

## Problems Faced by Visually Impaired School Students while Using Information Sources: A Pilot Study

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**Abstract** - This study aimed at investigating the problems faced by visually impaired students while using information sources. Data were collected from the visually impaired school students using questionnaires and interviews. It was revealed from the findings that friend, teachers, library, by own efforts, the internet and TV/radio are the main sources of information. The obtained Chi-square value 14.30 for not enough educational material is significant ( $\chi^2 = 14.30$ ;  $p < 0.05$ ) that means there is significant difference in the response. On the basis of these findings, recommendations were made towards the better utilization of information sources by the visually impaired students.

**Keywords:** Visually impaired; School students; Information source, information needs

### INTRODUCTION

The visually impaired students face several challenges that make them prone to powerlessness and inability to participate in decision making and development programs that affect them and their fundamental rights (Mbugua, Odini, and Chege, 2018, p.49). In visual disability, unlike other disabilities, the history of special education was not been very encouraging. The first school for visual disability was established by Miss Annie Sharp, a Christian missionary from England in Amritsar in 1887 (Kumar, Kumar and Rawat, 2017, p.14758). In recent years, there have been vast and positive changes in the perception of society towards persons with disabilities (Thiyagu, 2014, p.54). It has been recognized that a greater part of persons with disabilities can lead a better quality of life, if they have equivalent opportunities and effective access to rehabilitation measures (Ministry of Social Justice and Empowerment, Govt. of India, 2006, p. 1).

All over the world, visually impaired people have to face various complexities as they live in a contemporary, complex and competitive world dominated by able-bodied individuals. People with disabilities are often excluded from social activities and are not treated as their able-bodied equals. The fact is that, in one way or another, their physical state means that they live a life that is perceived to be different from that of able-bodied people (Ochoggia, 2003, p). There is a growing body of knowledge about disability and access to online technologies. Discussion focuses on several main areas guidelines on how to make resources disability friendly; recommendations on the kinds of adaptive equipment available to people with different disabilities; and information on the latest developments in adaptive equipment.

Barriers to using online services have had far less attention by comparison (Williamson, Wright, Schauder and Bow, 2006, p 2).

## **REVIEW OF RELATED LITERATURE**

Mbugua, Odini & Chege (2018) concluded that authority and information providers in this area take recognition of visual information needs and channels of accessing information. The studies recommend improvement of the existing information services, system, and channel of disseminating information to visually impaired to serve them without discrimination. Rayini (2017) performed a study on library and information services to the visually impaired Persons. The findings revealed that with the help of information technology it is possible to provide user-friendly and adequate services for these people who are neglected for a long time. It was also found especially those living in developing countries like India have been marginalized for too long because of the dearth of accessible materials.

Otyola, Kibanja & Mugagga (2017) expressed on the basis of these findings, recommendations towards the better education of the visually impaired students are made. Kumar & Sanaman (2015) analyze the challenges faced by vision-impaired users during web access. There are various barriers faced by vision-impaired users while web access with the help of assistive technologies as assistive technology like screen readers available today is somewhat compatible with the web.

Wanbin & Yanna (2014) explored the information needs of visually impaired library users in China. They identified that the visually impaired users felt some barriers in their access to library services such as lack of time or a sighted companion who can come along for the trip to the library. Lucky & Acheba (2013) opined the information service delivery to the visually impaired and centered on meeting the reading needs of persons with visual impairment through various assistive technology devices. Zia & Fatima (2011) expressed that those who were aware of the importance and usefulness of digital information they wanted to get the benefit of it in their education. Babalola & Yacob (2011) conducted a study on the role of academic library and information services to the visually impaired. The result of the study revealed that none of the libraries were having Braille books, talking books, talking newspapers and assistive technologies in the libraries.

