



**INCLUSION OF STUDENTS WITH DISABILITIES IN HIGHER EDUCATION  
- A STUDY OF UNIVERSITY OF DELHI**

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**ABSTRACT**

*The following research paper attempts to understand the current status of inclusion of Students with Disabilities (SwDs) in Higher Education at Delhi University. Totally 103 SwDs (9 students with locomotor disability, 94 with vision disability) were surveyed to assess the available facilities in colleges, problems faced by them, awareness regarding schemes and initiatives for PwDs and their views on the issues concerned. Purposive sampling technique was used in selection of participants. A questionnaire containing both open-ended and close-ended questions was used for data collection. Data analysis was done qualitatively. The results show that 70% of the SwDs face limited access to information and 39% of the SwDs face administrative issues. In the survey, only 40% of the SwDs found the sensitivity level of their colleagues satisfactory, 30% of the SwDs found it average while 8% found it below average.*

**Key Words:** *Inclusion, Students with Disabilities, Higher Education.*

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## Introduction

*“People with disabilities are vulnerable because of the many barriers we face: attitudinal, physical, and financial. Addressing these barriers is within our reach and we have a moral duty to do so..... But most important, addressing these barriers will unlock the potential of so many people with so much to contribute to the world. Governments everywhere can no longer overlook the hundreds of millions of people with disabilities who are denied access to health, rehabilitation, support, education, and employment—and never get the chance to shine.”*

-Stephen Hawking

Education is a way to empower oneself to become independent, gain knowledge and help to build opinions in life. It is important for the socio-economic development of a nation. In an era where “Inclusive Development” is being emphasized for sustainable development, focused initiatives are to be implemented which are contributed and enjoyed by all.

Education is a basic right, therefore, it is necessary to talk about the availability of the opportunities to access this right. The availability of the opportunities is very much related to the level of inclusivity in educational institutions of a nation. Before talking about the scenario of inclusive education, it is necessary to talk about the meaning of inclusion and how it fits in discussion of education. United Nations Educational, Scientific and Cultural Organization (UNESCO) views inclusion as

“a dynamic approach of responding positively to pupils with diversity and with individual differences not as problems, but as opportunities for enriching learning.” Promoting inclusion requires stimulating discussion, encouraging positive attitudes and improving educational and social frameworks to cope with new demands in educational structures and governance. It involves improving inputs, processes and environments to foster learning both at the level of the learner in his/her learning environment and at the system level to support the entire learning experience. Its achievement rests on governments’ willingness and capacities to adopt pro-poor policies, addressing issues of equity in public expenditures on education, developing intersectoral linkages with interdisciplinary and trans-disciplinary approaches to create an inclusive environment for all.

In India there are many marginalized groups in the society which are important to be included in the discussion of inclusion and one of these groups are Persons with Disabilities (PwDs). As per Rights of Persons with Disabilities Acts (RPD Act), 2016, a “person with disability” means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society. According to the Census of India 2011, out of the population of 121 crore, about 2.68 crore persons are ‘disabled’ which is 2.21% of the total population. At the same time, it also reveals that only 55% of PwD are literate it includes below primary (11%), below middle (13%), below matric (9%), below secondary (13%), above graduate (5%) and remaining 45% are illiterate in the total disabled population. The paper aims to understand inclusion by assessing the level of inclusivity in the

University of Delhi through various parameters like infrastructure, sensitivity among stakeholders of the University and awareness level of the SwDs.

### **Aim:-**

To understand the concept of inclusivity and identify the problems of inclusion in higher education.

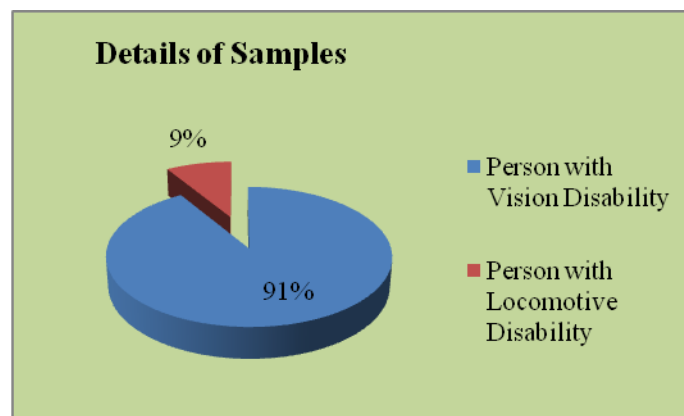
### **Methodology**

*Qualitative Research*

It is a case study of inclusion in University of Delhi which assesses the level of inclusivity in the university. It is a primary exploratory research which attempts to understand the problems faced by students with disabilities in University of Delhi.

