh and Ghasemii (2016).

Wilson's model of information seeking includes the following components:

- The context of information need
- Intervening variables
- Activating mechanism
- Information processing and use

These components are the same constituent elements of information behaviour. This pattern shows the cycle of information activities from the process of need creation to the process of using information and includes several intervening variables which have a noticeable influence on information behaviour.

The context: Wilson mentions three human needs on which psychologists are emphasized.

- Physiological needs, such as the need for food, water, shelter, etc.
- Affective needs, such as the need for excellence, mastery, etc.
- Cognitive needs, such as planning, acquiring a skillset

This categorization shows that individual needs are internal and related to each other, and each of them leads to the creation of other needs (Eyni, 2005).

Intervening variables: Wilson has mentioned all the intervening factors and depicted them in this model. Mental variables may affect the information-seeking behaviour as an intervening variable, as well as other intervening variables (e.g., the variables of demographic, environmental, dependent, or interpersonal role) (Adhami, 2004).

Individual's point of view on life and system of value, political orientation, knowledge, style of learning, emotional variables, individual's attitude towards innovation,

stereotypes, preferences, prejudices, self-perception (self-evaluation of knowledge and skills), interests, knowledge of the subject, duty, and information or search system can be mentioned as some psychological variables. Demographic variables include gender, age, social and economic position, education level, job experience, and so on. In this model, psychological and demographic variables have been separated from each other.

Activating information-seeking behaviour: According to Fereydoon Azadeh and Ghasemii (2016), Wilson inserts a concept of activating mechanism between person-in-context and the decision to seek information. He mentions well that every information needed offers an incentive to take part in activities leading to seeking information. He looks for an answer in psychology, and other sciences to find out the stimulating and motivating factors of seeking information. According to him, one of the activating mechanisms can be explained by stress or coping theory. According to this theory, all the information needed does not make the individual seek information. For example, if an individual is convinced that his possessed knowledge is sufficient to understand the situation and make a decision, he will not engage in seeking information. If he lacks such conviction, this will cause the stress connected with making a mistake, trespassing social or legal norms, financial responsibility, or not satisfying others' expectations. The greater the stress the greater is the motivation to seek information, up to a certain extent where the stress disables these activities. Another activating factor is a necessity to cope with a situation or problem-solving. The tendency towards getting a reward includes this feeling of necessity, even if this reward only leads to bringing comfort due to eliminating the feeling of uncertainty (Niedzwiedzka, 2003).

Information processing and use: Information gained by a user is processed, becomes a part of his knowledge, and is used directly or indirectly to have an impact on the environment, and as a consequence, create new information needs. Mental and physical information activities create a cycle, in which essential elements of the context determine the individual's behaviour at all stages. Then, gained information becomes a new element in a dynamic system (Wilson, 2004). The totality of human behaviour formed in any way (passive or active) leads to the information process and use which are the main objective of the research, but these processes and use may change according to the context of information need. It means that information process and use may differ based on the various fields and the context of information needed (Gazni, 2002). Wilson's model provides a useful framework for thinking about the process of data collection in the field of research.

Wilson's models exist within a "universe of knowledge" where the information seeker or the intermediary might exhibit human behaviour portrayed by constructs and theories integrated with the information behaviour models. As a result, there is always a scope for introducing new constructs and new theories from multiple disciplines and testing the newly proposed models with user groups in different contexts. For instance, Al-Suqri (2011) developed an integrated model of social science information-seeking behaviour by blending Wilson's (1996) revised model of information behaviour with other established models, to study the information-seeking among social science faculty in an Omanian university and promote future development in LIS in the Middle East. Potnis (2010) applied constructs from Wilson's models to study the role of information behaviour in shaping socio-economic opportunities for female mobile phone owners earning less than a dollar a day in rural India.

The ability of Wilson's models to continue serving as frameworks for developing and testing new combinations of information behaviour constructs and theories with a wide range of user groups from different parts of the world illustrate the rigor, relevance, and utility of the models in the rapidly changing landscape of information environments. Key Weakness of Wilson's Models The models primarily focus on the general processes of information seeking, and not on the context of the information search or the types of information available. As a result, the generic models may not fully explain the information behaviour of various actors in different contexts seeking a variety of information (Al-Suqri, 2007). For instance, Wilson (1999) acknowledges that his original concept (1981) paid insufficient attention to contextual factors: "The limitation of this kind of model, however, is that it does little more than provide a map of the area and draw attention to gaps in the research: it provides no suggestion of causative factors in information behaviour and, consequently, it does not directly suggest hypotheses to be tested" (Wilson, 1999).

