

## **Physically Challenged Students at Rajshahi University in Bangladesh: a study on Information Need and Seeking Behavior with Special Focus on Library Use**

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### **Abstract**

#### **Purpose**

The pattern of information needs and seeking behaviour of physically challenged students is comparatively different from those of general students. The paper discourses the information need, seeking behaviour, and habits of the library use by the physically challenged students of Rajshahi in Bangladesh.

#### **Design/methodology/approach**

The University of Rajshahi has more than 150 physically challenged students studying in various departments. Very little is known about the procedures adopted by them when searching and retrieving information, what types of source layouts they choose to use and how these sources are used, what obstacles they find, how they feel about the process, and how they can be helped to improve access and use of the information resources available to them. This paper investigates and finds the answers to the above questions by using survey methods of research. Thirty-six physically challenged students were selected randomly to collect the data. The collected were then analyzed by tabular and graphical form.

#### **Findings**

The results show that textbooks, newspaper are the most popular types of sources of information which are used for mainly preparing for the examination. Facebook, YouTube are significant sources of information as sources of entertainment. Regarding the use of the Central library usage, almost all physically challenged students use the reading room section of the central library. They felt difficulties in accessing the physical part of the library. The library furniture, installation of lifts, keeping the separate washrooms and separate corner were the most asking and demanded facilities from them. Moreover, the arrangement of the training program to access and use the traditional and automated library systems of the library was also required.

#### **Value**

Information access, information use, provision for providing uninterrupted library services to physically challenged students should be ensured for their development in academic and social aspects. The manuscript will be able to contribute to the explanation of the various information need and challenges in using library services and can add to the literature of library and information science. More importantly, the work will be unique in the surveyed area on this specific group of students. The outcomes of the paper will inform the policymakers to implement the different required and essential aspects so that the physically challenged students can effectively access and use a variety of information resources from the digital and physical library sources.

#### **Keywords**

Physically challenged, partially disabled, Information need and seeking, Central Library use, Rajshahi University.

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Date of Submission: 12-06-2020

Date of Acceptance: 29-06-2020

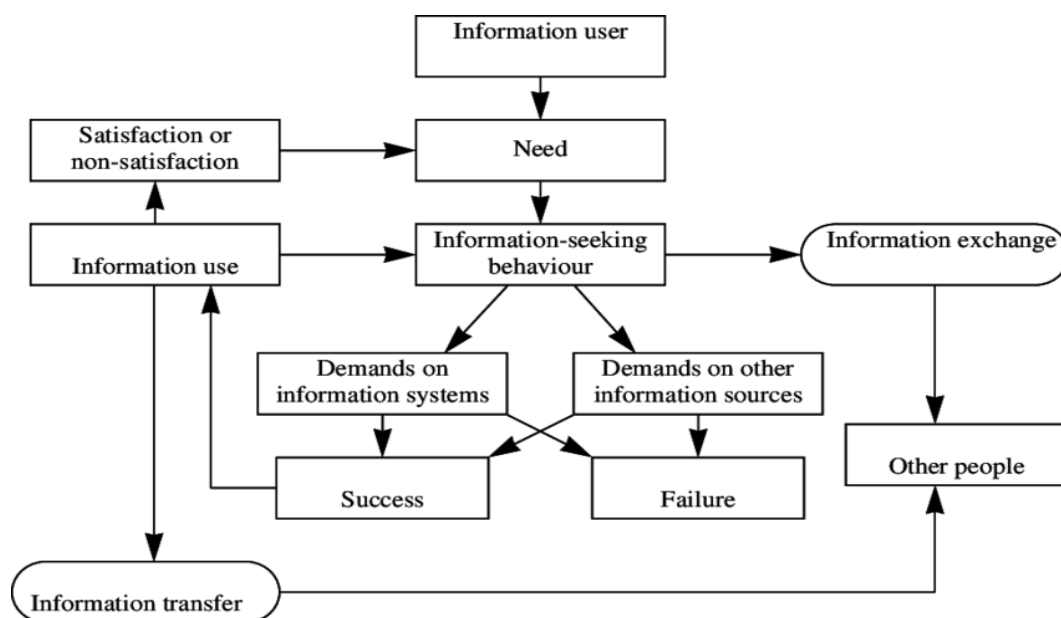
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## **I. INTRODUCTION**

Disability”, “Persons with Disabilities”, “Physically challenged” and “Rights of Persons with Disabilities” are people with physically, psychologically, or mentally disturbed who cannot be functioning correctly due to the social/environmental barriers. All people are equal to get services and access to all services of the state. According to the Constitution of Bangladesh, every citizen of the nation have the right to enjoy their

dignity, fundamental human rights and have social equality. The Act allows persons with disabilities to lead their lives like other people without facing any obstacles (WDDF&APCD, Bangladesh).