### *Sample Description*

- 103 participants with disability out of which 94 were persons with vision disability and 9 were persons with locomotor disability.



**Fig 1 - Details of Samples**

### *Sampling Technique:*

*Purposive Sampling* technique was used in this study. -

### *Inclusion Criteria*

- Students with vision and locomotor disability.
- Students in higher education of Delhi University.

### *Tools Used- Questionnaire*

- Students are asked about the problems that they face in college premises.
- Further, a section contained an activity where they had to rate the level of sensitivity of their peers, teaching and non-teaching staff.

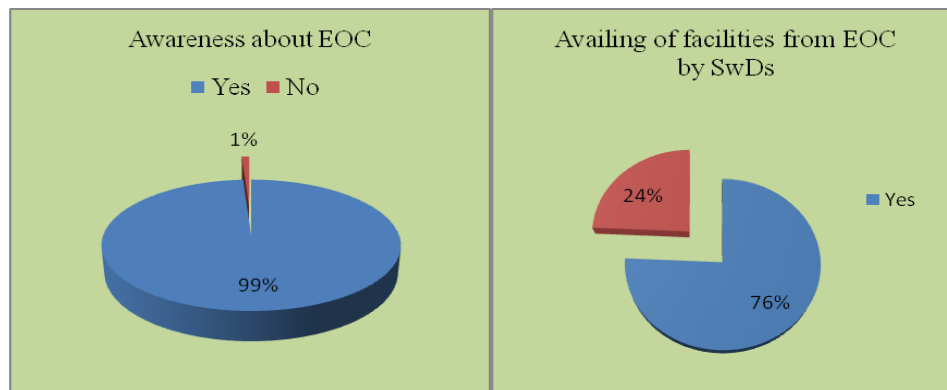
- They were asked about the opportunities they get for sports and extra co-curricular activities.
- Their activities in out of school/ college / in the community were also asked.
- Their suggestions to make infrastructure disable-friendly were taken at the end of the questionnaire.

### *Procedure*

- Participants were identified through the method of purposive sampling as per inclusion criteria.
- The participants were made comfortable and briefed about research purpose and their consent for participation was obtained.

- The responses were recorded by the interviewer manually.
- Debriefing was done after the completion of the questionnaire.
- Questionnaires were analysed using graphical analysis- pie charts, bar graphs, etc.

### Equal Opportunity Cell and Students' Reach



**Fig 2 - Awareness about EOC and Facilities availed from EOC by SwDs**

It is found that about 99% of the students were aware of Equal Opportunity Cell (EOC). 78 students (76%) had availed one or more facilities from EOC while 25 students (24%) never availed any facility from EOC.

### Assessment of facilities and difficulties of students with vision disability

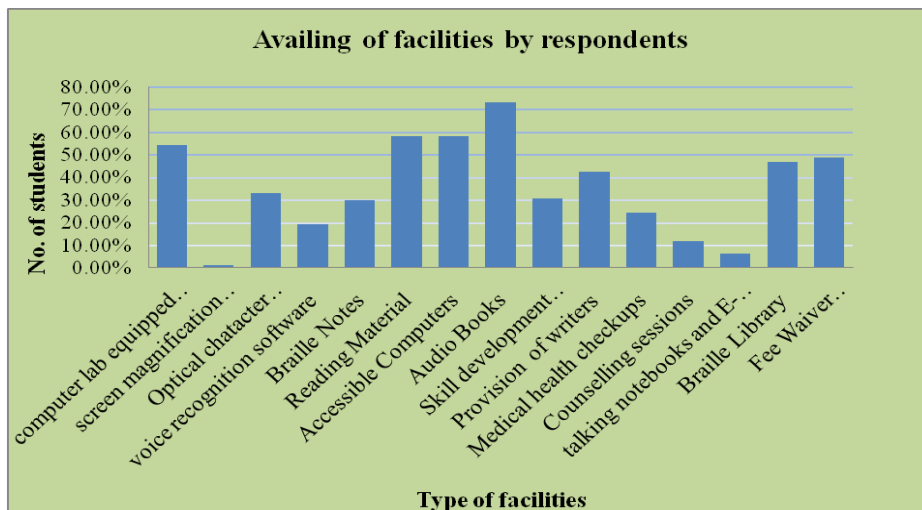
Various facilities were selected to check their availability and procurement by the students with disabilities. Facilities selected are not institution specific but can be provided at any level (College, University or EOC). Problems faced by the students with disability

Equal Opportunity Cell is one of the biggest set up initiated by UGC which is responsible for concerns of the students with disabilities. It looks also for benefits of disabled students in the college and at university level. Out of 103 students, 102 students had information about Equal Opportunity Cell (EOC).

were identified based on the literature review and corroborated through the survey. All the facilities and problems were disability specific.