It has been noted that the educational needs of students with visual impairments will vary depending on their level of study, particular degree, and age of the student. Consequently, the required information services will vary according to the student's degree of sight impairment as well as the extent to which they encounter barriers. In the submission of Case (2002) advised that there will be occasions for most students when time outside the regular classroom will be extensive, such as when starting to learn braille, expansion of orientation and mobility skills, career education, social skills, or times when skills relating to living independently need to be acquired. Hence, learning opportunities may require pull-out time, special class placement, or residential school placement for some time. Not minding an

individual's level of impairment everyone has needs that will not be similar to others. In addition, individuals' needs are often specific to a particular situation to be met at a certain time. In such an example a one-size-fits-all approach to the provision of services should not be adopted not unless the services are universally designed. Students with visual impairments have unique educational needs which are most effectively met using a team approach of professionals and students. To meet their unique needs, Cheverst, Fitton, and Dix (2003) suggested that students with visual impairments must have specialised services, books, and instructional materials inappropriate media (including Braille), as well as access to specialised equipment and technology so they can have equal access.

Visual impairments are common in all countries of the world and Nigeria is no different. Significant changes in the education of people with impairments have led to an increase in their educational aspirations and thus an increasing number of visually impaired persons who wish to enter higher. Many a time, searching for relevant information of any format is more often challenging especially for visually impaired students. In some cases, most of the information seekers give up in the course of seeking information due to various challenges they encounter (Halloway, 2001). Visually challenged students require specialized materials to help in accessing and seeking relevant and useful information (Hill, 2013). This shows that extra time is required for information processing and transcription from information sources by visually challenged students (Case & Davidson, 2011). It may also become difficult or impossible for visually impaired students to find materials in the library without special assistance. Understanding the information needs of different library users is essential in the set-up of information systems.

In the study conducted by Kumar and Sanaman (2015) to analyse the challenges faced by the visually impaired users during web access in the leading academic and special libraries of Delhi, India. The result stated that there are barriers faced by blind and visually challenged users in the libraries of Delhi, India during their web access. Kumar and Sanaman (2015) recommended three types of web-based resources that can be offered by libraries to their users. These include access to the Internet, access to subscription databases, and a library's own web pages/ website which need to be accessible to people with disabilities. Kumar and Sanaman (2015) further concluded that accessibility barriers to print, audio and visual media can be easily overcome through web technologies. Sehic (2013) study on six blind and three visually challenged students and reported that academic libraries used by respondents only sporadically responded to their needs and that blind and visually challenged students, when looking for information and materials for academic purposes, relied most often on

interpersonal sources, radio, and the Internet. It was also stated in Sehic (2013) that, in seeking and using information respondents put more value on information quality and reliability than the level of effort and time needed to find it. The preferred format for this specific user group was not Braille, but electronic documents. Hence, assistive technologies played a major role in their information seeking. Case (2002) reported that, irrespective of students' visual impairment every individual has needs that will not be similar to others. In addition, individuals' needs are often specific to a particular situation to be met at a certain time. In such instances, a "one-size-fits-all" approach to the provision of services should not be adopted not unless the services are universally designed.

It is important to note that in the field of education, a variety of interactive learning innovations have been developed. This has not ruled out the possibility for students most especially visually impaired students to learn whenever and wherever they want. This issue becomes very important because if a visually impaired student is not able to follow the developments that exist in his society, they will be left behind and may not be able to catch up with the technological challenges. This could however lead visually impaired students to be technologically backward or become technologically illiterate. In this regard, the majority of the visually impaired students will have to adjust to the environment to get a better life. It should be noted that this phenomenon also affects the search for specific information because they have to adjust to the pattern of existing technological developments.