Information is the root of all development. No development can take place without useful, valid, and legal information. Information is needed everywhere in the development. Information need refers to finding and getting information to fulfil a lack of human being. On the other hand, Information seeking behaviour denotes to the way people search for and utilize information. A model of information needs and seeking behaviour by Wilson is as:



**Figure 1:** Wilson model of information-seeking behaviour.

“Information Seeking Behavior is the purposive seeking for information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information systems (such as a newspaper or a library), or with computer-based systems (such as the World Wide Web) (Wilson, 2000)”.

People need information in different purposes. Information need differs man to man. Students need academic, social, economic, political, health, and many other societal matters. Physically challenged students need a variety of information for their studies and survival affairs. Physically challenged people mostly need explicit information about their disabilities and methods of surviving with life events (Williamson et al. 2007). Bopp & Smith (2001) assumed that different information service delivery should be provided to differently physically challenged people. Adesina (2005) mentioned that physically challenged students need information for educational progress, social and personal matters, and recreational purposes. Due to the advancement of Information and Communication Technologies and diverse demands of the society, information has been producing on a large scale in the printed and digital format. Thus, information seeking pattern has also been different compared to the past. Therefore, in the changing information society, information need and the information-seeking behaviour of the physically disabled students has been a significant and eventful issue since the last few decades (Singh & kaur 2013). The purpose of this study is to determine information need and seeking behaviour of the physically challenged students and their pattern of library usage at the University of Rajshahi in Bangladesh. The University of Rajshahi is the second-largest universities in Bangladesh where more than 30,000 (Thirty thousand) students are studying in 59 departments. Physically challenged students read in almost all universities in Bangladesh. About 150 physically challenged students study at the University of Rajshahi (RU, 2018). The information needs and seeking behaviour, and library usage of physically challenged students may differ from others. Thus, this study attempts to analyze their information need and seeking behaviour with particular emphasis on the library usages picture.

**Objectives of the Study**

The primary objectives of the study were to examine the information need and seeking behaviour of physically challenged students at the University of Rajshahi in Bangladesh. The specific objectives of the study are as follows:

- To identify the purpose of accessing information resources.
- To identify the types of information, they usually want to use.

- To discover the problems faced in using and accessing the central library.
- To provide some recommendation to solve the problems while seeking and accessing information in the library.

## **II. REVIEW OF LITERATURE**

There are many studies on information need of different groups of people in different circumstances in different times (Students (Weiler 2005; Kerins, Madden & Fulton 2004; Wallace & Clariana 2005; Latrobe & Havener 1997; Fidzani 1998); doctors (Davies 2007; Bryant 2004); patients (Haque & Basak 2017; Rutten et al. 2005; Neame, Hammond & Deighton 2005); women (Mooko 2005; Bakar 2011); Teachers (Tahir, Mahmood & Shafique, 2008); older people (Fink, Kobsa & Nill, 1998) in different countries.

Fuller, Bradley & Healey (2004) found that the students with disabilities considered information as very useful to access and use of information in their learning experience. Moreover, the study concluded with this statement that further studies are necessary to adopt a more integrated approach to understanding disabled students experiences as learners.

Anjode (2010) explored information resources and services provided to physically challenged people in Plateau State Special Educational Institutions, Nigeria. They preferred mostly the large print books, audio descriptive videos and talking books. Information resources and services available for the physically challenged students were not competent. Therefore, adequate and relevant information resources should be provided to meet the needs of the physically challenged in Plateau State. Parents and non-governmental organizations must come forward to organize information resources and services for the physically challenged in the state.

