Information Seeking Behaviour of Visually Impaired University Students in India

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ABSTRACT

The study was undertaken to determine the information seeking behaviour of visually impaired students at Aligarh Muslim University and University of Delhi. Study ascertained the sources and strategies employed by visually impaired students for acquiring the information. Problems encountered and suggestions to overcome are also discussed in the study. To conduct the study purposive sampling method was applied and data was collected using structured interview technique from 115 visually impaired students and analysed using SPSS. Findings of the study revealed that visually impaired students prefer electronic format for acquiring information for different academic purposes which they fulfilled from their university libraries. Students mentioned that whenever required they got help from their colleagues and library staff. The study is useful for professionals pursuing understanding about the information need of visually impaired students. Further, the study will be useful for government, academic libraries and NGOs serving visually impaired to work together on the strategies to provide better services to this group of users.

Keywords: Information need; Information seeking behaviour; Visually impaired; Aligarh Muslim University; University of Delhi

1. INTRODUCTION

Information plays a remarkable role in academic, health as well as social well-being for an individual. The information needs of students depend on their social roles and surrounding environment. Information seeking is a course of action in which people seeks, assess and use information and it is also the process through which a person can enhance the level of knowledge. Information seeking behaviour of visually impaired students is slightly different as they are more likely to use internet or ask other people such as friends, family and colleagues. In addition the stages of recognition and assessment of search results are least.[1]

"Visually impaired is a term which is used to describe the people who are partially-sighted or completely blind".[2] Libraries adopted alternative services to meet the information needs of disabled patrons.[3] However, Friend[2] asserted that "Less than 5 % of the information available to library users is accessible to visually impaired". For instance, information may not be available in required format at the right time or is insufficient.[4] Considering the importance of information accessibility, the present study is conducted to determine the information seeking

behaviour of visually impaired students at Aligarh Muslim University (AMU) and University of Delhi (DU) to identify the information needs, purposes, sources and strategies for seeking information.

AMU which is one of the premier University was established in 1920 deals in both the traditional and modern branches of education and has enrolments form the world[5] AMU provides "braille books, talking books, audio books, talking newspaper, braille magazines and various assistive technologies" to their visually challenged users. Moreover, library develops its collection according to the need of users and is having some in-house production of material for these users as well.[6] DU which is also a premier university was established in 1922. Its motto "Nishtha Dhriti Satyam" revealed its commitment towards nation building and resolute cohesion to human values[7] DU provides "Braille books, big screen computers with assistive technologies, audio books and infrastructural facilities, provision of writers is also provided to the students".[8]

2. LITERATURE REVIEW

Information seeking is the behaviour of an individual of acquiring information, both manual and online patterns

can be adopted to find the information.[9] Disabled students require guidance from mentors on contrary internet is required for searching information for quick acquisition.[1] The major sense for searching is 'vision' in the absence of which certain special/alternative materials/devices and attention will require to gain information/knowledge.[10] "Audio web browsers, modified computer keyboards, screen readers and Braille output" are some assistive devices for providing information access' effectively.[11] Students of Nairobi University, Kenya assisted by sighted persons or they use computers with screen readers, braille prints and audio books. Majority of them were relied on aiding tools while least on tap-tap mobile app[12] Wilson's model asserted that both the concepts of information need and information seeking behavior are interrelated and should be studied together. These needs could be physiological, affective and self-actualization. Three elements namely the person himself, the roles played at the workplace or in the society and the physical, political, economic, social-cultural and the general work environment of the individual define the contexts for the basic and the resultant information needs.[13]

Visual impairment imposes lack of opportunities for an individual in accessing information, this problem can be overcome with advancement in ICT.[14] Balagi[15] asserted that ICT tools has significant role in providing education and bringing social equality by enabling students to read, learn and interact with ease. These students cannot perform their responsibilities successfully, well organisational skills and facilities to assist them will be required to enhance performance.[16] Students of federal college of education, Oyo prefer e-books, e-newspapers, audio material, internet sources, etc. Dreadful staff attitude, least documents in Braille/audio, lack of computers with screen readers, difficulty in listening translated material are the challenges faced.[17] Kwak and Bae[18] found that users of "LG Digital Talking Book Library" encounter issues like "late updates, unbalanced subject areas, and lack of educational contents".

