

2016

OCT -NOV

**Aarhat Multidisciplinary
International Education Research
Journal (AMIERJ)**

**(Bi-Monthly)
Peer-Reviewed Journal
Impact factor: 2.125**

VOL - V Issues: V

Chief-Editor:

Ubale Amol Baban





**EXPLORING THE PROBLEMS FACED BY VISUALLY IMPAIRED
COLLEGE STUDENTS IN ACADEMIC INFORMATION SEEKING
AND LIBRARY USE**

Dr. Kalpana Kharade
Associate Professor, K.J. Somaiya College of
Education , Training and Research,
Vidyavihar, Mumbai

Ms. Apurva Joshi
Librarian , K.J. Somaiya College of
Education , Training and Research,
Vidyavihar, Mumbai

Abstract

This paper presents a small exploration of the problem faced by visually impaired college students in academic information seeking and library use in India. In-depth telephonic interviews were conducted with fifteen visually impaired undergraduate and post graduate students across the country. Initial findings reveal that academic libraries of their institutions used by participants hardly catered to their academic needs and those visually impaired students, when looking for information and materials for academic purposes, rely most often on interpersonal network and the Internet. The preferred format for this specific user group is not the Braille, but electronic document. The assistive technologies play important role in their academic experiences. Overall, they face barriers in the form of time-constraints, lack of independence and lack of accommodative attitude of teaching and non teaching faculty and limited access to electronic materials and clear print documents which can be read by the visually impaired students if equipped with adequate technological support. The authors also give suggestions to make library services accessible for these students.

Key words:- visually impaired, academic information seeking behavior , library use, assistive technology

Introduction

Higher education plays a major role in empowering the visually impaired (hence forth will be mentioned as VI) students for their meaningful social inclusion, economic participation,



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

**(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655**

there by improving their quality of life. Never the less the participation of VI students in higher education in India is very insignificant.

The primary challenges faced by a visually impaired student as he/she enters the higher education system relate to accessibility: accessibility to materials, accessibility to infrastructure, accessibility to information and accessibility to learning environment.

Problems

The main problem faced by these students is:-

- They cannot use the traditional print materials and must use alternative means of accessing academic information (Braille, audio books and electronic documents) which in most cases are not readily available especially at higher education level. Hence the visually impaired students can be regarded as marginalized in their information seeking (Saumure & Given, 2004). The information seeking behavior and library use of the
- Visually impaired students should be therefore of particular importance to librarians and information professionals because the number of people with this disability can not be ignored in Indian context of higher education .

Literature review

As compared to the research conducted on library access and library services for people with disabilities and specifically people with visual impairment, in different countries, very little research in India focuses on the issue.

One of the key research identified was that conducted by Dr.Priya Pillai (2012) titled 'Library and information services for the visually impaired in India'. The study identified and examined the institutions providing library and information services to visually impaired people in India with reference to their infrastructure, library materials, IT facilities and services. The study also examined disability acts and copyright laws for the visually impaired in USA, U. K and India. The study further looked at the needs and expectations of the visually impaired library users and suggested ways and means to improve the library facilities (Pillai, 2013)

A paper discussing the need of digital libraries for blind users in India suggested that the development at national level should be initiated so that this special category of users are not deprived of library services in this information age. The study suggested certain policies that should be incorporated in the strategy of the library ensuring that library services to blind and print handicapped people should be of the same quality as that to common people, and special



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

**(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655**

format materials should be treated on equal terms with all other materials (Bhardwaj, Shukla, & Kamboj, 2005). Singh and Moirangthem also suggested the need for increased efforts to the still very insufficient library services and fill up the lacunae in providing information services to the visually impaired people. (Singh & Moirangthem, 2010). Another paper describing the case of M.K. Tata Memorial Learning Centre (TISS) recounted the facilities and services provided by the centre to visually impaired students studying at TISS (Koganuramath & Choukimath, 2009)

In order to contribute to the general knowledge of academic information seeking behavior of VI college students and to gain insight into the experiences and perceptions of these students in India a small study was launched in February 2016. In the study, authors have attempted to answer the following research questions:

1. How are VI college students accessing academic information?
2. What are the barriers and enablers in their successful academic information seeking?

The major findings of this study are presented in this paper.

Study

In order to obtain answers to the above mentioned research questions the qualitative study was conducted in February 2016. Participants in the study were identified and recruited with the help of an appeal through two social sites for the VI people of which the first author is a member.