Research on the physically challenged people's status, health problems, challenges, poverty (Black 1977; Zaman, 1990; Khan, 2003; Mai 1981; Hossain 2010; Zaman & Munir 1992; Hosain, Atkinson, & Underwood 2002; Islam, Mandal & Hossain 2011; Siddiqua, Islam & Afrin 2012; Ahmed 2015; Sufi, 2016; Sarita & Manish 2016; Shawon, Bhuiyan & Plateau 2018; Šiška & Habib 2013; Ahmmed, Sharma, & Deppeler 2014; Lira Huq, Edmonds, Baker, Busjia, Devine, Fotis & Keeffe 2013; Rahaman & Sutherland 2011; Malak & Khanam 2011; Zahid, Ashraf, Malik & Hoque 2013; Ahmmad, & Islam 2014; Mallick & Sheesh 2013) have done by many researchers in Bangladesh. However, studies on the physically challenged students' information need in Bangladesh have not been conducted earlier. So, this work attempts to explore this group of peoples' information need and library usages picture. Moreover, very little is known about the techniques employed by the physically challenged students in a rehabilitation setting like when looking for information, the kinds of source formats they prefer to use and how these sources are used, what barriers they confront, how they feel about the process, and how they can be helped to exploit the information resources available to them better. This group of people should be given special care to make them productive and thus can be able to contribute themselves to the development of their life and society simultaneously. The present study will explore the information need and seeking behaviour of physically challenged students as well as the library usage scenarios at university of Rajshahi in Bangladesh.

## **III. METHODOLOGY**

The study based on was survey research. The instrument used for data collection in this study was a structured interview and questionnaire. The questionnaire was containing both open and closed-ended questions. More than 150 physically challenged students of the University of Rajshahi are considered a population in various departments of the University of Rajshahi. The researchers have chosen randomly 36 physically challenged students as respondents. The researchers have gone physically with the questionnaire and met them in their department and their residence. The collected data were then analyzed through SPSS and simple tabular, graphical form.

### **Scope and Limitation**

The study was confined to the University of Rajshahi. Students who fitted the following criteria were interviewed:

- Having physical disabilities.
- Partially deaf or hearing impaired
- Visually weaken

All the physically challenged students of the University of Rajshahi were not included in this study, out of the more than 150 physically challenged students, 36 students were selected randomly for this study, and it is the limitation of the study. This study only includes students of the University of Rajshahi, not all the physically challenged students of other universities. This study will act as a reference for future research. There is an opportunity to conduct this study in a broad aspect in future.

**Data analysis:**

**Table 1:**

<b>Demographic information</b>	
Male	31(86.11%)
Female	5 (13.89%)
<b>Categories' of respondents</b>	
Hearing	-
Visual	2 (5.56%)
Speech	-
Physical	33 (91.67%)
Multiple	1 (2.78%)
<b>Instruments' used by respondents.</b>	
Wheelchair	1
Crutches	1
Braces	-

Table 1 shows that majority of the respondents (86%) are male while only 13% are female. Most of the respondents (91%) are physical disable only 5% of respondents are visually disabled, and about 3% of respondents are multiple disable. Only 2 Respondents use instrumental support, and the rest of the respondents do not use any instrumental support but somewhat physically troubled.

**Table 2: Resources used**

Newspaper	35 (97.22%)
Journal article	6 (16.67%)
Textbook	26 (72.22%)
Storybook	16 (44.44%)
Magazines	5 (13.89%)
Google	14 (38.89%)
Different health blogs	2 (5.56%)
Facebook	31 (86.11%)
Twitter	1 (2.78%)
YouTube	30 (83.33%)
Different health groups on Facebook	10 (27.78%)

As shown in table 2, 35(97%) respondents use newspaper, 6(16%) respondents journal article, 26(72%) textbook, 16(44%) storybook, 5(13%) magazines, 14(38%) google, 2(5%) different health blogs, 31(86%) Facebook, 1(2%) Twitter, 30(83%) YouTube.

**Table 3. Digital information resources**

E-Newspapers	28 (77.78%)
E-journals	7(19.44%)
E-Books	10(27.78%)
E-Magazines	2(5.56%)

Multiple responses

Table 3 shows that 28(77%) respondents are using E-Newspapers, 7(19%) respondents are using E-journals, 10(27%) respondents are using E-Books, and 2(5%) respondents are using E-Magazines.