#### *For students with vision disability*

Among the various vision disability specific facilities, facility of audio book was the most availed facility. While the least availed facility was procuring screen magnification software.



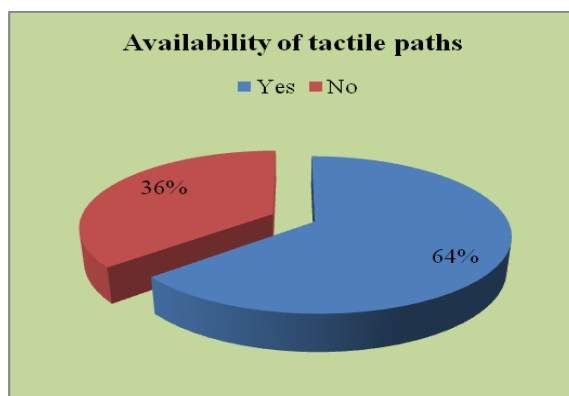
**Fig 3 - Different facilities availed by students with disability**

Out of 94 students with vision disability, being availed by 73% students, audio books were the most availed facility by students with disabilities. Computer lab equipped with screen reading software, reading materials, accessible computers were facilities availed by 54%, 59% and 59% students respectively. Above mentioned are the only four facilities which are availed by more than 50% students. While out of 15 listed facilities 6 are availed by less than 30% students. Optical character recognition software braille display, Skill development courses and vocational training, braille library and facility of fee waiver (University/Hostel) was availed by about 33%, 31%, 47%, 49% students. Facility of screen magnification software, voice

recognition software, Braille notes, medical health checkups, counseling sessions and facility of talking notebooks and E-textbooks are among the facilities which are availed by less than 30% students.

**Tactile paths**

Tactile paths are meant for easy and feasible journey of people with vision disability. This is considered as one of the basic infrastructure facility in order to make paths easily accessible. As per the survey a significant number of colleges do not have tactile paths.

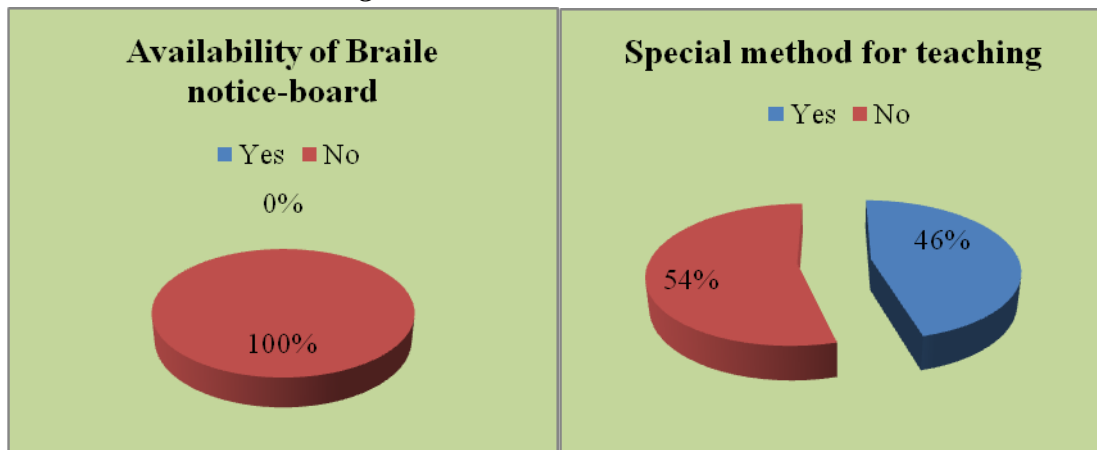


**Fig 4 - Availability of tactile paths in colleges**

Out of 94 students, only 60 students said that they have tactile path in their college campus, which consist only about 64% of the total surveyed population. The figure is more obscure when it turns to follow the tactile

paths. 60% of the students do not follow the tactile paths due to various reasons. One of the biggest reasons behind it is improper paver operations and direction.

