

Journal homepage: https://www.fkjolis.org/

Information Needs and Seeking Behaviour of Visually Impaired Students at Owo High School

Fasa Rachael Aladeniyi (CLN)

Polytechnic Library Rufus Giwa Polytechnic Owo, Ondo State Nigeria Email: <u>kennyfasa07@gmail.com</u>

Temitope Samuel Owokole Department of Library and Information Science Kwara State University Malete, Kwara State Nigeria Email: princess.sam2166@gmail.com

&

Nancy Patrick Zamani Federal University Wukari, Taraba State Nigeria Email: <u>nancyzamani9@gmail.com</u>

Abstract

This study investigated information needs and seeking behaviour of visually impaired students at Owo High School. A descriptive survey design was adopted for the study, and the total population of visually impaired students for the 2022/2023 academic session was 40. The entire population was sampled. Out of the 40 copies of the questionnaire administered, 36 were retrieved and used for the study. The data collected from the respondents were analysed using frequency counts and simple percentages. The results revealed that the visually impaired students primarily sought information on how to acquire more knowledge in their studies and career development. The main purpose of their information-seeking behaviour was to solve practical problems and enhance their career opportunities. Braille was the preferred type of information resource. The challenges encountered included limited availability of documents in Braille or audio format, a lack of computers with screen reader software, and difficulty in accessing information from the internet. The study recommended providing alternative formats for information resources and training on the use of available resources to support visually impaired students' information needs.

Keywords: Information, Information needs, Information-seeking behaviour, Visually impaired students, Accessible information resources.

Introduction

Information is essential for decision-making and socio-economic development. Information can be described as processed or structured data, and it is conveyed through communication of knowledge or new facts or events. Information is important to human beings as it plays a crucial role in virtually every aspect of life. It contributes significantly to socioeconomic progress and development. People actively search for information that satisfies both conscious and subconscious needs, and utilise it towards achieving specific goals. Taylor (1962) introduced the concept of information need, highlighting that individuals may have both conscious and unconscious desires for information. However, information seeking behaviour of individuals varies.

Information needs refer to an individual or group's desire to obtain information to satisfy a particular need. Abubakar (2017) described information as facts and ideas that can be expressed through speech, written text, Braille, symbols, or images, all serving to convey knowledge or meaning relevant to a particular context. Information seeking behaviour involves a set of actions, including information need, searching, evaluation and selection, and use. Information-seeking behaviour refers to the intentional activities individuals engage in to identify, locate, assess, choose, and use information to meet their specific requirements. Wilson (1981) introduced the concept of information-seeking behaviour, highlighting the observable actions individuals perform when searching for and utilizing information. Furthermore, Bates (2010) established that information behaviour encompasses the various ways humans interact with information, especially focusing on their methods of seeking and using it.

According to Sultana and Ayesha (2016), seeking information is seen as a high-level cognitive process that involves changing one's state of knowledge and adapting to new information formats and tools. Information seeking behaviour involves searching for, retrieving, and applying information to accomplish objectives. Information is an essential element for students, especially those who are visually impaired. It is vital for their academic success as well as their personal and professional growth. However, due to the visual impairment, the information needs and information-seeking behaviour of these students are unique.

Visually impaired students have unique information needs and information seeking behaviour, which require specialised services to meet their needs. Visually impaired students often have different information needs compared to those who have sight. Due to their disability, they may require information on assistive technologies, social services, and other disabilityrelated resources. Additionally, they may seek information on topics related to their interests or hobbies, such as music or literature in formats that are accessible to them, such as talking books or Braille books. According to Zhang and Beheshti (2011), visually impaired students often face challenges in accessing information due to their disability, and therefore, require specialised information services.

Understanding the information needs of visually impaired students is essential in facilitating their information-seeking behaviour. Visually impaired students require access to information in alternative formats that are accessible to them. The availability of these resources determines their information-seeking behaviour. Additionally, knowledge of the information-seeking behaviour of visually impaired students is necessary for the provision of effective services. However, visually impaired students encounter several challenges in accessing information resources, which can limit their academic progress, socialisation skills, and overall satisfaction with school and their surroundings. Therefore, this study aims to investigate the information needs and information-seeking behaviour of visually impaired students at Owo High School, Owo, Ondo State.

