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Satisfaction of Visually Impaired Students with Resources and Services at GC University Lahore, Pakistan

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Abstract

Purpose: This research's main goal was to know the resources and services being offered to the visually impaired students at GC University Lahore and their level of satisfaction with the facilities they are being provided.

Design/methodology/approach: Quantitative study design was opted to get the purpose of this research. Convenience Sampling technique was applied to get required results. 50 visually impaired students were chosen as a sample from the population of almost 300 special students who were currently enrolled in different disciplines at GC University Lahore. Required data was collected after having used close-ended interview technique because majority of the target population was blind. Gathered data were analyzed.

Research limitation (s): This study is limited to the physically disabled students & researchers of Government College University Lahore, Pakistan.

Key finding (s): The research findings reveal that visually impaired students can become valuable members of society if they are provided equal opportunities. The Centre for Special Students (CSS) at the University gives two fundamental freedoms to VIPs, first independence to excel in an academic environment, and the second choice in library services. The majority of the visually impaired students

are satisfied with the resources and facilities which they are being provided at GC University Lahore. Disabled students utilize braille for reading purposes. They prefer electronic materials. They also face problems due to the lack of required equipment in meeting their needs.

Keyword (s): Library resources and services, visually impaired students at GC University Lahore, Facilitating VIS

Introduction and Background of the Study:

The library is considered a very 'welcoming place' in the university. It provides comfortable access for reading and research material. The library provides its services to all knowledge seekers. GC University Library Lahore is a major library of Pakistan regarding resources and services. There are at present more than 3,49,797 books in the library. The Library has received more than 59 personal collections. It has all volumes of Nuqoosh Magazine. It has received more than 20,000 literary letters. GCU Library has a rich collection of Archives. It has preserved all volumes of the Ravi from 1906 to onward. GCU Library Lahore is the only member of World Digital Library, a cooperative project of UNESCO and Library of Congress. 17 rare books are available there in full text format at WDL Portal. Library is pioneering in starting formal & informal resource sharing projects with leading libraries including COMSATS University Library, Punjab University Main Library, LUMS Library and University of Texas. The Library has taken the initiative of KOHA Cloud Computing in collaboration with PASTIC, Islamabad. Access to 27 leading online databases through HEC has been provided which provide more than 55000 peer reviewed journal and more than 1,75,000 e-books. Access to millions of online theses is being provided to the users through Pro Quest Theses & Dissertations Databases. The Library has been declared the best library of Pakistan by ISSR, UK. GCU Library Website won the first position in a competition organized by Elsevier and HEC, Islamabad.

GCU Library has a rich history. Government College, Lahore Library came into existence in 1872. Khalifa Asadullah Khan joined in 1916 as the first qualified librarian. A proper library with an office and a reading room was established in 1937 in memory of Mian Fazl-i-Hussain a renowned

educationist. The library building once again was expanded in 1964. In 1999 the post graduate library was established. At present there are three libraries (Central Library, Postgraduate Library and Life Sciences Library) with eight departmental libraries and one Center for Special Students, directly associated with the library for administrative affairs. The library fulfills the information needs of more than six thousand student, teachers and researchers.

In 2008, the library opened the door of its collections to the visually impaired students by setting up a Center for Special Students (CSS). The administration of the same center tries to provide the visually impaired persons (VIPs) every reading material, a VIP could want in a library in the very form which is easily readable and comfortable for that special person. GCU Library believes that freedom of information is included in the basic rights of students of the GC University Lahore. Visually impaired students thus have the same right to education and information as other student in the university.