***Braille Notice Board and Teaching Method***

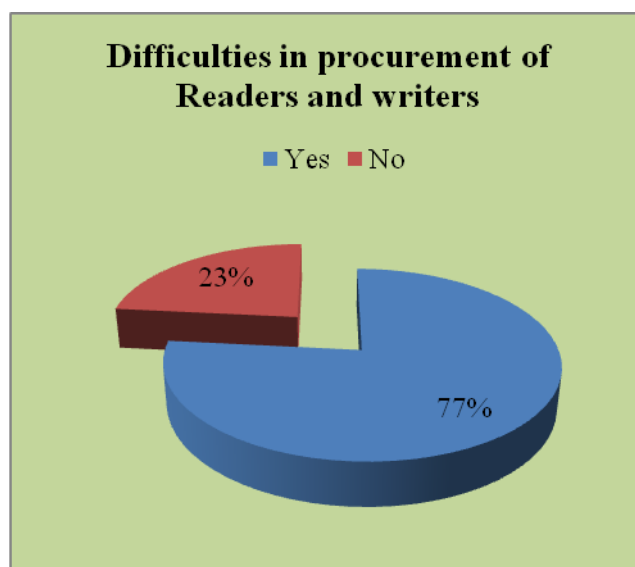


**Fig 5 - Availability of Braille notice-board and following special method for teaching.**

None of the colleges had Braille notice board to make the students with vision disability independent to know notices and information. More than half the number of students was not being taught through any special method. 43 students (46%) replied that teachers follow some special method if needed.

*Procurement of readers and writers*

Students with vision disability need readers and writers in submitting their assignment and for their exams. This is one of the areas where a major population faces difficulties i.e. in procuring the reader/writers.



**Fig 6 - Difficulty in procurement of readers and writers**

In the survey, it was found that about 77% students face difficulties in procurement of readers/ writers. They depend on their friends, volunteers of Enabling unit or NSS and volunteers of EOC. Since EOC, NSS and enabling units are not entitled to provide this facility they sometimes fail to provide these facilities. It is not one of the functions of these enabling units to ensure that every student with disability gets a writer. Since the

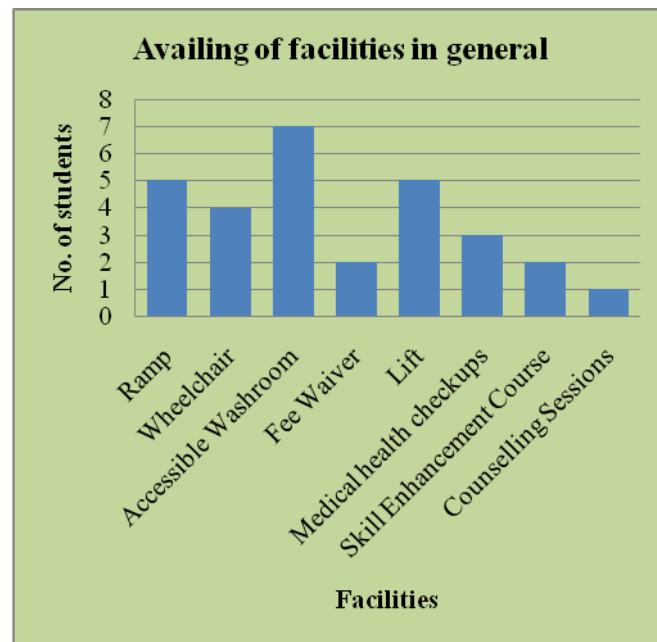
work is totally voluntary, the writers are sometimes not available.

**Assessment of facilities for students with Locomotor disability:**

Among the various locomotor disability specific facilities, they have access for accessible washrooms in their colleges while least availed facility is counselling sessions though cause behind being least availed is not assessed.

**Table No. 1 - Availing of facilities by the Students with locomotive disabilities**

<b>Facilities</b>	<b>No. of Students</b>	<b>Percentage of students</b>
Ramp	5	55.56%
Wheelchair	4	44.44%
Accessible Washroom	7	77.78%
Fee Waiver	2	22.22%
Lift	5	55.56%
Medical health checkups	3	33.33%
Skill Enhancement Course	2	22.22%
Counseling Sessions	1	11.11%



**Fig 7 - Availing of facilities by the Students with locomotive disabilities.**

Out of 9 students with locomotor disability, most availed facility among the selected facilities which is important to ensure state of inclusion is accessible washrooms. However its availability is also not 100% since 22% of the students said that their colleges do not have accessible washrooms. Counseling sessions were availed by least number of students. Percentage of students who availed this facility was just 11% while skill enhancement courses taken by only 22% of the participants. Percentage of Students who got benefitted from fee waiver facility was also 22%. Infrastructure facility like well managed ramps and lifts which makes any structure accessible to people with locomotor disability was also not available in all colleges. Only 56% students replied that there were ramps and lifts in their respective colleges. Facility of wheelchair and medical health checkups were also availed by an average number of students. Percentages of students who have benefitted from these two facilities were about 45% and 33% respectively.