Therefore, every individual tends to look for information according to their needs. For example, students will look for information to help complete the tasks at school, while doctors will look for information related to the latest treatment methods, architects will look for information related to "contemporary" home design, and so on. However, the information search above generally uses sensory involvement such as eyes to see, ears to hear, and tongue (lips) to talk. Therefore, a person who wants to find information must be able to see, hear and speak. Hence, how do people with visual impairments cope with this circumstance, because it will be difficult for them to process information optimally? Hence, the need for this present study to assess information-seeking behaviour of visually impaired students using Wilson's model of information behaviour in Federal College of Education (Special), Oyo)

Statement of problems

Information seeking behaviour of visually challenged students in their everyday life has been studied by many information studies professionals. Literature search reveals very little study of the challenges faced by visually challenged students in seeking information in tertiary institutions. The information behaviour of visually impaired students, in general, varies. Visually impaired students must cope and adapt to the academic environment. Concerning the information needs and seeking behaviour, visually impaired students encounter more challenges than the other students on campus. These include unfriendly physical structures for physically handicapped and visually challenged students, lack of computers to read electronic texts and use Internet resources, lack of funds and financial assistance for their services. Hence, the most vulnerable group is the visually impaired students. Therefore, this study sought to adapt the Wilson information model to study the information needs of people with visual impairment in the Federal College of Education (Special), Oyo.

Objectives of the study

The main objective of this study is to assess the information-seeking behaviour of visually impaired students using Wilson's model of information behaviour in the Federal College of Education (Special), Oyo. The specific objectives of the study are to:

- determine information needs of the visually impaired students in Federal College of Education (Special), Oyo;
- examine the level of adequacy of library information services and resources in meeting visually impaired students' information needs in Federal College of Education (Special), Oyo;
- determine visually impaired students' preferences of information materials in Federal College of Education (Special), Oyo;
- 4. determine the level of satisfaction of information needs of visually impaired students in Federal College of Education (Special), Oyo;
- identify challenges that visually impaired students face while seeking information in Federal College of Education (Special), Oyo;

Research questions

- 1. What are the information needs of the visually impaired students in Federal College of Education (Special), Oyo?
- 2. What is the level of adequacy of library information services in meeting visually impaired library users' information needs in the Federal College of Education (Special), Oyo?

- 3. What are the visually impaired students' preferences of information materials in Federal College of Education (Special), Oyo?
- 4. What is the level of satisfaction of information needs of visually impaired students in Federal College of Education (Special), Oyo?
- 5. What are the challenges that visually impaired students faced in satisfying their information needs in the Federal College of Education (Special), Oyo?

Methodology

The research employed a survey design. The population of the study consisted of thirty-eight 300 level visually impaired students of the Federal College of Education (Special), Oyo, who have duly registered with the library in the 2019/2020 academic session. In this regard, the research used total enumeration to sample the opinion of the population. The questionnaire was the major instrument used for data collection. Data collected were analysed using descriptive statistics such as tables, frequencies, percentages, and mean scores. Also, the research made use of a four-point scale, hence, the midpoint of the scale is 2.50. Therefore, items with a mean score of up to and above 2.50 were regarded as high, while items with a mean score of below 2.50 were regarded as low.

Result, Findings, and Discussion

A total of thirty-eight (38) copies of the questionnaire were administered to respondents in the Federal College of Education (Special), Oyo. Thirty-five (35) copies were duly filled and returned for analysis. This translates to a 92.1% response return rate.

Gender	Frequency	Percent
Male	16	45.7
Female	19	54.3
Total	35	100.0

Table 1 reveals that the majority of the respondents 19 (54.3%) were female, while the minority 16(45.7%) were male.

Age	Frequency	Percent
15-25	17	48.6

26-35	6	17.1
30-45	12	34.3
Total	35	100.0

Table 2 reveals that the majority of respondents 17(48.6%) were between the ages of 15 to 25, and 12 (34.3%) were between the ages of 30 to 45, while the minority 6 (17.1%) were between the ages of 26 to 35 years old.

Research question 1: What are the information needs of the visually impaired students in Federal College of Education (Special), Oyo?

Table 3: Information needs of the visually	impaired	students	in Federa	l College o)f
Education (Special), Oyo					
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Information Need of Visually Impaired Students	Mean	Std.
		Deviation
	2.11	(7)
Personal development	3.11	.6/6
Procedure for performing tasks	3.11	.796
Laws, administrative rules & policies	3.00	.727
New products	2.42	.884
Health information	3.02	.617
Housekeeping and households	3.02	.568
Educational opportunities	3.22	.546
Financial matters and assistance	2.97	.746
Politics	2.60	.774

Table 3 reveals the information needs of visually impaired students. It was revealed that information on educational opportunities has a mean score of 3.22; personal development mean score of 3.11; procedure for performing skill mean score of 3.11, and information on housekeeping and households has a mean score of 3.02. However, information needs on a new product have a least mean score of 2.42. Therefore, the information needs of the respondents range from personal development, educational, financial matters, and so on.