Objectives of the Study:

Objectives of the study include the following:

- To know the satisfaction level of the visually impaired students regarding resources and services offered to them in GC University Lahore
- To reveal problems of the physically disabled students being faced in satisfying their information needs

Literature Review:

Shepherd (2001) conducted study on Providing Learning Support for Blind and Visually impaired Students Undertaking Fieldwork and Related Activities. Findings show that audio and visual facilities are highly beneficial for visually impaired persons. E services are very productive for partially blind students too. Modern techniques need to be implemented to provide satisfactory services to the

special students so that they can get equal learning opportunities like normal human beings and may not fall into inferiority complex because lack of required facilities often leads to a sense of frustration. So, visually impaired students should be given special importance. They should not be left alone during testing times.

Braille machines, audio books, CDs, DVDs, and electronic books in specific format are widely used to provide facilities to the visually impaired students. Needs of the visually impaired students are different from sighted people. They have to struggle to get quality learning. Their information and research needs should be satisfied by using the latest methods and techniques because they can also become valuable citizens. Bernardi (2006) conducted study on Library Services for Blind and Visually Impaired People. Results of the study show that visually impaired students use special software and voice programs in order to make compliance of requisite tasks. They use braille machines for learning and doing different exams. They sometimes face problems in accessing required publications. Digital services need to be designed keeping in view the needs of visually impaired students.

Koganuramath (2009) conducted research on Learning resource centre for the visually impaired students in the universities to foster inclusive education. Results of the research show that libraries need to be dedicated in providing services to the physically disabled persons. Emerging technologies need to be implemented to facilitate the special students so that they can meet their needs without meeting any barriers. Adequate resources need to be placed in the libraries. Proper training should be given to the visually impaired students for making them skilled in exploring required information resources.

Athanasios, Konstantinos, Doxa & Eleni (2009) conducted study on Students with Visual Impairments in Higher Education Institutes. Findings of the study reveal that technology-based environment mattered a lot in the provision of ideal services to the visually impaired students. There was a great role of the environment in satisfying information and research needs of the special students.

Visually impaired students faced problems in getting jobs after having made compliance of their degree from the university. They complained about the shortage of important infrastructures which could prove beneficial in meeting their required needs. They faced problems in the understanding of their lectures. They needed good infrastructure for getting quality education and finding equal opportunities like other students.

Cetin, N.M., Alemdag, E., Tuzin, H. & Yildiz, M. (2015) conducted study on web pages assessment for the special students. Findings of the study reveal that websites are very valuable source to gather required information. Online information sources are preferred than print sources. Special students more preferably use electronic resources. They use websites to access required information. Online information resources have brought a great comfort in the lives of people. Now, access to information has become easy on account of different websites. Special students should be given awareness about the usage of websites so that they can make an effective utilization of web pages. Special students face the problem of unavailability of curriculum content at websites. They don't have access to all relevant material at websites.

Peters, L. & Smith, C. (2015) conducted study on using law and licences to supply accessible books to visually impaired students at the University of Chester. Findings of the study suggest that text books should be arranged for the special students. They should be provided course packs adequately. Their curriculum needs should be placed on priority. There should be a welcoming behavior by the library professionals for the special students. Special students should be given priority. Their reference queries should be fulfilled on urgent basis. They should never be ignored. They should be provided individual guidance. They should be given training to utilize e-resources without facing any hurdle.

Schiff, R.A. (2015) conducted research on information literacy for the special students. Findings of the study suggest that information literacy instruction is highly significant for the special students. Information searching expertise need to be developed so that special students may not face any problem in searching required information. Special literacy courses need to be conducted to facilitate the special students. Awareness should be provided regarding the use of Boolean operators to the disabilities. Learning should be provided related to databases. Online information resources literacy needs to be developed to support the visually impaired students.

Lourens, H. & Swartz, L. (2016) conducted research on the experiences of special students regarding higher education. Results of the study show that disabled students have a different experience of learning from sighted students. They have to struggle to get higher education. They can't have access to all resources easily. They have to work harder. They have to consume more time on their studies. They are also lover of learning and research. They wish to enhance their expertise by using available sources. They need to be provided requisite facilities. They should be provided amicable learning environment. Their needs should be given value. They should not be left alone in problems. Their feedback should be given significance. Services should be designed keeping in view the needs of the special students.