Objectives of the Study

The objectives of this study are to:

- i. identify the types of information needs of visually impaired students at Owo High School;
- ii. examine the purpose of seeking information among the visually impaired students;
- iii. determine how visually impaired students access information resources
- iv. ascertain the type of information resources the visually impaired students use; and
- v. investigate challenges encountered by visually impaired students in accessing information resources.

Literature Review

Visually impaired individuals have unique difficulties when it comes to accessing and seeking information due to their impairment. The ability to access information and actively seek out knowledge is vital for their academic and personal success. Understanding their information

needs and information-seeking behaviour is essential to develop effective strategies to support visually impaired students. Rahmati et al. (2018) stated that visually impaired students have specific information needs, which require alternative formats to access. They also engage in information-seeking behaviour, such as the use of screen readers or Braille displays, to access information resources. Kim et al. (2020) posited that visually impaired students are individuals who experience partial or complete loss of vision, and they face challenges accessing information resources. These students may depend on alternative formats such as Braille or audio recordings to access information.

Access to information resources is critical for visually impaired students to achieve academic success. Hargittai and Hinnant (2018) noted that the availability and accessibility of resources in alternative formats, such as Braille books, audio recordings, and screen readers, are crucial for visually impaired students to access information. Rayini (2017) explained that libraries and information centres worldwide have developed specialised services for visually impaired users to meet their information needs. These services include Braille books, which are audio versions of books that can be recorded on various formats such as cassettes, CDs, DVDs, and e-books. Talking newspapers are also available, providing audio recordings of news articles from daily newspapers. Large printed materials are available for partially sighted individuals, which are documents printed in large fonts. Lastly, electronic texts are provided in computer text-files, allowing visually impaired users to read the text using assistive technologies such as screen magnifying software, braille bars, and screen readers.

Students with visually impairment seek information for various purposes. According to Kim et al. (2020), academic activities, such as studying and assignments, are the primary reasons for seeking information among visually impaired students. Fatima and Kumari's (2017) study on visually impaired students at Maulana Azad Library found that users sought information for career development, practical problem-solving, and staying updated. The analysis of the data revealed that the majority of users sought information for career development purposes. According to Murtal and Abubakar (2018), physically challenged students require information to fulfill educational, recreational, social and personal development needs. In a study conducted by Appiah (2017), it was found that the most common reason for seeking information among respondents from two universities was to obtain materials for learning, followed by preparing for

examinations. Other reasons included keeping up with new knowledge, seeking better understanding of a topic, obtaining materials for research purposes, and multiple reasons.

Visually impaired students face several challenges in using information resources. These include lack of documents in alternative formats, inadequate accessibility, and insufficient knowledge on how to use available resources effectively. Bishop and Rhind (2011) identified the factors that hinder or enable visually impaired students from participating in higher education institutions in the UK. The study categorised these factors into four themes, including the attitude of the students towards their disability, the support and provision provided by the institution, external support mechanisms available to the students, and attitudes towards the disability from others, such as parents and staff members.

Arowosaye and Bakare (2022) conducted a study on information-seeking behaviour of visually impaired students at the Federal College of Education (Special), Oyo. The result revealed several challenges including the poor attitude of library staff toward visually impaired students, which creates an unwelcoming environment for information access. Another significant issue is the limited availability of documents in Braille or audio formats, restricting students' access to essential learning materials. Additionally, the study highlighted the lack of computers equipped with screen reader software, which makes it difficult for visually impaired students to navigate digital resources independently. The absence of adequate training on how to use assistive technologies further compounds the problem, limiting students' ability to maximize the available resources. Students experience difficulty listening to materials transcribed from print to audio, which affects their comprehension and learning process.

Solarin (2012) conducted a survey to determine the availability of library and information services for physically challenged students in academic libraries in Ogun State, Nigeria. The results showed that the students are not receiving adequate support in institutions of higher learning, and there is a need for greater accessibility to information sources. According to Hegarty and Ajjawi (2020), the lack of knowledge on how to use available resources effectively compounds the challenges faced by visually impaired students. In their study, Lucky and Achebe (2013) examined how the Hope for the Blind Foundation in Wusasa, Zaria (Nigeria) provides information services to visually impaired users. The authors discovered that visually impaired individuals face limited access to printed information, but noted that information and communication technology can play an important role in addressing this issue.