This was in line with (Chartered Institute or Library and Information Professionals (CILIP) 2005), which opined that persons with visual impairment need factual and recreational reading, educational materials, encyclopedias, directories, and other kinds of publication used by sighted people, but unlike the sighted, they need appropriate formats or auxiliary aids to help them access their reading interests. Also, a study conducted over radio signals (Davis 2005) found that blind people are interested in reading daily newspapers, magazines, and other periodicals; supermarket, drugstore, and departmental store advertisements as well as community events, breaking state, national, and world news.

Research Question 2: What is the level of adequacy of library information services in meeting visually impaired library users' information needs in the Federal College of Education (Special), Oyo?

Information Adequacy	Mean	Std.
		Deviation
Adequate for my information needs	2.80	.797
Current awareness services are adequate	2.77	.770
Selective dissemination is adequate	2.97	.923
My queries are usually answered adequately	2.88	.900
Library's user education is adequate	2.80	.797
Internet facilities are adequate	2.42	.814
Library loan services are adequate	2.11	.796
Photocopying services are adequate	2.11	.796
Reading room services is adequate	2.80	.797
Reference services are adequate	2.42	.916
Transcription services are adequate	2.62	.689

 Table 4: Level of the adequacy of the library information services in meeting visually

 impaired information needs

Table 4 indicates the adequacy of the library information services in meeting visually impaired information needs. The table reveals that selective dissemination of information has a (mean score=2.97, s.d=.923); current awareness services (mean=2.77, s.d=.770); users query answered (mean=2.88, s.d=.900); transcription services (mean=2.62, s.d=.689); reading

room services (mean=2.80, s.d=.797) and library's user education (mean=2.80, s.d=0.797). However, some of the library services has low mean score which made them inadequate, these are Internet facilities (mean=2.42, s.d=0.814); Library loan services (mean=2.11, s.d=0.796); and photocopying services (mean=2.11, s.d=.797). These findings were against the submission of Ajogwu's (2006) finding that the disadvantaged in Nigeria have inadequate library services and that libraries often fail to have specific, special provisions that encourage the blind students to use the library paints a succinct picture of the situation.

Research Question 3: What are the visually impaired students' preferences of information materials in Federal College of Education (Special), Oyo?

Preference of information	Mean	Std.
		Deviation
Audio newspaper and magazine	2.74	.780
E-book	2.88	.582
Textbooks	2.82	.513
Audio book	3.02	.617
Internet resource	2.80	.584

Table 5: Visually impaired preferences of information materials

Table 5 reveals visually impaired preferences for information materials. It was indicated from the table that newspaper and magazine (mean=2.74, s.d=.780); e-book (mean=2.88, s.d=.582); textbooks (mean=2.82, s.d=0.513), audio information material (mean=3.02, 0.617) and internet resources (mean=2.80, s.d=0.584). This indicates that audio newspapers and magazines, e-book, audiobooks, internet resources were information material the respondents have a preference for. Similarly, Ogba (2000) reported that visually impaired users of the Imo State library board visit the library section for the visually handicapped to use and borrow braille books, moon type, talking books on cassette, large prints periodicals, and books. This finding is further buttressed with studies such as Mabawonku (2004) and Adetoro (2004). These studies have shown that specific information user groups or interest groups in Nigeria have the appropriate or expected information needs that are necessary to make decisions, solve problems and reduce uncertainty. However, visually impaired persons cannot obtain the required information through most of the available means this makes Obichere (2011) posit

that because visually impaired persons cannot obtain the required information through most of the conventional means used by normal people, it is necessary, that they should be provided with the information they need through specialized methods that are convenient for them, viz braille, large print, talking books/audiobooks, radio reading service and the use of other audio facilities.

Research Question 4: What is the level of satisfaction of information needs of visually impaired students in Federal College of Education (Special), Oyo?

Information Satisfaction	Mean	Std. Deviation
Library resources and services	2.80	.719
Silence in the library during service hours	2.74	.918
Lightning system	2.45	.852
Attitude of lib. staff	2.34	.937
Lib. Internet facility	2.17	.746
Lib. Environment	2.45	.741
Procedure for user registration in the lib.	2.34	.802
Overall quality of library services	2.60	.774
Competency of library staff	2.77	.770
Reading tables and chairs	2.71	.957
Ventilation	2.91	.701
Security	2.91	.817