Iqbal, M., Shahid, S. & Naseem, M. (2017) conducted research on braille based learning system for the parents special students. Findings of the study show that braille learning is the one of the basic needs of the special students. Braille machines play a major role in the spread of learning and knowledge among special students. Disabled students can't satisfy their needs without making sound expertise to use braille machines. Urdu braille machines play a major role in bridging gap between the special students and their parents. Braille Translator is very much useful in fulfilling required needs.

Rayini (2017) conducted study on Library and information services to the visually impaired persons. Findings of the study show that visually impaired students have similar information and research needs like sighted people. They need information from multiple sources. They require information through newspapers, Compact Discs, and internet etc. Efficient library services need to be provided to visually impaired student. Visually impaired students often face problems in accessing required information on account of the lack of required publications in specific format. Library professionals need to make available required books for the visually impaired students in specific format so that special students may not face any problem in locating their information. With the advent of Information & Communication Technologies, now it has become easy to provide quality services to the visually impaired students.

Bhardwaj, R. K. & Kumar, S. (2017) conducted study on digital environment for the special students. Findings of the study show that on daily basis, the special students frequently utilized online resources. They use electronic information products in order to make compliance to related projects. They can easily access digital information from anywhere. They use Information Technology to meet their information and research needs. They use e-books, digital research reports, peer reviewed articles and other online content. They make assignments, projects and make completion of dissertations through digital resources. Online content has brought a great ease for the special students. Educational places need to build maximum digital collections so that required needs may be met efficiently and special students may not face any problems. Proper training should be given to the special students so that they can use latest devices easily. Online information searching techniques should be developed among the special students so that they can search required information without facing any barriers.

Visually impaired students depend on electronic content. They prefer to read material in specific format. They get their books converted so that they can read without facing any problems. They have

a sharp mind. If they are provided efficient services from their educational placed then they will be able to quality conscious learning. Jones (2017) conducted study on Educating Students with Visual Impairments in the General Education Setting. Findings reveal that visually impaired students need to be given importance. They can become valuable citizens if they are focused. Their information needs should be considered. They need to be served. They should be provided support. They need to be given training so that they can become skilled. If adequate facilities are provided to the visually impaired students, then they can do their tasks independently.

Eligi, I. & Mwantimwa, K. (2017) conducted research related to IT services for special students in Tanzania. Findings of the study suggest that innovative learning was needed to special students. They required virtual resources and services in order to manage educational challenges. Through digital resources, they could meet their needs in an efficient style. They needed a special section where they could accomplish their tasks without facing any barriers. They needed special on campus facilities so that they could equally get learning opportunities. They were brilliant and only they required sufficient facilities in order to meet their needs. They should be given importance by the institutes so that they may work like sighted humans. The role of IT experts is also of great value to fulfill the information and research needs of the special students. Databases and special portals need to be developed to serve the special learners so that they can feel a sense of pleasure and satisfaction.

Access to information to every user is at the center of all library services. The basic goal of the any library is to provide information resources to the users. If users' needs are not fulfilled, then the library can't win a good repute in the community. To create a good image, a library needs to be up to mark. The Library should provide satisfactory services to all types of users. Mbugua, Odini & Chege (2018) conducted research on Provision of Information Services to the Visually Impaired Students at Thika School for the Blind. Data was gathered from the target population by using interview technique.

Results of the study show that special students are given top priority regarding the provision of information resources and services. However, most of the library's services are designed keeping in view the sighted students therefore visually impaired students face problems in quenching their thirst for learning. The study suggests the need of providing services to all users without any discrimination.