**Table4. Purposes of accessing information resources**

For preparing notes	18 (50%)
For making assignment	14(38.89%)
For developing the presentation	16(44.44%)
For preparing exam preparation	26 (72.22%)

Multiple responses

Table 4 reveals that out of the 36 respondents of the survey, 26(72%) respondents accessing information resources for preparing exam preparation, 18(50%) respondents accessing information for preparing notes, 14(38%)respondents accessing information for preparing an assignment, 16(44%) respondents accessing information for preparing a presentation.

**Table 5. Research information**

For a reading research article with my interest	7 (19.44%)
For doing/researching any department project	10 (27.78%)
For managing and organizing research	6 (16.67%)
For final research writing	5 (13.89%)
For updating my knowledge in research	28 (77.78%)

Multiple responses

Table 5 shows that 28(77%) respondents accessing information for updating their knowledge, 10(27%) respondents accessing information for doing/researching any department project,7(19%)respondents accessing information for reading the article with their interest, 6(16%) respondents accessing information for managing and organizing research and 5(13%) respondents accessing information for final research writing.

**Table 6. Health information**

To know the information required for I am in need/ which is related to my physical condition	30 (83.33%)
To understand the better treatment places/ hospital all over the world besides Bangladesh	2 (5.56%)
To know better information about harmful medicine	4 (11.11%)
To understand better information about physical exercise	10 (27.78%)

Multiple responses

Table 6 shows the types of health information. It is found that 30 (83%) were searching about their physical information while 2 (5%) respondents need the information on the available treatment facilities other than Bangladesh which is very nominal, 4 (11%) needed the information about harmful medicine, and 10 (27%) respondents required information about physical exercise.

**Table 7. Business information**

To gain knowledge about online business	16 (44.44%)
To obtain knowledge about regular business trends in the world	12 (33.33%)
To do business in internet	8 (22.22%)

Table 7 shows that 16 (44%) respondents required information about online business information, and 12(33%) respondents needed information regular business trends in the world.

**Table 8. Recreational information**

For refreshment	14 (38.89%)
For recent movies, films, dramas, documentary	17 (47.22%)
For video gaming	3(8.33%)
I don't need entertainment	2(5.56%)

Multiple responses

Table 8 shows that 14 (38%) respondents were willing to know the information for refreshment, while 17 (47%) required information for recent movies, films, dramas, documentary.

**Table 9. Information needed by respondents.**

Career-related	26 (72.22%)
About computer and internet	20 (55.56%)
Religious information	7 (19.44%)
Politics	8 (22.22%)
Sports	10 (27.78%)
Medical information	12 (33.33%)

Multiple responses

Table 9 shows that 26(72%) respondents needed for career-related information, 20(55%) respondents needed for computer and internet related information, 7(19%) respondents required religious information, 8(22%) respondents needed political information, 10(27%) respondents needed sports information and 12(33%) respondents needed medical information.

**Table 10. Basic sources of information frequently used.**

Internet browsing	21 (58.33%)
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Newspaper	23 (63.89%)
Friends	20 (55.56%)
Teachers	8 (22.22%)
Others	1 (2.78%)

Multiple responses

From the above table 10 it is seen that most of the respondents 23(63%) used newspaper, 21(58%) respondents used internet, 20(55%) respondents asked friends, 8(22%) respondents communicated with teachers as sources of information.

**Table 11. The preferences of printed sources rated by respondents.**

Strongly prefer	5 (13.89%)
Prefer	29 (80.56%)
Not prefer	2 (5.56%)