Jiang & Zhu (2006) suggested some key technologies implement accessible information services and systems for visually impaired people. Cookson & Rasmussen (2001) National Library Service (NLS) produces about 2,000 talking books and 50 magazines per year on specially formatted cassette tape for free distribution to a readership of about 764,000 visually challenged users. Anne (1997) examined the various services that public libraries can offer to open up access to the blind and visually impaired. Lucky and Acheba (2013) suggested the information service delivery to the visually impaired and centered on meeting the reading needs of persons with visual impairment through various assistive technology devices.

## **OBJECTIVES OF THE STUDY**

- To identify the various sources of information for visually impaired school students;
- To find out the problems faced by the students while accessing information sources;
- To explore the major barriers faced by visually impaired students.

**METHODOLOGY**

The purpose of this study was to address the problems faced by visually impaired school students while using information sources. The survey method was employed for the present study. The study was conducted in a visually impaired school in Varanasi. The population of the study was visually impaired, school students. Questionnaires were distributed to gather data from the visually impaired students to test the consistency of the questionnaire. Data gathered through questionnaires were analyzed using descriptive statistics facilitated by SPSS.

**RESULTS AND DISCUSSION**

Form the Table-1 it is clear that friend, teachers, library, by own efforts, the internet and TV radio are the main sources of information. From this 17(65.40%) of students opinioned that TV and Radio are the most preferred sources of Information and 14(53.8%) from friends are the most. 3(11.50%) visually Impaired children respond teachers al so provide information the most. Most of the respondents responded that library has less urgent in comparison to their sources of information. From this is inferred that the main source information of visually impaired students is TV radio, then friends. The table also shows that all the Chi-Square values are significant. So it can be concluded that there is significant association between the respondent and their response.

Table-1: Various sources of information

Statement		The most	More	Less Urgent	Absolutely not needed	Do not Know	$\chi^2$	P value
By friends	Number	14	6	5	1	0	13.692	.003
	%	53.80%	23.10%	19.20%	3.80%	0.00%		
By the methods described by the teacher	Number	3	10	9	3	1	12.46	.014
	%	11.50%	38.50%	34.60%	11.50%	3.80%		
Through the library	Number	0	9	9	7	1	6.61	.081
	%	0.00%	34.60%	34.60%	26.90%	3.80%		
By own efforts	Number	1	4	17	4	0	23.58	.000
	%	3.80%	15.40%	65.40%	15.40%	0.00%		
through the Internet	Number	1	4	17	4	0	12.07	.002
	%	3.80%	15.40%	65.40%	15.40%	0.00%		
Via TV / Radio	Number	17	5	4	0	0	26.30	.000
	%	65.40%	19.20%	15.40%	0.00%	0.00%		

It revealed from the Table-2 that the most source of information of visually impaired students by friends 3(11.50%), 12(46.20%) respond that more get from friends 11(42.30%) has less urgent. In case of teachers 16(61.50%) the most 9(34.6%) more and 1(3.80%) less Urgent, Regarding the Library 7(26.90%) respond the most 4(15.4%) respond more 50% respond it's less urgent and 7.70% it is not needed. in the case of internet 7(26.90%) are respond most,4(15.4%) respond more, 13(50%) respond Less urgent and 2(7.70%) not needed .from this it is inferred Teachers are the most source information then library and internet.

The obtained Chi-square value 5.61 for friends is significant ( $\chi^2 = 5.61$ ;  $p < 0.05$ ) that means there is significant difference in the response. Regarding teachers ( $\chi^2 = 13.61$ ;  $p < 0.05$ ). That means there is a significant difference in the response visually handicapped. Library ( $\chi^2 = 10.61$ ;  $p < 0.05$ ) and through the Internet it is 11.84;  $p < 0.05$ . All the values are significant that means the opinion are differed significantly.