Glory (2019) conducted research on provision of library and information service to the visually impaired in Ogun State, Nigeria. Results of the study show that special persons have reading trends like other normal human beings. They mostly depend on audio and visual materials. They largely utilize electronic content. They use special technologies in order to enjoy reading and learning. Their examinations are different from traditional examinations. They face shortage of required IT equipment. They need skilled staff so that they can do their tasks without facing any barriers. Ismail & Waseem (2019) conducted research to reveal reading habits. Results of the study show that special students love book reading. They also like books other than syllabus. They prefer popular literature. They sometimes face problem in finding specific material.

Bodaghi, N.B., Cheong, L.S. & Zainab, A.N. (2019) conducted study related to experience of special students in academic libraries. Results of the study show that academic librarians have a major responsibility to meet the needs of special students. They need to form resources keeping in view the needs of disabled students. They must work dedicatedly. They need to be expert in relevant tasks. They need to flourish their IT skills so that they can present solution of the different problems of special students. They should take keen interest to fulfill the information and research needs of special students. They should be innovative in their approach. They should make creative projects in order to lead from the front. They should listen the problems being faced by special students and should make serious efforts in making solution of the same because this thing will boost up the confidence of the special students. Special students should be made comfortable through the provision of satisfactory services.

Harrasi, A.A. & Taha, A. (2019) conducted research on services delivery for the special students at UAE. Findings of the study suggest that special students faced several problems in accessing required material. Their information needs were not met. They were not provided data in required format. They were not provided satisfactory digital services. They were not able to get quality learning on account of different problems. Resources were not sufficient to meet their needs. They had an urgent need of satisfactory resources and efficient services in order to perform different tasks.

Alabi, A. O. & Mutula, S.M. (2020) conducted research on digital inclusion for special students through IT in academic libraries. Findings of the study suggest that information and communication technologies are of great help regarding facilitation to special students. IT has brought a revolution in all fields of life. Information technologies are very useful to satisfy the needs of all types of users. There are many benefits of IT. Users can access required information around the clock. They can make assignments through digital resources easily. Special students mostly depend on digital content so that frequently use online resources of academic libraries. They consult Reference Librarians for specific queries. They also get required material in scanned form. Academic libraries should develop digital collection keeping in view the needs of the modern age. Right to information is also a human right so special students should be provided all required information.