Table 6: Level of satisfaction information needs of visually impaired students

Table 6 reveals the level of satisfaction of information needs of visually impaired students. It was revealed library resources and services (mean=2.80, s.d=0.719); silence in the library during service hours (mean=2.74, s.d=0.918); Overall quality of library services (mean=2.60, s.d=0.774); competency of library staff (mean=2.77, s.d=0.770); Reading tables and chairs (mean=2.71, s.d=0.957); ventilation (mean=2.91, s.d=0.701); and security (mean=2.91, s.d=0.817). However, respondents indicate that library lightning system (mean=2.45, s.d=0.852); library. Internet facility (mean=2.17, s.d=0.746); and library environment (mean=2.45, s.d=0.852), this indicates that they were not satisfied with these facilities. Nkiko and Ilo's (2006) submitted that user satisfaction is the essence of the rigorous and complex organization of libraries, together with Bassey's (2006) opinion that

user satisfaction is connected to well-stocked libraries which are properly arranged, manned by well-qualified and cultured staff is in line with this finding. The findings are in contrast and agreement with the findings of Dwivedi, Kapoor, Williams, and Williams (2013) who studied factors affecting system use and user satisfaction in RFID-enabled libraries and discovered that factors like system quality, use, and user satisfaction positively influenced users attitudes towards the library services.

Research Question 5: What are the challenges that visually impaired students faced in satisfying their information needs in the Federal College of Education (Special), Oyo?

 Table 7: Challenges of meeting information needs of visually impaired students

Challenges	Mean	Std.
		Deviation
Library staff poor attitude to visually Impaired	2.91	781
Less no. of documents in Braille/audio	2.82	., 01
Lack of computer with screen reader software	2.97	.706
Lack of training	2.34	.905
Difficult to listen materials which were transcribe from print	2.05	.481
to audio form		

Table 7 indicates challenges faced in meeting the information needs of visually impaired students. It was indicated that library staff poor attitude to visually impaired (mean=2.91, s.d=0.781); less number of documents in Braille/audio (mean=2.82, s.d=0.890); lack of computer with screen reader software (mean=2.97, s.d= 0.706); lack of training (mean= 2.34, s.d= 0.905); difficult to listen materials which were transcribe from print to audio form (mean=2.05, s.d= 0.481). However, Kumar and Sanaman (2015) conducted a study to analyse the challenges faced by the blind/ visually impaired users during web access in the leading academic and special libraries of Delhi, India. The result clearly stated that there are barriers faced by blind and visually challenged users in the libraries of Delhi, India during their web access. Sehic (2013) also conducted a study on six blind and three visually challenged students and reported that academic libraries used by respondents only sporadically responded to their needs and that blind and visually challenged students, when looking for information and materials for academic purposes relied most often on

interpersonal sources, radio, and the Internet. Obiozor, Onu, and Ugwoegba (2010) noted that physically challenged students find it difficult to use the library, especially where the environment is not conducive.

Discussion

Findings from the study reveal the information needs of visually impaired students. It was revealed that the information needs of visually impaired students include educational opportunities, information on personal development, the procedure for performing skills, and the information on housekeeping and households. However, respondents do not usually seek information about new products. This is in line with the submission of Smith and Rosenblum (2013) affirming this purpose when they reported that students constantly find themselves in need of information to write assignments, essays, tests, and any other academic-related endeavour. The findings also corroborate with Canadian National Institute for the Blind (CNIB, 2005) research which found that visually challenged young people's information needs include finance, employment, education, and social integration. Talking books/audio recordings are the preferred source by persons with visual impairment.

However, the preference for Braille has been on the decline in favour of talking book/audio recordings among the young in many countries. Studies such as Chartres (1998) and NLB (2002) have confirmed this, though Johnson (1996) and Ryles (1996) have reported a preference for Braille in other places, especially as a literacy and communication medium. Adetoro (2012) argues that, unlike sighted persons, the visually impaired receive information in alternative formats such as Braille, talking book/audio recording, and large print. These materials provide the opportunity for visually impaired students to read and communicate like sighted students. Also, Eskay and Chima (2013) report that libraries are also taking advantage of advances in ICTs to increase information access for the visually impaired. A broad range of ICTs otherwise called adaptive or assistive technologies are now available to provide access to information in electronic databases and on the internet, giving blind users equal opportunity as the sighted. Respondents indicated adequacy of the library information services in meeting their information needs and it was revealed that selective dissemination of information, current awareness services, users query answered, transcription services, reading room services, and library's user education were adequate. Library services like Internet services, library loan services, and photocopying services were not adequately provided.