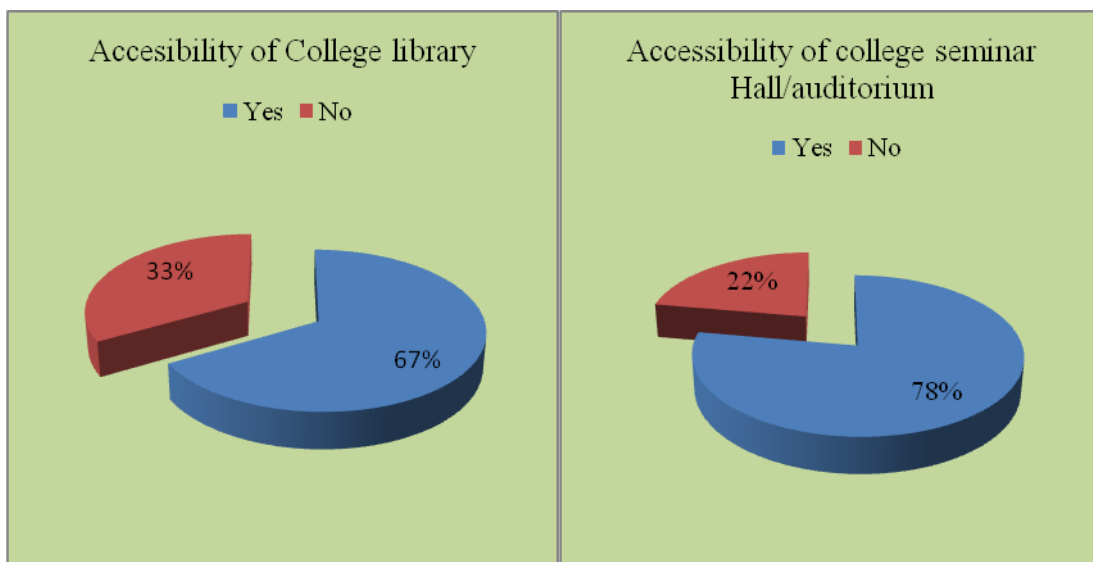
#### *Accessibility of classrooms*

For an educational institution to be inclusive it is necessary to have accessible classrooms. Result of assessment of availability of this necessity is positive enough. 100 % students responded that their classrooms were accessible through wheelchair i.e. almost every student can access their classroom.

#### *Accessibility of library, auditorium and washrooms*

Library, seminar hall, auditorium and separate accessible washrooms for girls and boys are integral part of a college. Not only the classrooms but these places also form an important part of the college life of any student. Therefore, it is equally important that these places should be accessible to everyone including students with disabilities. Results of accessibility of these are different from classrooms. Accessibility percentages of these structures are depicted in figures below:

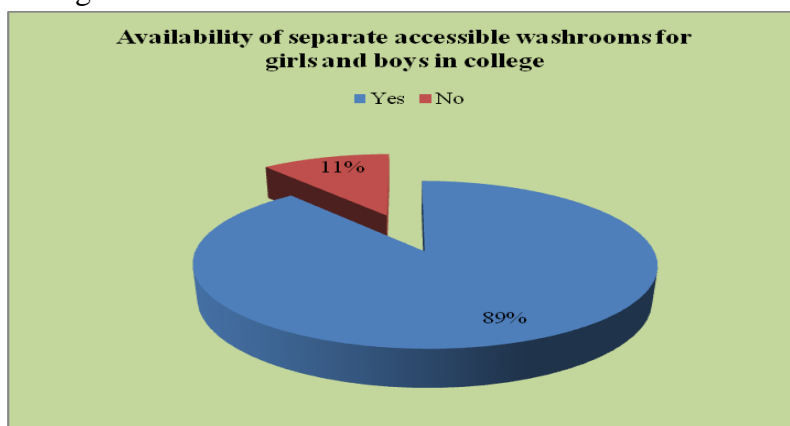




**Fig 8 - Accessibility of college library and seminar hall/auditorium**

More than half of total number of students told that library in their college is accessible to them. Percentage of this population consists of 67% of the total students with locomotor disability. Seminar hall/ auditorium are accessible to larger number of

students than their college library. 78% students have accessible seminar hall/auditorium in their colleges. It is 12% larger than the percentage of students who have accessible library in their college



**Fig 9 - Availability of separate accessible washrooms for girls and boys in college**

89% students have separate accessible washrooms for girls and boys in their respective colleges. Results are more satisfactory than the earlier two facilities.

**Assessment of problems, academic and non-academic activities in general**  
Other than facilities and disability specific problems, their participation in non- academic activities, awareness about various opportunities has been assessed. Their

opinion on problems which are restricting inclusion in education and suggestions for

increasing inclusion were also recorded manually.