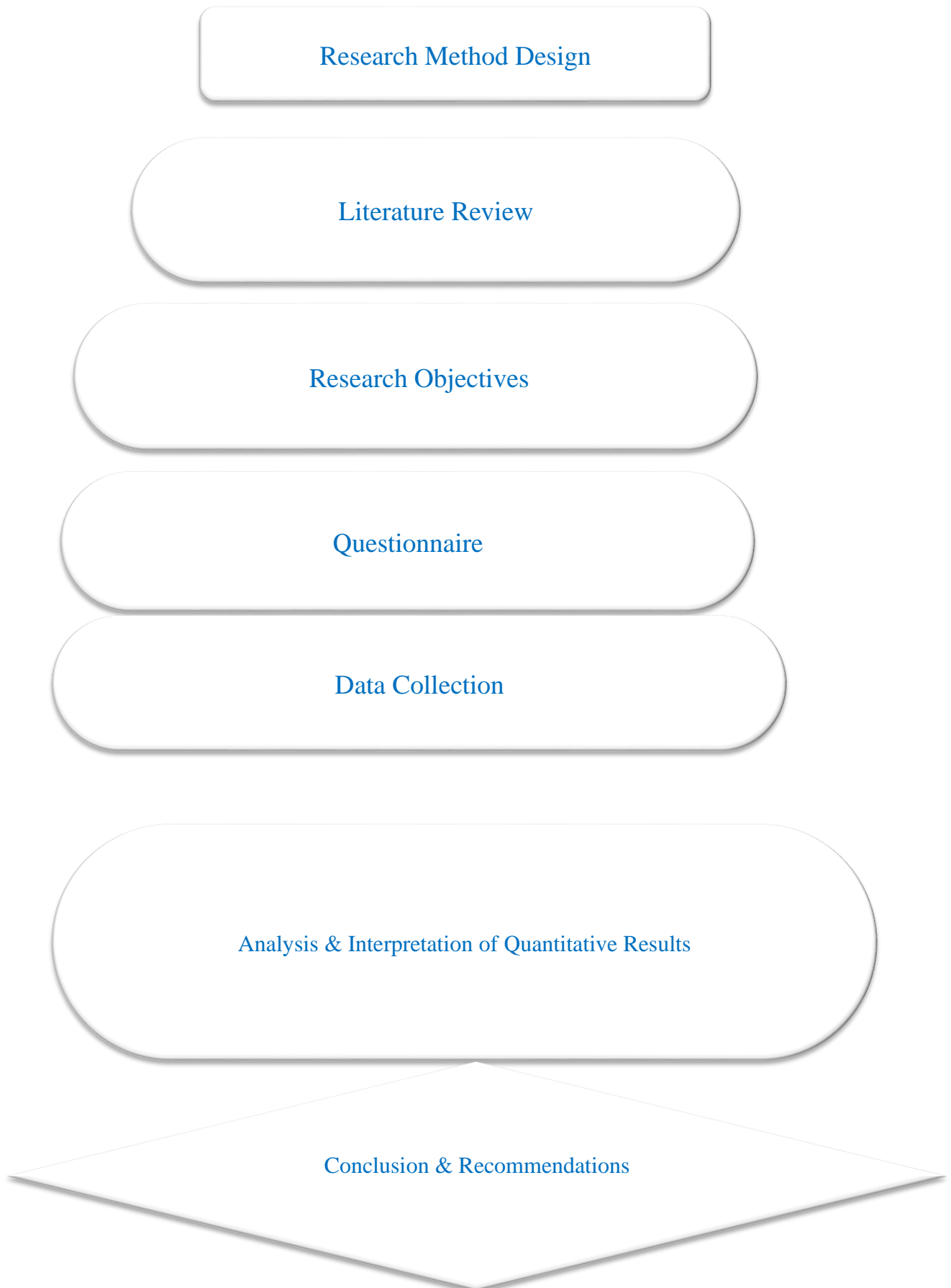
Ratliff, R. R. (2020) conducted thesis on parental involvement with students who are visually impaired and blind academic success. Results of the study show that parents play an important role in the success of special students. If parents and guardians are self-responsible and they place all needs of their special children on priority then there are maximum chances of success otherwise disabled students can't become special members of the society. The role of teachers is also very significant in the success of special students. Mentors can play the role of being facilitators for the disabled students. They can help the students to a great deal. They are a real role model as they bring much ease regardless

race, nationality, religion etc. Parents need to attend meetings with teachers regarding the performance of their children. They need to become pro-active. They must play a great role in the academic success of their children. Special students should be supported through all available resources so that they may also lead in different fields of life more effectively. If proper attention is not given to them, then they will always feel inferiority complex and they will not be able to become self-independent. Parents and teachers are most valuable pillars in the academic and professional successes of their children.

Methodology

Survey research followed by quantitative method was adopted to get the set objectives of the research. 50 visually impaired students were selected as sample from the population of 300 visually impaired students who were enrolled in the different departments of GC University Lahore. Convenience Sampling Technique was applied. Researchers themselves gathered data using close-ended interview technique through a check list because majority of the target population was blind and some respondents have other physical disability. Required data was accumulated. Frequency Test was utilized for data analysis. Below-depicted figure shows the research methodology of the study:

Figure: 1



Results, Analysis, Interpretation

Collected data are analyzed as following:

Table 1: Frequency distribution of respondents' gender N=50

Gender	Frequency	Percent
Male	47	94%
Female	03	6%
Total	50	100.0%

Table 1 reveals that there were 47 (94%) male respondents and 03 (06%) female respondents who participated in this study. This shows that male participants were more in the Centre for Special Students (CSS) situated in the University.