Methodology

Descriptive survey design was adopted for the study. The population of the study was the 40 visually impaired students at Owo High School in the 2022/2023 academic session. The entire population was used for the study due to the manageable size of the population. The instrument of data collection was questionnaire. The questionnaire was divided into two sections. The first section collected information on the bio-data of the respondents while the second section was the main questionnaire. Frequency count and simple percentages were used in analysing the data collected. Out of 40 copies of the questionnaire administered, 36 (90%) were retrieved and used for the study.

Results

ст с

Types of information needs of the visually impaired students at Owo High School

Types of Information Needs	Yes		No	
	Frequency	Percent (%)	Frequency	Percent
				(%)
Information on how to acquire more	36	100	0	0
knowledge in study				
Information on career development	36	100	0	0
Information on how to do	33	91.7	3	8.3
assignment				
Information on health	30	83.3	6	16.7
Information on current affairs	18	50	18	50
Information on politics	10	27.8	26	72.2

 Table 1: Types of Information Needs of Visually Impaired Students at Owo High School

Table 1 shows the types of information needs of visually impaired students. The data in the table show that all the respondents agreed that their major information needs were information on how to acquire more knowledge in their study (36, 100%), and information related to career development (36, 100%). This is followed by information on how to do their assignments 33 (91.67%). Information related to health was also identified as an information need 30 (83.3%). Information on current affairs (18, 50%) and information on politics (10, 27.78%) were the least. This implies that information on how to acquire more knowledge in study and information on career development are the major information needs of the respondents.

ъ т

Purpose of seeking for information resources among visually impaired students at Owo High School

Purpose of seeking for information resources	Yes		No		
	Frequency	Percent	Frequency	Percent	
To do assignment	36	100%	-	-	
To solve practical problem	35	97.2%	1	2.8%	
Career development	34	94.4%	2	5.6%	
More knowledge in study	29	80.6%	7	19.4%	
To get news update	26	72.2%	10	27.8%	

 Table 2: Purpose of Seeking for Information Resources Visually Impaired Students at Owo

 High School

From Table 2, it can be seen that the majority of the respondents seek information resources for the purpose of doing their assignments 36 (100%), solving practical problems 35 (97.2%), and for career development 34 (94.4%). Almost all of the participants seek information resources for practical problem-solving, while a significant majority seeks information for career development and for gaining more knowledge in their study. Seeking information for news updates was less common among the respondents 26 (72.2%).

The way the visually impaired students at Owo High School access information resources

Table 3: The Way the Visually Impaired Students at Owo High School Access Information	
Resources	

Means of access	Ye	S	No		
	Frequency	Percent	Frequency	Percent	
Independently	34	94.4%	2	5.6%	
Assistance from teachers	31	86.1%	5	13.9%	
Through friend	25	69.4%	11	30.6%	

Table 3 provides insight into how visually impaired students at Owo High School access available information resources. The analysis indicates that the majority of respondents reported accessing information resources independently 34 (94.4%). A significant number of respondents

31 (86.1%) reported accessing information resources with the assistance of teachers. Twenty-five (69.4%) of the respondents access information resources through friends.

Types of information resources used by visually impaired students at Owo High School

 Table 4: Types of Information Resources Used by Visually Impaired Students at Owo High

 School

Types of information resources used	Ag	Agree		
	Frequency	Percent		
Braille	29	80.6%		
Audio recording	4	11.1%		
Talking book	3	8.3%		
Large print		-		
E-newspaper for the blind		-		
Daisy		-		

Table 4 shows the types of information resources the visually impaired students use. Majority of the respondents indicated that they use Braille 29 (80.6%). Only 4 (11.1%) students used audio recording, and 3 (8.3%) students used talking books. None of the students used large prints, e-newspaper for the blind, and daisy. This implies that most of the respondents preferred using Braille.

Challenges encountered by visually impaired students at Owo High School in using information resources

Table 5: Challenges Encountered by Visually Impaired Students at Owo High School in
Using Information Resources

Challenges	SA	Α	SD	D	Т
Inability to personally access	8 (2.2%)	20 (55.6%)	4 (11.1%)	4 (11.1%)	36 (100%)
information from the Internet					
Difficult to listen to materials	7 (19.4%)	20 (55.6%)	4 (11.1%)	5 (13.9%)	36 (100%)
which translated from print to					
allow form					
Lack of computer with screen	6 (16.7%)	23 (63.8%)	5 (13.9%)	2 (5.6%)	36 (100%)
reader software					
Less availability of documents in	3 (8.3%)	15 (41.7%)	15 (41.7%)	3 (8.3%)	36 (100%)
Braille or audio formats					
Lack of training	-	3 (8.3%)	27 (75%)	6 (16.7%)	36 (100%)