Results from the study also indicate respondents' preference for information. It was revealed that newspapers and magazines, e-book, interpersonal information sources, audio information material, and internet resources were some of the information resources that respondents have a preference for. This corroborates Sehic's (2013) study that reveals that when visually challenged students are searching information and materials for educational purposes they relied mostly on interpersonal sources. Therefore, respondents can acquire the needed information through both formal and informal sources. Hence, aligned with Wilson's (1999) model which states that users make demands upon traditional or non-traditional information sources to acquire the needed information. Findings further reveal that a significant number of respondents were satisfied with library resources and services, silence in the library during service hours, overall quality of library services, competency of library staff, reading tables and chairs, library ventilation, and security.

However, respondents were not satisfied with the library lightning system, library Internet facility, and library environment. The study further revealed that the library is challenged with the following problems in meeting the information need of respondents. These were library staff poor attitude, less number of documents in braille/audio, lack of computer with screen reader software, lack of training on use and difficulty in listening to materials that were transcribed from print to audio form. These findings are slightly different from those of Bodaghi and Zainab (2012) who claim that there is a lack of policies, procedures, or guidelines that cater to the needs of people and Visually Impaired Students. This was further revealed in the study by UNESCO 90 (1997) that only a few institutions have a written policy regarding disabled students most especially those with sensory limitations. And that the national policy is not clear on the availability of library and information services for those with sensory limitations such as people and visually impaired students.

Conclusion

The study concludes that visually impaired students have the same information needs to meet as any other student. The manner and special way of meeting the information need are having to rely on sources and assistance outside the regular information resources socked in the library. Consequently, the information need of visually impaired students needs to go through a series of additional steps before they are met and may require technological devices for effective service delivery. Therefore, special attention should be given to this category of students for effective information service delivery.

Recommendation

- 1. There should be library policies for visually impaired students to serve as guidelines to direct and coordinate all services for the visually challenged in the library.
- 2. The budgetary allocation should be increased for libraries to acquire for visually impaired students.
- 3. Assistive technology should be acquired to give persons with visual challenges access to information technology that enhances their academic and career opportunities.
- 4. It is also important that the route to the library be marked out appropriately so that visually impaired students can find their way to these facilities.
- 5. To provide effective library services to students with visual impairments, all staff must have appropriate attitudes toward them.

References

- Adetoro, N. (2004). Towards building capacity for sustainable library and information services for the visually challenged in Nigeria. *Journal of Association of libraries for the Visually Impaired*, *3*(1), 54-60.
- Mabawonku, I. (2004) The information needs of artisans: case study of artisans in Ibadan, Nigeria. Lagos Journal of Library and Information Science, 2(2):61-76.
- Canadian National Institution for the Blind (2005). The status of Canadian youth who are blind or visually impaired. Available at http:// Cnib ca/eng/publications/needs report/
- Shaw, A., Gold, D., & Simson, H. (2013). *The status of Canadian youth who are blind or visually impaired: A study of lifestyles, quality of life and employment.* CNIB.
- Case, D. O. 2002. Looking for information: a survey of research on information seeking, needs, and behaviour. Amsterdam: Academic Press.
- Case, D. O., & Given, L. M. (2016). Looking for information: A survey of research on information seeking, needs, and behavior.

Cheverst, K., Fitton, D., & Dix, A. (2003). Exploring the evolution of office door displays. In *Public and Situated Displays* (pp. 141-169). Springer, Dordrecht.

- Holloway, S. (2001). The experience of higher education from the perspective of disabled students. *Disability & Society*, *16*(4), 597-615.
- Hill, H. (2013). Disability and accessibility in the library and information science literature: content analysis. Library and Information Science Research, 35 (2), 137-142
- Kuhlthau, C. C. (1993). A principle of uncertainty for information seeking. Journal of Documentation 49(4): 339-355.
- Kumar, S. & Sanaman, G. (2015). Web challenges faced by blind and vision impaired users in libraries of Delhi. The Electronic Library 33 (2), 242-257
- Sehic, S. & Tanackovic, F. S. (2013).Exploration of academic information seeking and library use of the blind and visually impaired students in Croatia.

- Smith, D. & Rosenblum, L. (2013). The development of accepted performance item to demonstrate braille competence in the Nemeth Code for Mathematics and Science Notation. Journal of Visual Impairment and Blindness, 107 (30), 167-179.
- Wilson, T.D. (1999). Models of information behaviour research. Journal of Documentation, 55(3), 249-270. Website: http://www.informationr.net/tdw/publ/papers/1999 jdoc.html.