Table 2: Satisfaction with resources & services

Service	Extremely Satisfied	Less Satisfied	Not Satisfied at All	No Response
Computer Training Classes	32/50= 64%	9/50= 18%	5/50= 10%	04/50= 8%
Perkins Braille Machines	23/50= 46%	8/50= 16%	13/50= 26%	6/50= 12%
Speech Output Programmes	22/50= 44%	16/50= 32%	11/50= 22%	01/50= 2%
Internet Facilities	33/50= 66%	6/50= 12%	4/50= 8%	7/50= 14%
Examinations	29/50= 58%	13/50= 26%	06/50= 12%	02/50= 4%
Audio & Video Materials	24/50= 48%	13/50= 26%	04/50= 8%	09/50= 18%
Scanning-Facility	22/50= 44%	09/50= 18%	11/50= 22%	08/50= 16%

Braille Magazines	34/50= 68%	06/50= 12%	05/50= 10%	05/50= 10%
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Table 2 shows respondents' satisfaction with the resources and services being offered to them by the university. Visually impaired students were asked about their satisfaction level with computer training classes which they attend during their studies in GC University Lahore. Out of 50 students, 32 students showed great level of satisfaction, 09 students were less satisfied, 05 students were not satisfied at all while 04 students did not give any response. The students were asked to mention their satisfaction regarding Perkins Braille Machines. Out of 50 students, 23 students were highly satisfied with Perkins Braille Machines, 08 students were somewhat satisfied with Perkins Braille Machines, 13 students were less satisfied while 06 students were not satisfied at all with Perkins Braille Machines.

Visually impaired students were asked to mention their satisfaction level with speech output programmes. Out of 50 students, 22 students were highly satisfied with speech output programmes, 16 students were somewhat satisfied with speech output programmes, 11 students were less satisfied while only one student was not satisfied at all with speech output programmes. Visually impaired students were asked to mention their satisfaction level regarding internet facilities. Out of 50 students, 33 students were highly satisfied with internet facilities, 06 students were somewhat satisfied with internet facilities, 04 students were less satisfied while 07 students were not satisfied at all with internet facilities.

Satisfaction of the visually impaired students was asked regarding examinations. Out of 50 students, 29 students were highly satisfied with examinations-service, 13 students were somewhat satisfied with examinations-service, 06 students were less satisfied with the facility of examination while only 02 students were not satisfied at all with examinations-service. Visually impaired students were asked to show their satisfaction related to audio & video materials. Out of 50 students, 24 students were highly satisfied with audio & video materials, 13 students were somewhat satisfied with audio & video materials, 04 students were less satisfied with audio & video materials while 09 students were not satisfied at all with audio books facility.

Visually impaired students were asked to show their satisfaction with scanning facility which they received in the Centre. Out of 50 visually impaired students, 22 students were highly satisfied with scanning-service, 09 students were somewhat satisfied with scanning service, 11 students were less

satisfied with the service of scanning while 8 students were not satisfied at all with scanning-service. The Centre has a good collection of different magazines. Visually impaired students enjoy reading serials. They enhance their information through periodicals. They were asked to show their satisfaction regarding braille magazines. Out of 50 visually impaired students in the Centre, 34 students were highly satisfied with the service of braille magazines, 06 students were somewhat satisfied with braille magazines service, 05 students were less satisfied with magazines service while 5 students were not satisfied at all with braille magazines service.

Conclusion:

Physically disabled students are valuable. Their information and research needs should be fulfilled efficiently so that they may feel great satisfaction with the facilities being offered to them. They have shining minds. They compete in different examinations like normal students. They spend a good deal of time in reading different content. They utilize audio & video materials to make compliance of required tasks. They mostly depend on electronic resources. They use Perkin machines. They use a number of resources to get learning and enhance their expertise. Overall, they have shown satisfaction with the facilities and resources which are being provided to them in the Centre for Special Students (CSS), GC University Lahore.