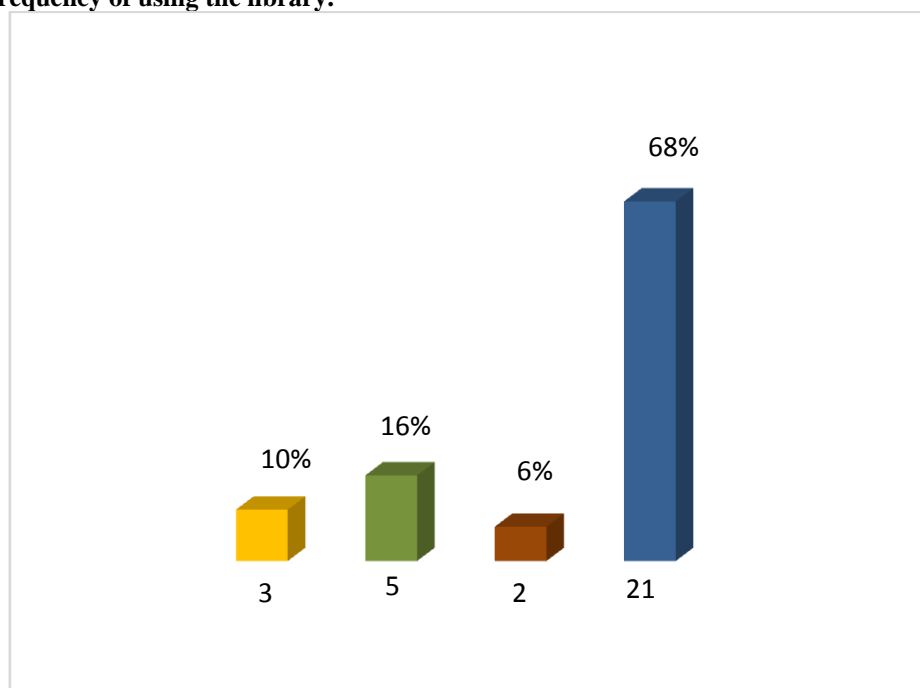
As shown in table 11, 29(80%) respondents preferred of printed source, 5(13%) strongly preferred and 2(5%) respondents did not prefer of printed sources.

**Table 12. The preferences of digital sources rated by respondents.**

Strongly prefer	10 (27.78%)
Prefer	23 (63.89%)
Not prefer	3 (8.33%)

Table 12 shows that 23(63%) respondents preferred digital sources, 10(28%) respondents strongly preferred, and 3(8%) did not prefer digital sources.

**Figure 2. Frequency of using the library.**



The above figure indicates that 3(10%) respondents use the central library every day, 5(16%) respondents use central library one day in a week, 2(6%) respondents used central library in a month and 21(68%) respondents used central library when needed.

**Table 13. Separate corner for the respondents in the library.**

Yes	5(13.89%)
No	31 (86.11%)

Table 13 shows that there is no separate corner for the respondents in the central library.

**Table 14. Finding information in the library.**

Browsing catalogue cards	13 (36.11%)
Searching on shelves	15 (41.67%)

Asking library staff for the required information	6 (16.67%)
Asking friends	2 (5.56%)
Online catalogue (OPAC)	00

Table 14 implied that 13(36%) respondents find information in the library by browsing catalogue cards, 15 (41%) respondents find information in the library by searching on shelves, 6(17%) respondents find information in the library by asking library staff, 2 (6%) respondents find information in the library by asking friends and no respondents in use of Online catalogue (OPAC) for finding information in the library. So, searching on shelves to locate the information was the largest.

**Table 15. Section of the library use.**

Reading section	24 (66.67%)
Reference section	6 (16.67%)
Reprography section	00
Circulation section	8 (22.22%)
Internet browsing section	4 (11.11%)
Newspaper section	11 (30.56%)

Multiple responses

From the above table 15, it is seen that most of the respondents 24(66%) used general reading section, 6(16%) respondents used reference section, 11(30%) respondents use newspaper section,4(11%) respondents used internet browsing section, circulation section 8 (22%)and no respondents usedreprography section.

**Table 16. Satisfaction level of library service.**

Very satisfied	3 (8.33%)
Satisfied	19 (52.78%)
Dissatisfied	14 (38.89%)

Table 16 shows that 3 (8%) respondents are very satisfied with the existing services and systems of the library, 19(52%) respondents were satisfied, 14 (38%) respondents were dissatisfied.

**Table 17. Barriers to using library services**

Staff attitude is discouraging	1 (2.78%)
Library environment is not good	3 (8.33%)
Lack of information materials	10 (27.78%)
Lack of infrastructure facilities for you	9 (25%)
Furniture in the library are not suited to my physical condition	10 (27.78%)
Lack of orientation program	6 (16.67%)
Lack of architectural design that suited with my physical condition	3 (8.33%)

Multiple responses

Table 17 shows that the major problems hindered that handicapped student information seeking includes staff attitude is discouraging 1 (2%), Library environment is not good 3 (8%), lack of information materials 10 (27%), lack of infrastructure facilities 9 (25%), furniture in the library are not suited with the physical condition of the students 10 (27%), lack of orientation program 6 (16%) and lack of proper architectural design 3 (8%).