Table-2: Mostly used sources of information

Statement		The most	More	Less Urgent	Absolutely not needed	Do not Know	$\chi^2$	P value
By Friends	Number	3	12	11	0	0	5.61	0.06
	%	11.50%	46.20%	42.30%	0.00%	0.00%		
By Teachers	Number	16	9	1	0	0	13.00	.000
	%	61.50%	34.60%	3.80%	0.00%	0.00%		
By the library	Number	7	4	13	2	0	10.61	.014
	%	26.90%	15.40%	50.00%	7.70%	0.00%		
Through the Internet	Number	7	4	13	2	0	11.84	.008
	%	26.90%	15.40%	50.00%	7.70%	0.00%		

Table-3 shows that unavailability of information, more time to get information visually impaired students for resources not available and don't know how to use resources are the main problem faced by the visually impaired students for seeking information literacy skills. Regarding this 8(30.80%) are respond the time to get information are the most problem, 7(26.90%) are respond that unavailability of information 6(23.10%) are respond that resources are not available and 6(23.10%) respond that they don't know how to use resources. So it's inferred that time, unavailability of information and how to use are the most problem faced by the visually impaired students. The obtained chi-square value ( $\chi^2 = 9.38$ ;  $p < 0.05$ ) is significant regarding don't know, how to use resources.

Table-3: Problems faced by visually impaired students

Statement		The most	More	Less Urgent	Absolutely not needed	Do not Know	$\chi^2$	P value
Unavailability of information	Number	7	10	6	3	0	3.84	.279
	%	26.90%	38.50%	23.10%	11.50%	0.00%		
It takes more time to get information	Number	8	10	8	0	0	.308	.857
	%	30.80%	38.50%	30.80%	0.00%	0.00%		
Resources not available	Number	6	13	7	0	0	3.30	.191
	%	23.10%	50.00%	26.90%	0.00%	0.00%		
Don't Know , how to use resources	Number	6	4	13	3	0	9.38	.025
	%	23.10%	15.40%	50.00%	11.50%	0.00%		

Table-4 highlights that not enough educational material, lack of technical knowledge, online unavailability and time are barriers of faced visually impaired students for regarding this 14(53.80%) are respond the not enough educational material are the most barrier, 7(26.90%) are respond that Lack of technical knowledge of resource usage 6(23.10%) are respond that online unavailability of resource and 8(30.80%) respond that they too much time to get

information. So it's inferred that time, not enough educational material the most barrier faced by the visually impaired. The obtained Chi-square value 14.30 for Not enough educational material is significant ( $\chi^2 = 14.30$ ;  $p < 0.05$ ) that means there is significant difference in the response. Regarding Lack of technical knowledge of resource usage ( $\chi^2 = 16.30$ ;  $p < 0.05$ ). That means there is a significant difference in the response visually impaired school students. But other case no difference that means the difference is almost same.

Table-4: Barriers faced by visually impaired students

Statement		The most	More	Less Urgent	Absolutely not needed	Do not Know	$\chi$	P value
Not enough educational material	Number	14	4	7	1	0	14.30	.003
	%	53.80%	15.40%	26.90%	3.80%	0.00%		
Lack of technical knowledge of resource usage	Number	7	12	5	1	1	16.30	.003
	%	26.90%	46.20%	19.20%	3.80%	3.80%		
Online unavailability of resources	Number	6	8	10	0	2	5.38	.146
	%	23.10%	30.80%	38.50%	0.00%	7.70%		
Too much time to get information	Number	8	11	3	4	0	6.30	.098
	%	30.80%	42.30%	11.50%	15.40%	0.00%		

## CONCLUSION AND RECOMMENDATIONS

This pilot study aimed at investigating the problems faced by visually impaired students while using information sources. Access of information sources has never been more critical than in the present information age, because now medium and format has been changed. The respondents revealed that TV/radio was the maximum used source of information than any other sources of information. As Rayini (2017) concluded in his study that “the visually impaired, especially those living in the developing countries like India have been marginalized for too long because of the dearth of accessible materials. Therefore, Indian libraries in collaboration with other stakeholders must stand up to their moral responsibility in ensuring an inclusive and equitable library and information services to the visually impaired (p.12)”. In addition, trained and experienced staffs with special qualifications are required. There should be positive attitudes to both library staffs as well as visually impaired students towards using of information sources. Government should provide best ICT infrastructure with assistive equipments for visually impaired students to enable them to participate in mainstream.

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