Factors affecting information seeking behaviour of visually impaired are their health, relations with information providers, their dependence, acceptance of disability, willingness and ability to pay for assistive devices.[19] Visually impaired students behaviour at "Stellenbosch University conformed to McKenzie's information behaviour model which is based on four practices viz. active seeking, active scanning, non-direct monitoring and by proxy in which the initiative is taken by another agent".[20] Information seeking behaviour could be affected by personal and environmental barriers. Information seeking behaviour can also be affected by some circumstances such as being alone, unemployed or retried and the type of vision problem involved.[21] Information seeking behaviour of visually impaired can also be affected by interpersonal barriers. Therefore, librarians should try to remove barriers to sustain ethics and principles of profession.[22] At Uganda Christian University library had unskilled staff to cater the information needs which leads to failure in serving these students.[23]

Review of literature is undertaken to enhance the understanding on the topic of study. It is clear from the literature that visually impaired students are in need of information whereas they face difficulty in accessing information. Though libraries are providing assistive devices but still they find it difficult due to certain reasons. Present study will reveal the information seeking behaviour of visually impaired students at AMU and DU also the problems encountered. Suggestions will be provided for smooth accessing of information which might be considered by the authorities of the said as well as other institutions to enable accessibility with ease to these students.

3. OBJECTIVES OF THE STUDY

Objectives of the study are:
- To identify the information needs.
- To identify the place and purpose of seeking the information.
- To determine the frequency of visiting the library.
- To identify the sources for information acquisition.
- To identify the preferred format.
- To ascertain the information seeking strategies.
- To identify the problems encountered in searching information.

4. METHODOLOGY

The study was undertaken by using purposive sampling technique, to ascertain the information seeking behaviour of visually impaired students at AMU and DU. Total of 115 (52 AMU; 63 DU) visually impaired students enrolled in PhD, PG and UG program were considered for the study, selection of this number of users was based on their willingness to contribute. Survey method was followed in which structured interview was used (face to face and telephonic) to gather the precise data.

Interview was designed with the help of literature review and the questions asked were regarding the information need, place, purpose, sources as well as preferred format for acquiring information. Frequency of library visit, strategies followed and problems encountered while searching the information. The responses received were analysed using SPSS (ver23) for drawing conclusion.

5. ANALYSIS AND INTERPRETATION

To make it understandable results and interpretations are divided into respective headings.

5.1 Information Need

Information need arises when a person find themselves in the need of information to overcome some circumstances, situations or to take decision. Results recorded in table1 shows that 100 % students of both the universities are having academic information needs. 57.69 % AMU; 50.79 % DU seek health related information and 67.31 % AMU; 38.10 % DU seeks job related information and 51.92 % AMU; 31.75 % DU seeks other information which includes administrative, recreational, etc.

Table 1. Information need

Particulars	AMU	DU
Academic information	52 (100%)	63 (100%)
Health information	30 (57.69%)	32 (50.79%)
Job information	35 (67.31%)	24 (38.10%)
Others	27 (51.92%)	20 (31.75%)

5.2 Place for Seeking Information

Place from where students fulfil their information need was ascertained; responses recorded in table 2 revealed that students of both universities seek information from university library as mentioned by 100 % students of AMU and 84.13 % students of DU followed by NGOs (AMU22; DU47) and seminar library (libraries associated to the particular department of study) (AMU12; DU37).

Table 2. Place for seeking information

Particulars	AMU	DU
University library	52 (100%)	53 (84.13%)
Seminar library	12 (23.08)	37 (58.73%)
NGOs	22 (42.31%)	47 (74.60%)

5.3 Frequency of Visiting the Library

Table 3 shows that 73.07 % students AMU; 28.57 % students DU visit library daily, 9.61 % AMU; 31.75 % DU visit weekly, 13.46 % AMU; 39.68 % DU visit when required while only 3.85 % students AMU none student from DU visit twice a week.

Table 3. Frequency of visiting library

Particulars	AMU	DU
Daily	38 (73.07%)	18 (28.57%)
Weekly	5 (9.61%)	20 (31.75%)
Twice a week	2 (3.85%)	-
When required	7 (13.46%)	25 (39.68%)

5.4 Purpose of Seeking Information

Table 4 revealed that 48.07 % students of AMU; 89.89 % students of DU use information to remain updated, 61.54 % AMU; 28.57 % DU to obtain learning material, 28.85 % AMU; 20.63 % DU to pass examination, 34.61 % AMU; 15.87 % DU to seek better understanding about topic and 19.23 % AMU; 17.46 % DU to solve practical problem.

Table 4. Purpose of seeking information

Particulars	AMU	DU
To pass examination	15 (28.85%)	13 (20.63%)
To obtain material for learning	32 (61.54%)	18 (28.57%)
To seek better understanding about the topic	18 (34.61%)	10 (15.87%)
To solve practical problem	10 (19.23%)	11 (17.46%)
To remain updated	25 (48.07%)	56 (89.89%)

5.5 Preferred Format for Seeking Information

Students were asked to mention their preferred format; results recorded in Table 5 shows that students of both Universities preferred electronic format mentioned by 48 and 47 students followed by audio format mentioned by 38 and 36 students and print format only by 5 and 15 students respectively.