Table 5 identifies challenges visually impaired students encountered when accessing information resources. Less availability of documents in Braille or audio formats was considered a challenge by some, with 41.7% of respondents agreed and 8.3% strongly agreed. Lack of training was not considered a significant challenge, as 75% of respondents strongly disagreed. However, 63.9% of respondents agreed that lack of computers with screen reader software was a challenge, with 16.7% strongly agreed. Difficulty in accessing information from the internet was deemed a significant challenge by some, with 55.56% of respondents agreed and 22.2% strongly agreed. Materials translated from print to audio formats were also challenging to some, with 55.6% of respondents agreed and 19.8% strongly agreed.

Discussion of findings

The findings of this study provide valuable insights into the information needs, information-seeking behaviour by visually impaired students at Owo High School, Owo. The results indicate that the primary information needs of visually impaired students revolve around acquiring more knowledge in their studies and career development, with all respondents indicating these as major needs. This finding is consistent with previous research (Kim et al., 2020; Fatima & Kumari, 2017), which highlight that visually impaired students seek information primarily for academic purposes and future career planning. Additionally, most students required information on completing assignments, while a significant number needed health-related information. Information on current affairs and politics were the least sought-after categories.

The study identified assignment completion, solving practical problems, and career development as the primary reasons for seeking information. These findings correspond with the studies of Murtal and Abubakar (2018) and Appiah (2017), who found that visually impaired students prioritize academic activities and career advancement when searching for information. Additionally, a substantial number of respondents seek information for gaining more knowledge in their studies, while a smaller proportion use information resources for news updates. The study found that a significant majority of students access information independently, with teachers and friends playing supporting roles. This indicates that while visually impaired students strive for independence in their information-seeking behaviour, they still rely on assistance from educators and peers. This finding is consistent with Bishop and Rhind (2011),

who highlighted the importance of institutional and social support in enhancing information accessibility for visually impaired students.

The study found that Braille is the most commonly used information resource among visually impaired students, with most respondents indicating its usage. This finding aligns with Rayini (2017), who emphasised the importance of Braille books for visually impaired users. Other alternative formats, such as audio recordings and talking books, were used by only a small percentage of respondents, suggesting potential barriers to accessing these resources or a preference for tactile learning methods. Several challenges hinder visually impaired students from effectively accessing information. The study revealed that lack of computers with screen reader software and difficulty in listening to materials converted from print to audio were significant issues. These challenges align with previous research (Hegarty & Ajjawi, 2020; Solarin, 2012), which emphasised the technological and accessibility barriers visually impaired students face. Furthermore, some respondents acknowledged the limited availability of documents in Braille or audio formats, which corroborates the findings of Lucky and Achebe (2013), who noted that limited access to printed information is a key issue for visually impaired individuals. Interestingly, lack of training was not considered a major challenge, as the majority of respondents strongly disagreed with this being an issue, suggesting that students have a reasonable level of proficiency in utilizing the available resources.

Conclusion

This study examined the information needs and seeking behaviour of visually impaired students at Owo High School, Owo. The findings show that students primarily seek information for academic purposes, career development, and solving practical problems. Braille materials and audio recordings are their main sources, and many rely on teachers and peers for support. However, students face challenges such as limited availability of Braille and audio resources, lack of computers with screen reader software, and difficulty using transcribed audio materials. These barriers make it harder for them to access the information they need. To improve their learning experience, schools and libraries should provide more accessible materials, invest in assistive technologies, and train staff to support visually impaired students. Future research should explore better ways to enhance access to information for visually impaired individuals, ensuring they have equal opportunities for academic success and personal growth.

Recommendations

Based on the findings of the study, the following recommendations are made:

- i. Education institutions and libraries should prioritize providing accessible materials in Braille and audio formats to meet the information needs of visually impaired students.
- ii. Teachers and friends who can provide necessary assistance to visually impaired students should receive appropriate training.
- iii. Educational institutions and libraries must address the challenges related to lack of computers with screen reader software, difficulty in accessing information from the internet, and materials translated from print to audio formats to provide a more inclusive learning and recreational experience for visually impaired students.
- iv. There is a need to create more awareness among policymakers and stakeholders on the importance of providing inclusive education and information resources for visually impaired students.
- v. Providing alternative formats for information resources, such as large print, tactile graphics, and digital talking books, to ensure visually impaired students have diverse options for accessing information effectively.