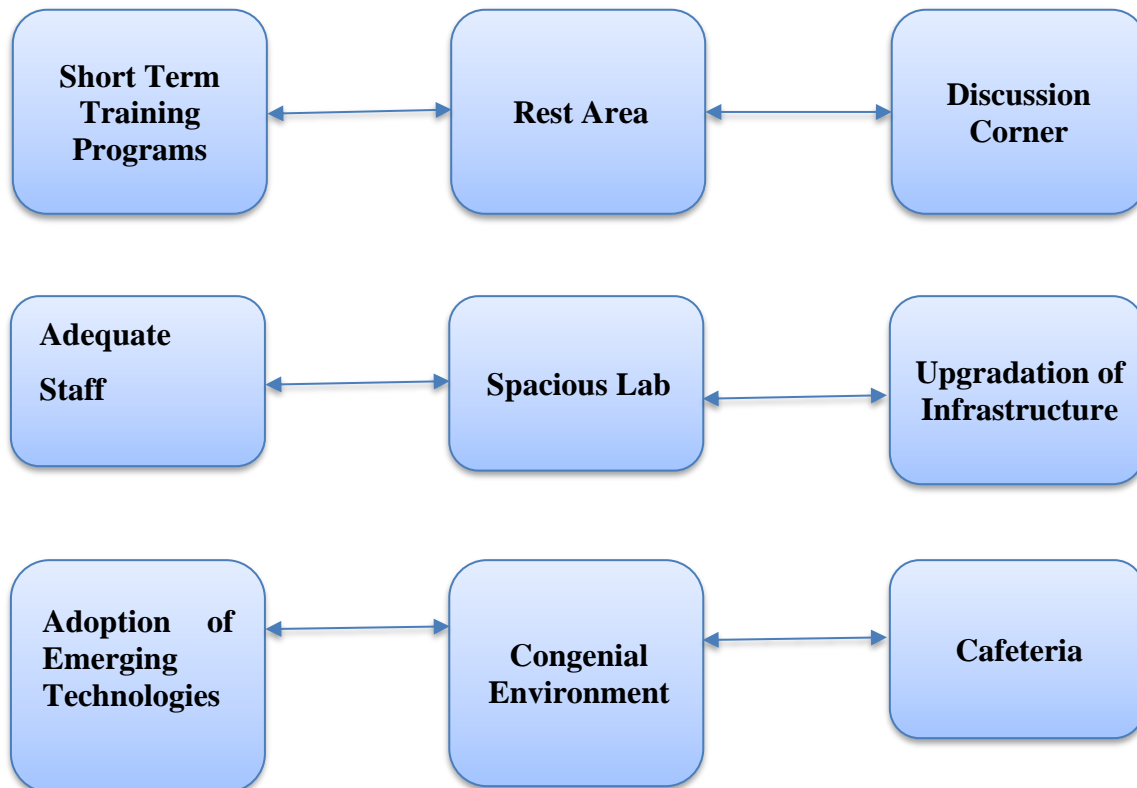
Recommendations:

Following recommendations are furnished to further improve the services for the visually impaired students, GC University Lahore, Pakistan:

- Maximum resources should be built in order to satisfy the needs of visually impaired students.
- Electronic content should be increased to provide efficient services to the disabled students.
- Feedback from the visually impaired students should be placed on priority and services should be designed keeping in view the same reflection.
- Emerging technologies should be implemented.
- Staff with IT expertise should be deputed to serve the visually impaired students.
- High-Tech. facilities should be provided on priority.
- A suggestion box should be installed to record visually impaired students' demands so that they can be provided services in an efficient style.

While gathering responses from the participants through close-ended interviews, some observations were noted and the same are shown through following figure to provide more satisfactory resources and services to the visually impaired students at the university:

Figure 2.0
Solutions for provision of better satisfactory services



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