Table 5. Preferred formats for seeking information

Particulars	AMU	DU
Electronic format	48 (92.31%)	47 (74.60%)
Audio format	38 (73.08%)	36 (57.14%)
Print format	5 (9.61%)	15 (23.81%)

5.6 Sources of Acquiring Information

Students were enquired about the sources from which they were acquiring information. It is clear from the results recorded that mostly students of AMU and DU acquiring information from the internet as mentioned by 86.53 % and79.36 % followed by text books by 59.61 % and 58.73 % respectively, from colleagues 40.38 % AMU and 34.92 % DU, audio/talking books by 34.61 % AMU; 57.14 % DU, recorded lectures by 23.08 % AMU; 46.03 % DU and group discussion only by 11.54 % AMU; 12.70 % DU (Table 6).

Table 6. Sources of acquiring information

Particulars	AMU	DU
Colleagues	21 (40.38%)	22 (34.92%)
Audio/talking books	18 (34.61%)	36 (57.14%)
Group discussions	6 (11.54%)	8 (12.70%)
Recorded lectures	12 (23.08%)	29 (46.03%)
Text books	31 (59.61%)	37 (58.73%)
Internet	45 (86.53%)	50 (79.36%)

5.7 Strategies for Searching Information

Information is available in different sources/formats while visually impaired users access it with the help of assistive devices such as screen reader software, audio/talking devices or braille devices. In this aspect users were enquired how they find information through such devices. From the results of table 7 it is clear that students of both AMU and DU are taking help from their colleagues while in search of information as it is mentioned by 41 and 52 students followed by taking help from library staff by 33 and 46 students and searching by their own by 17 and 36 students respectively.

Table 7. Strategies for searching information

Particulars	AMU	DU
Take help from library staff	33 (63.46%)	46 (73.01%)
Take help from colleagues	41 (78.85%)	52 (82.54%)
Search by your own	17 (32.69%)	36 (57.14%)

5.8 Problems Encountered

Investigator determined the problems encountered by these students while in need of information and it is mentioned by 43 students of AMU; 47 students of DU they face problem of inadequacy of braille/audio documents, 32 AMU; 44 DU mentioned lack of training, difficulty in listening translated material mentioned by 35 AMU; 29 DU and inadequate number of computers with screen readers mentioned by 7 AMU; 14 DU (Table 8).

Table 8. Problems encountered

Particulars	AMU	DU
Inadequate braille/audio documents	43 (82.69%)	47 (74.60%)
Inadequate number of computers with screen reader	7 (13.46)	14 (22.22%)
Lack of training	32 (61.54%)	44 (70.00%)
Difficult to listen translated material (from print to audio)	35 (67.31%)	29 (46.03%)

6. FINDINGS AND CONCLUSION

Information seeking is a personalised phenomenon through which an individual approach to available knowledge/ information, strongly held opinion and differing level of cognitive development. It is equally important and similar for visually impaired because they are also having similar information need as their sighted colleagues. However, due to dependency on others whether friends, colleagues or family visually impaired have different information seeking behaviour as they require specialised material to access and seeking relevant information.[24]

Study revealed that majorly visually impaired students of both AMU and DU are in needs of academic information which they mostly fulfil from their University libraries and prefer in electronic format. Purpose of seeking information depends upon an individual's academic or other needs, students of AMU and DU required information to remain updated, to obtain learning material or to pass examination.

Physical characteristics, motivations and sources preferred has a major contribution on the way one search for information[25] these students acquire information usually from internet, text books, while they were not participating actively with other colleagues whether is for studies or for day to day activities because the least mentioned source was group discussion from both the universities. On the other hand it was mentioned that their library staff and colleagues are highly cooperative and helpful whenever required they got assistance from them, problems encountered by them were inadequacy of braille/audio documents, lack of training, difficulty in listening translated material. Technology can reduce the effects of impairment by improved activity and greater participation to promote inclusion of visually impaired. Therefore, library and data centres should consider their special needs and assistance to provide them with the best possible assistive devices to access information on the same parlance.

7. RECOMMENDATIONS

Based on the findings following recommendations are put-forth:
- Publishers must consider their books should be accessible in digital format.
- Libraries should focus on the accessible collection for visually impaired.
- Libraries must organise training programmes for visually impaired to make use of ICT effectively.
- New arrivals in the library or other important information should be made available to visually impaired through appropriate tools.
- Visually impaired students should be encourage to take part in discussions whether academic or extra curriculum to enhance their overall learning and personality development.

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Her contributions to the current work include: Conceptualisation of ideas, assistance in technical writing of the paper, and manuscript review.