References

- Abubakar, S. A. (2017). Information seeking and use among visually impaired students in secondary schools in North-West, Nigeria. *MiddleBelt Journal of Library and Information Science*, 15.
- Appiah, D. K. (2017). Information seeking behaviour of visually challenged students in public universities: A study of University of Ghana, Legon and University of Education, Winneba. *Library Philosophy and Practice (e-journal)*, 1507. https://digitalcommons.unl.edu/libphilprac/1507/
- Arowosaye, T. M., & Bakare, O. D. (2022). Assessing information-seeking behaviour of visually impaired students using Wilson's model of information behaviour in Federal College of Education (Special), Oyo. *Library Philosophy and Practice (e-journal)*, 7202. <u>https://digitalcommons.unl.edu/libphilprac/7202/</u>
- Bates, M. J. (2010). Information behavior. In M. J. Bates & M. N. Maack (Eds.), *Encyclopedia* of Library and Information Sciences (3rd ed.). Taylor & Francis.
- Bishop, D., & Rhind, D. J. A. (2011). Barriers and enablers for visually impaired students at a UK higher education institution. *The British Journal of Visual Impairment*, 29 (3), 177– 195.
- Fatima, N., & Kumari, D. (2017). Information seeking behavior of visually impaired students in Maulana Azad Library, AMU: A survey. *Library Philosophy and Practice (e-journal)*, 1575. <u>https://digitalcommons.unl.edu/libphilprac/1575/</u>
- Hargittai, E., & Hinnant, A. (2018). Digital inequality: Differences in the causes, impacts, and consequences of internet-related disparities. *Social Issues and Policy Review*, 12 (1), 145–168.
- Hegarty, B., & Ajjawi, R. (2020). The habits and perceptions of screen reader users: A key to understanding the emerging digital divide. *Educational Researcher*, 49(8), 607–616.
- Kim, S. M., Kim, J. S., & Koo, C. Y. (2020). Information literacy needs and seeking behavior of visually impaired individuals. *Journal of Librarianship and Information Science*, 52(1), 119–127.
- Lucky, A. T., & Achebe, N. E. E. (2013). Information service delivery to the visually impaired: A case study of Hope for the Blind Foundation Wusasa, Zaria (Nigeria). *Research Journal of Information Technology*, 5(1), 18–23.
- Murtal, A., & Abubakar, M. (2018). Information needs and seeking behavior of physically challenged students in Adamawa State, Nigeria. *Indian Journal of Information Sources and Services*, 8(1), 83–88.
- Rahmati, A., Sasani, R., & Karami, R. (2018). The information-seeking behavior of visually impaired students in higher education: A qualitative study. *Journal of Education and Practice*, 9(7), 21–31.

- Rayini, J. (2017). Library and information services to the visually impaired persons. *Library Philosophy* and *Practice* (*e-journal*), 1510. https://digitalcommons.unl.edu/libphilprac/1510/
- Singh, K. P., & Moirangthem, E. (2010). Are Indian libraries VIP-friendly? Information use and information seeking behaviour of visually impaired people in Delhi libraries. *Library Philosophy* and *Practice* (*e-journal*), 374. https://digitalcommons.unl.edu/libphilprac/374/
- Solarin, E. O. L. (2012). A survey of library and information services to physically challenged students in academic libraries in Ogun State, Nigeria. *Library Philosophy and Practice* (*e-journal*), 699. <u>https://digitalcommons.unl.edu/libphilprac/699/</u>
- Sultana, A., & Ayesha, T. S. (2016). Information seeking behaviour of academics of Maulana Azad National Urdu University in the digital environment. In S. Dhanavandan (Ed.), Transition in librarianship (pp. 245–252). Dominant Publishers and Distributions Pvt Ltd.
- Taylor, R. S. (1962). The process of asking questions. *American Documentation*, 13(4), 391–396.
- Wilson, T. D. (1981). On user studies and information needs. *Journal of Documentation*, 37(1), 3–15.
- Zhang, J., & Beheshti, J. (2011). Information behavior of visually impaired people in the digital age: Empirical evidence from ten countries. *Library & Information Science Research*, 33(3), 191–202.