They were invited to participate via these sites. Convenience sampling was employed since the fifteen students who availed themselves formed the sample. Of all fifteen students twelve were males while three were females. They were enrolled in Mumbai, Delhi and Pune universities (nine were from Mumbai, five were from Delhi and one was from Pune university. Their age ranged from eighteen to twenty five. Ten were pursuing their graduation while five were pursuing their post-graduation. The participants were invited to share their experiences of accessing academic information and use of academic libraries of their institutions. No mention was made to them about the existence of possible concerns regarding exclusionary practices so as not to influence their responses. In-depth telephonic interviews were conducted with the participants. Telephone was chosen as a preferred communication channel by the participants due to time and distance constraints. Semi-structured interviews were conducted using a variety of open-ended questions which focused on general demographic data (including information on their disability), educational experience, academic information search processes and use of



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

**(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655**

academic libraries. Interviews lasted from 30 to 45 minutes. Following the transcription, a qualitative thematic analysis was done. In conducting the study, researchers paid special attention to ethical considerations and respected the dignity and autonomy of participants in the research. All participants consented verbally to participate in the study and agreed for their conversations to be recorded. Also, they were reminded of their right to withdraw from the study at any time. The research was carried out in a respectful manner, with clearly stated objectives. During the study, researchers observed that participants appreciated such an approach and thought that the results of the study might benefit them and others.

Results

- **Barriers and Enablers in Information Seeking**

The academic information seeking of the participants was different from their sighted peers in many ways. They perceived their locating and searching academic information as quite complicated compared to their sighted peers. Firstly, they found the information locating as time consuming as they have to depend on someone for locating it if the information is in a conventional print format. Secondly they have to take help from the librarian to use library database or resource links if these links are to be accessed in the institutions only and further convert the material in accessible format if they are allowed to take the source to home. Only after this they can read the information.

This finding is congruent with the findings of Saumure and Given (2004) and Silvana Sehic (2013) that information-seeking process of visually impaired students involves additional time and intermediaries for material selection and location. In the information seeking process the participants came across with several barriers while they also experienced some enablers that smoothed their information behavior.

- **Barriers**

1. **Non-availability of resources**

The participants experienced that many resources recommended by their teachers are not available in electronic format.

2. **Inaccessible websites**

The participants felt that their information seeking is also impeded by the fact that many academic websites are not disabled friendly. In many cases even their institutional websites also were not accessible.



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655

3. Poor print quality of materials

All the fifteen participants expressed their concern about poor print quality of print material in the libraries. Lack of clarity of print sources makes it very difficult to scan them and further transfer it into an accessible format. “Library copies of the textbooks often are not clean copies. Besides the sighted peers do not use it properly. They underline text which makes it difficult to scan” (P 11)” It becomes difficult if the material is not with proper font, or use italics” (P 14)

4. Unsuitability of available electronic material-

The materials available in college libraries in electronic format sometimes create following problems :

- if they are saved in PDF format,
- if documents contain text embedded in pictures,
- if electronic documents are scanned as pictures .

Problem also arises when they have to access LMS platforms and access the information if it is not compatible with assistive technology.

5. Rigid library policy

The participants expressed dissatisfaction about inflexible library policies in which number of days for issuing a book is fix and no time concession is given to VI students. Besides certain sources are not allowed to take out of the libraries.

Similar challenges are also stated in the studies by Corn and Wall, 2002; Roy and MacKay, 2002.

• Enablers

1. Assistive Technology

All the participants expressed that they are able to study in higher education only because of modern scientific inventions in assistive technology. All of them are using the technology in a number of ways to locate and access digital information and adapt it for use: they scan print materials, enlarge the text magnify screen, convert documents into audio forms, access information on the Internet with the help of screen readers etc.

All the participants have their personal laptops with portable internet connection and scanners at home. The assistive devices have empowered them and made independent in certain ways.



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655

“I cannot imagine, how I would have coped with my higher education without technology” (P. 15.)

At the same time they have also expressed that not all VI students can afford such devices and perhaps government can make such devices available to them .

The empowering role of assistive technology is also described in the studies of Saumure and Given (2004) and Silvana Sehicand and Sanjica Faletar (2013) who concluded that adaptive technologies are essential to the successful academic experience of the blind and partially sighted post-secondary students

2. Social Network

Out of fifteen participants fourteen mentioned that they were benefited by their social network with their VI friends studying in various institutions. The participants became the members of several blogs and communities through which they could get content in accessible digital formats.

3. Accommodative attitude of peers , teachers and librarians

Not all fifteen participants had negative experiences with their peers, teachers and librarians. Seven participants mentioned the help from their sighted peers, three from their teachers and two from their librarians for locating academic information.

Peers shared their class notes in electronic format, accompanied them to the library and helped to locate the books. Teachers shared their lecture notes in electronic format and librarians helped them to locate books in the library and at times even scanned the material for them. Saumure and Given (2004) and Silvana Sehicand and Sanjica Faletar (2013) have also emphasized the significance of inter-personal contacts for better academic experiences for VI students.

Nature of Library Use

The use of library by the participants presents vivid picture. Out of fifteen fourteen participants mostly depend on internet or their VI friends through social sites. They also make use of teachers’ handouts if shared. Out of fifteen two never went to library as their libraries do not have resources in any other format other than print format. Remaining went there if the other sources do not fulfill their requirement.