**Table No. 2 - Problems faced by students with disabilities in colleges**

<b>Problems</b>	<b>No. of respondents</b>	<b>Percentage of respondents</b>
Limited Access to information	61	59.22%
Attitudinal/Behavioral problem	35	33.98%
Infrastructural impediments	49	47.57%
Communication related problems	36	34.95%
Administrative issues- Unsupportive Staff, etc.	33	32.04%
Others	-	-

Out of 103 respondents, 61 students think that limited access to information in colleges as well as outside academics is a problem for students with disability. This population constitutes 59% percent of the total number of students surveyed. About 48% students think that infrastructural impediments are also a big problem for disabled students. Problems of limited access to information and infrastructural impediments were chosen by

more than 50% of the students. Other than these two, 34%, 35% and 32% students think attitudinal/ behavioral problem, communication related problems and administrative issues- unsupportive Staff, etc respectively as a big problem.

### **Scholarships and Schemes**

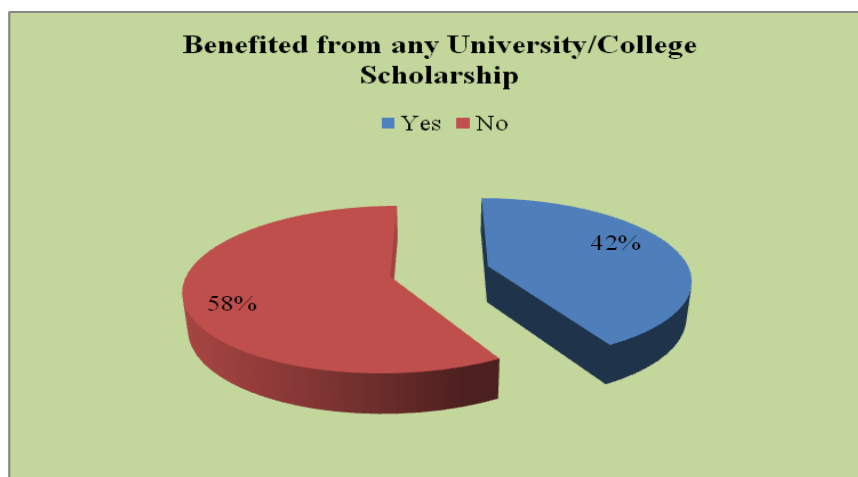
Some national level and widely known facilities like scholarship for PwDS has been selected to know the extent of awareness about the opportunities students are availing.

**Table No. 3 - Opportunities and their extent of awareness amongst SwDs**

Name of Scholarship	No. of Students	Percentage of Students
National Scholarships for PwDs	71	68.93%
Scheme for Top class education for SwDs	16	15.53%
Rajiv Gandhi national fellowships for SwDs	24	23.30%
National Fellowship for PwDs	30	29.13%
National Handicapped Finance	27	26.21%
Vice Chancellor's Fund for SwDs (Currently not available)	82	79.61%
Others	18	17.48%

The most widely known scholarship among students of Delhi University is Vice Chancellor’s fund for SWDs. About 80% of

the students are aware about this scholarship though it is not available now but had been taken for study.



**Fig 10 - Students’ response whether they receive any University/College scholarship or not**

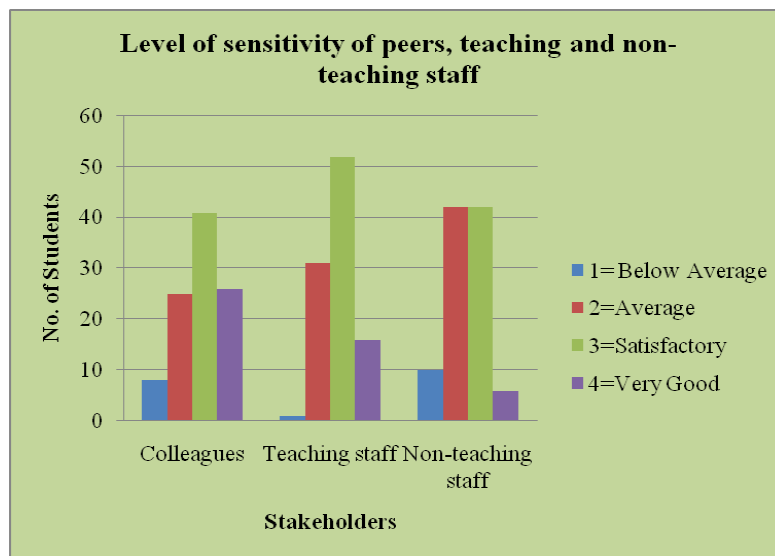
It was also seen that other than Vice Chancellor’s fund for SWDs scholarship only 42% students get benefitted from scholarship at college/university level. VC fund and National Scholarship for PwDs are widely known scholarships among PWD students;

nearly 69% students were aware about these scholarships. Other scholarships besides VC Fund and National Scholarship for PwDs were known by less than 30% of the students.