**Table 18. Sectors to be improved**

Communication improvement	18 (50%)
Internet availability everywhere	14 (38.89%)
Lift system in a library and academic buildings	20 (55.56%)
Provision of Audiovisual aids	12 (33.33%)
Automatic speech recognition machine	5 (13.89%)
Hearing impairment aids	5 (13.89%)

Multiple responses

Table 18shows the sectors that need to be improved. 18(50%) mentioned about the improvement of communication, 14(38%) mentioned to make internet available everywhere, 20 (55%) said to launch lift system in a library, and academic buildings, 12 (33%) thought about the addition of Audiovisual aids in the library and departments, 5(13%) mentioned about automatic speech recognition machine.

#### **IV. FINDINGS OF THE STUDY AND RECOMMENDATIONS:**

- Most of the respondents are male students having some physical problems.
- Textbooks are popular types of information for physically challenged students. Majority students use newspaper, facebook, storybook, youtube.
- Most of the physically challenged students access information resources for preparing examination and for gaining knowledge in research projects.
- Concerning health information, most of the respondents use and access in such information which fits with their health conditions.
- They mostly preferred printed sources of information.
- Most of the students used the central library when they needed it.
- Most of the students find information in the library by searching on shelves.
- Most of the respondents used reading sections of the library.
- The physical barrier was the main problem to access in the library.

### **Recommendations**

Based on the analysis, some recommendations can be put to implement. Those are:

- University authority should make all public places and services easily accessible.
- University authority especially library and information centers of the university must take the responsibility to make them expertise by arranging some projects on the soft skills. So that, besides their studies, they can involve themselves with career development.
- General awareness based program about the rights of these special groups of students must be initiated by the university authority.
- Regular basis training and orientation program must be arranged by the library authority.
- Physically challenged students must be handled with welcoming attitudes.
- Library should keep available reading materials relating with disabilities.
- Library should keep audiovisual aids for them.
- Library should have separate corner for them.
- Library should have friendly furniture for them.
- Internet availability should be ensured everywhere
- Automatic speech recognition machine should be installed in the library.
- Hearing impairment aids should be installed in the library.
- Authority should take necessary steps to ensure education is inclusive and must provide rational accommodation in the student's hall (BLAST, 2015).
- Libraries through the installation of an acceptable and proper technology that supports an e-learning platform (BLAST, 2015).

### **V. CONCLUSION:**

The physically challenged students are not the burden of society. Most developed countries have been giving priority to those groups of people. One respondent in this study said that "University authorities throughout the country should initiate a large measure to take us in the mainstream. Although we have quota for admission and job market, we do not get full-fledged facilities in the university like the suited living facilities, adequate learning aids, suited classrooms and buildings, suited library facilities, etc." Different types of disability require different types of specialized services, be it in the classroom facilities, academic buildings, living building and library and information centres. Pulman (2004) categorized services to be provided libraries for the physically challenged in general into four main areas:

a. Physical access to buildings, service counters, workstations, reading rooms, and shelves where possible. This can include providing: ii. entrances with proper, vibrant openings or automatic doors (900mm ideal door width); iii. Slopes outside and within the building; in case of stairs: no open treads, handrails on both sides; ideally: elevators; iv. Barrier-free hallways (no floor mats or furniture); v. colour contrast in carpets and on walls (also to function as warnings near stairs and doorways); vi. effective lighting; vii. accessible tables, computer stations and public service desks (table height and width, turning spaces, ergonomic chairs, lighting); viii. toilets should be well suited; ix. shelving: should ideally fall within 750- 2000mm from floor level; x. signage: plain typeface on signs and websites; b. Rational access to the content of information carriers, including the availability of substitute layout materials, adapted workstations and distinct software. c. Specialized training of library staffs to handle such groups of pupils. d. provision of online access to library services. Virtual access to library services. Ensuring the online preservation of materials that are also in the stacks of the library. The library reservation services should also be the same for them besides the regular clients of the library.



In conclusion, we need to be aware of the physically challenged students in society. If we can be able to make them proper human resources, they will be social capital which would be an added advantage in society.

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