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

**(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655**

Two participants were happy about the service provided to them by the librarians. They helped them to locate books and even provided material in scanned format. None of the libraries had any provision of screen reading software in the computers available in the libraries.

The participants felt that the libraries should be equipped with assistive technology and the librarians should be oriented to the academic needs of VI students and trained in the use of assistive technology.

“Our librarian is good but she does not know how she can help me as she is not aware about screen readers.” (P 1)

Three participants mentioned the need for appropriate light arrangement in the library as the low vision students find it difficult to read if the light is not appropriate. All the participants mentioned that the noisy environment in the libraries make it difficult for the VI students to concentrate as they have to listen to the adapted text which requires calm environment.

The participants also felt that the long and complicated process of accessing books; depending on others for help and at the end even getting disappointed make them feel apologetic in front of others. “I feel very awkward to trouble my sighted peers and the librarian who have to spend their time for me.” (P 3)

Rigidity of library policies also impedes the information seeking. “My librarian is very rigid. She never gives little leeway to me” (P. 9)

To sum up the participants faced with the following hindrances in using libraries:

- Noisy environment in the library;
- Prevalence of material in conventional print format;
- Rigid library policy;
- Unprepared ness of librarians for catering to the academic needs of the VI students;
- Lack of assistive technology in the libraries.

The participants gave the following suggestions for improving library services for the VI students:

- Equipping academic libraries with assistive technology like at least one computer with screen reading software JAWS or NVDA;
- Giving facility of scanning the books – The librarian or library attendant can do this work or some student volunteers can help to do this work;
- Training the library personales in using assistive technology for the VI people;



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

**(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655**

- Making the library policy flexible for accommodating the VI students;
- Making the library premise barrier free by providing proper lighting and creating spacious reading zones.

Conclusion

This small exploratory study has been successful in giving an insight into the information seeking behavior and library use of VI students in India. Although, its results can not be generalized because of its small nature and additional research is required, it is noteworthy that it supported some of the findings of earlier researches conducted worldwide.

They include:

1. Factors creating barriers in information seeking and library use like : lack of academic information/materials in accessible format, dependence on intermediaries and time-consuming processes of material adaptation.
2. Enabling role of adaptive technology in academic information seeking and library use ;
3. Underuse of library by VI students.

In order to facilitate the academic library use by the VI students the following can be done:

1. Development of e-Repository: Just like the UGC Infonet, colleges at their own level and universities should have e-repositories for VI students, where teachers can submit study material. The resources could be downloaded as audio or Braille. The material could be supplied in DVD on request. There should be collaboration and networking between the publishers and the UGC or higher education policy makers so that the publisher can directly submit electronic versions to the central repository.
2. Library staff Training: The library staff should be given training in operating assistive and adaptive technologies.
3. Organizing Seminars and conferences: Seminars, conferences and awareness camps need to be organised in colleges to promote inclusiveness.
4. Collaboration and Net-Working: Universities should collaborate with other libraries in and outside India, and promote inter-library loan facility for VI students. Every university should subscribe to bookshare.org.(that makes books available in E form)
5. Union Catalogue of Accessible material: In India development of accessible material for persons with visual impairment are scattered among few organizations like Mitrajyothi,



Aarhat Multidisciplinary International Education Research Journal (AMIERJ)

**(Bi-Monthly) Peer-Reviewed Journal Vol No V Issues V
OCT-NOV 2016 ISSN 2278-5655**

National Association for Blind, All India Federation for the Blind, National Institute of Visually Handicapped, Daisy Forum of India , Saksham and Blind Relief Association.

There is a need for a collaborating agency and a union catalogue of all the accessible material available in India and worldwide for persons with visually impairment, which will help to avoid duplication.

REFERENCES

1. Bell et al ., (2003), “The Librarian's quest: transforming the printed word so that all may read” *Computers in Libraries*, Vol.23 No.10, pp. 14-19.
2. Kavanagh, R. & Christensen Skold, B. (Eds.) (2005) *Libraries for the blind in the information age: Guidelines for development*. The Hague, IFLA Headquarters.
3. Machell, J. (1996) *Library and information services for visually impaired people: National guidelines*. London: Library Association.
4. National Disability Authority. (2009). *Ethical guidance for research with people with disabilities*. Retrieved February 25, 2016 from <http://www.nda.ie/cntmgmtnew.nsf/0/232F61AE5397A93D802>
5. Saumure, K. & Given, L. M. (2004) *Digitally enhanced? An examination of the information behaviours of visually impaired post-secondary students*. *The Canadian journal of information and library science*, 28, 2, 25-42.
6. Schuyler, M. (1999). *Adapting for impaired patrons*. *Computers in libraries*, 19, 24-29.
7. Smale, R. (1992). *Australian university library services for impaired students: Results of a survey*. *Australian Library Journal*, 41, 199-212.
8. Tucker, Richard N. (2007), “Library and resource center for visually and print impaired people in developing countries”, *Library Trend*, Vol.55 No.4, pp. 847-863