### Assessment of sensitivity level of various groups

Sensitivity of people surrounding a person plays an important role to create a state of inclusion. Therefore, in this study sensitivity of peers, teaching and non-teaching staff were

taken for assessment. Students were told the rate the level of sensitivity on the range of four, where 1 stands for below average, 2 stands for average, 3 stands for satisfactory and 4 stands for very good of the sensitivity level. Ratings of each of peers, teaching and non-teaching staffs are depicted in fig. 11.



**Fig 11 - Level of sensitivity of peers, teaching and non-teaching staff.**

About 8% respondents rated their peers for having poor level of sensitivity where for rating of very good sensitivity percentage of respondents is 25%. Percentages of students who rated for average and satisfactory level of sensitivity to their peers are 24% and 40% respectively. Only 1% of the respondent rated below average of sensitivity level for teachers and 16% rated for very good level of sensitivity. While percentage of students who rated for average and satisfactory level of sensitivity are 30 and 51 percent respectively. About 10% respondents rated their non-teaching staff for having poor level of sensitivity where for rating of very good level of sensitivity percentage of respondents is only 6%. Percentages of students who rated for average and satisfactory level of

sensitivity to their non-teaching staff were 40% and 42% respectively.

### Assessment of extracurricular activities

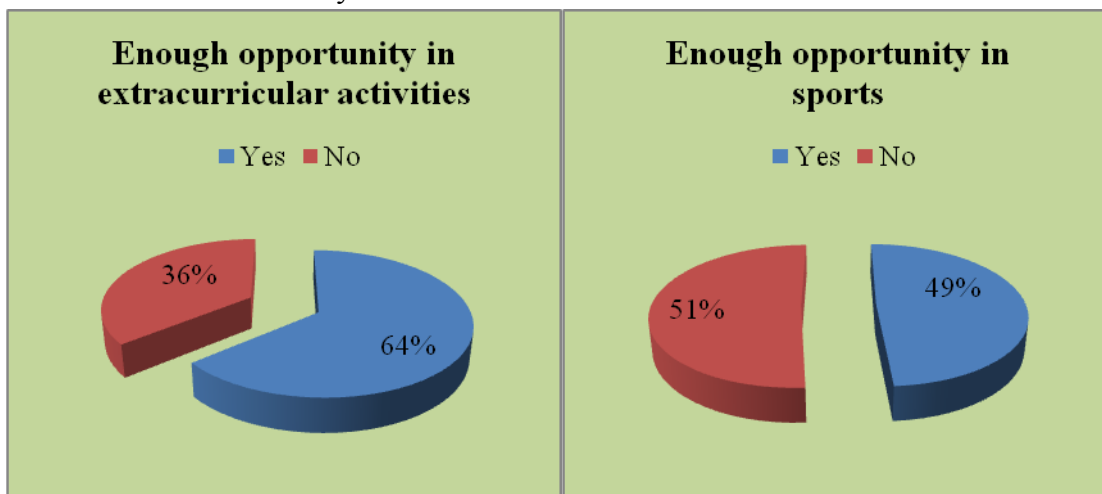
Extra-curricular activities are an essential part of student life as they polish other skills which are as important as academic knowledge. In the assessment of extracurricular activities student participation and opportunity provided to them for the same had been selected for the study.

To promote activities beside academics among students with disabilities, societies which are dedicated to students with disabilities can play an important role. In this study it was found that more than half of the students have specific societies for SwDs in their colleges. These include Ankur Society in Hindu College, Lakshita Society in Miranda

House, Prayas- The Enabling Unit of Kirori Mal College, etc.

Out of 103 students, 61 students told that there are societies in their college which are dedicated to students with disabilities and it constitutes about 59% of the total population surveyed. 35% students replied negatively where 6% students told that they don't know

about whether there is any such society or not. 45 students said that they participate in societies in their college but most of them participate in disability specific societies. While 56% of the students were not a member of any society. Assessing about opportunities in extracurricular activities and sports findings were a bit satisfactory.



**Fig 12 - SwDs response to whether they get enough in extra-curricular activities and sports.**

Out of 103 respondents, about 66 students (64%) said that there are enough opportunities for them to participate in extracurricular activities while 37 students (36%) replied in negative. Opportunity for participation in sports activities are though less satisfactory than other extracurricular activities. 51 students (nearly 51% of the total population) believe that there is not enough opportunity for participation in sports. One can participate occasionally only if there is any sports event conducted for disabled students.

**Conclusions**

The University of Delhi is a premier University of the country that has the privilege of a venerable legacy. Over the many years of its existence, the University has continued to sustain the highest global

standards and best practices in higher education.

The Equal Opportunity Cell (EOC) was established by the University of Delhi on 27th June, 2006 to address the issues related to students belonging to Schedule Caste/Schedule Tribe, Other Backward Caste and minorities and the Persons with Disabilities (PwDs) on a continual basis. The main objective of the EOC is to help and empower the persons with disabilities students to participate fully in the academic, intellectual, social and cultural life of University on an equal basis.

Research team has surveyed 103 Students with Disability in University of Delhi. It was found that most of the Students with disabilities (SwDs) are visually impaired. As per the data collected 91% of the SwDs respondents are having vision disability. It

signifies the importance of the following facilities.

- Computer lab equipped with software and devices like screen reading software
- Screen magnification software
- Optical Character Recognition (OCR) software braille display
- Voice recognition software
- Braille notes
- Accessible computers
- Audio books
- Provision of writers

In Delhi University, EOC was established to empower SwDs and minority students by providing equal opportunities. Almost all SwDs are aware about EOC and some of them are even getting benefited by the provisions of EOC. The team has identified some of the issues regarding SwDs through this project with participatory approach. Due to some of the limitations university is now not able to actively facilitate all the resources and opportunities to Students with Disability. Only 30% of SwDs could get some of the facilities mentioned above. But due to very long administrative procedure they got audio books and other study material very late. University or any of the college even not providing writers to these students which is matter of great concern. There are enabling units dedicated to PwDs in the college run by the participation of students and teachers of the colleges of the University which are dedicated towards the empowerment of SwDs.

Accessibility and inclusion in higher education should not be limited to only classrooms but also at every place. University canteens, auditoriums and toilet blocks should be accessible for SwDs. But, many of the

colleges do not have accessible toilets and auditoriums. SwDs face lots of problems like limited access to information, infrastructural impediments attitudinal and behavioral issues. These problems can be solved and inclusivity in higher education can be maintained. This is not only the responsibility of University Administration. but, the stakeholders have a substantial role to play for inclusion in higher education. Participation of everyone in this mission of balancing inclusion in education is very significant and it is necessary.

Government of India and University of Delhi has been providing scholarship to SwDs. The study results reveal that almost 30% of SwDs are not aware of these scholarships and are not benefited from any of the scholarship. This is because of the communication gap between the SwDs and the university/colleges.

Cultural Fests and Sports competitions are flagship events of any college/University. In Delhi University these activities are centres of attraction. There should be equal opportunity to participate for every student. As per survey conducted by research team only 51% SwDs are satisfied with the level of opportunity they are getting to participate in these events.

It is believed that true inclusion in higher education can only be developed if each one of the citizen is cooperative and sensitive towards SwDs. This sensitivity about anybody plays an important role to create a state of inclusion. In the colleges or university campus if everybody has a sense of responsibility for SwDs then inclusivity can be nurtured very well.

## References

- All India Survey on Higher Education.* (2016-17). MHRD, GOI, Department of Higher Education, New Delhi.
- Annual Report.* (2014-15). New Delhi: University Grants Commission.
- Aruna, D., Singh, K., & Lal, M. (2016). Inclusive Education in India. *The International Journal of Indian Psychology*, 4(1).
- Bonela, G. (2014). Does Inclusive Higher Education Can Help For Physical Disability. *International Journal of Research in Applied, Natural and Social Sciences*, 2(5).
- Disabled Person in India: A Statistical Profile.* (2016). Ministry of Statistics and Programme Implementation, GOI, Social Statistics Division, New Delhi.
- First Country Report on the Status of Disability in India.* (2015). Ministry of Social Justice and Empowerment, GOI, Department of Empowerment of Persons with Disabilities, New Delhi.
- Inclusion and Accessibility for Students with Disability in Higher Education.* (2015). Tata Institute of Social Sciences, Center for Disability Studies & Action, Mumbai.
- Salve, P., & Yadavar, S. (2017). *Why nearly half of India's disabled population is illiterate.* Retrieved from Scroll.in.
- Singh, J. D. (2016). Inclusive Education in India – Concept, Need and Challenges. *Scholarly Research Journal for Humanity Science and English Language*, 3(13).
- The Right of Persons with Disabilities Act.* (2016). Ministry of Law and Justice, GOI, Legislative Department, New Delhi.