

Research Article

The Universal Accessibility Provisions in Educational Institutes of New Delhi, India

Raja Singh^{1,2}, Laxmi Bohora¹

1. ISAC Centre for Built Environment Policy, India; 2. Department of Architecture, School of Planning and Architecture, India

Background

Restriction in access to higher education aggravates issues for persons with disabilities to pursue the education that will improve their quality of life. In developing countries like India, it has been observed that Persons with Disabilities (PwDs) may have reduced access to educational institutions compared to their counterparts. India is a signatory to the UN Convention on Rights of Persons with Disabilities (UNCRPD), due to which it has formulated the Rights of Persons with Disabilities Act (RPwDs) 2016. The study's objective is to identify the present accessibility status of educational institutions in Delhi as per the Rights of Persons with Disabilities Rules, 2017. The study also evaluates institutions' compliance with the five-year time limit from the date of enforcement on 15 June 2017— imposed by the Central Government to make all existing infrastructure accessible as per the RPwDs Act, 2016— the due date of which expired on 15 June 2022. The Right to Information Act (RTI), 2005, has been used as the primary research tool to obtain information that is accessible under the open public domain. The study revealed that most institutions were aware of RPwDs Act 2016, but a few reported being compliant with accessibility standards. The study highlighted that the educational institutions in Delhi have not fully undergone the necessary upgrades to create an accessible and barrier-free environment for persons with disabilities.

Aims

The goal of the study is to determine whether educational institutions in Delhi are in compliance with the Rights of Persons with Disabilities Act of 2016, regarding accessibility to a barrier-free physical environment, equal opportunities, and appropriate information and online communication for Persons with Disabilities within the stipulated time limit of five years.

Settings and Methods

The RTI Act, 2005, was used to request information from 43 educational institutions in Delhi regarding compliance with accessibility standards of the built environment, including the provisions of equal opportunities and access to information as per the RPwDs Act, 2016. Only government-run educational institutions were selected for the study as they are subject to the RTI Act's transparency requirements. In

this study, authors have only relied upon verified sources for information accessible under the open public domain as per the RTI Act, 2005, provided directly by the institutions. Future studies to verify the on-ground reality may be performed.

Results

A total of 38 higher educational institutions in Delhi were approached for the study, and only 27 responded under the RTI Act up to the time period of compilation from April 2022- November 2022. After compiling the results, it was identified that 16 were aware of section 45 of the RPwDs Act, 2016. 14 of the 27 institutions responded to being accessible, while one acknowledged being inaccessible. 17 institutions responded having PwDs on the payroll, while seven responded negatively. Only six of the 27 institutions accepted having features for accessible websites, and six responded that they did not have a website at all.

Conclusion

There is no universality for accessibility in the institutions under the study. Many did not respond to the queries and many others have admitted to being not fully accessible. Therefore the status quo of the educational institutes with respect to the provisions of universal accessibility in them needs further improvement. Lack of compliance is first in the case of the institutes that did not provide information with full integrity under the RTI Act, 2005. The other issue of the non-compliance with the Right of Persons with Disabilities Act, 2016. There is a requirement for improvements in universal accessibility of built environment and information along with the provision of equal opportunities for PwDs educational institutions.

Introduction

Education is a fundamental and powerful tool capable of encouraging and empowering persons with disabilities for overall development ^[1]. People with disabilities are restricted due to inaccessible features in our schools, colleges, and other public buildings ^[2]. Inaccessibility in the built environment and communication technologies distress the 26.8 million persons with disabilities population living in India ^[3]. India signed the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in 2007 and then ratified it on October 1, 2007, with the goal of promoting, defending, and ensuring equal access to all human rights. Being a signatory, India is held to important obligations regarding the implementation of the provisions of the convention and harmonization of the country's laws with the convention. Even though persons with disabilities constitute a comparatively small percentage of the country's population, their disabilities should

not be regarded as 'objects' of charity but as 'subjects' with rights ^[4]. According to article nine of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), which is concerned with accessibility, states parties must make the necessary arrangements to ensure fair access to the built environment, transportation, communications, including information and communication technologies and systems, and other public facilities and services, both in urban and rural areas ^[4]. In this regard, the Government of India initially undertook the amendment of laws such as the Persons with Disability Act, 1995 (PWD Act 1995), which was replaced by the Rights of Persons with Disabilities Act, 2016 (RPWD Act 2016) to comply with the UNCRPD ^[5]. Disability is currently seen as the result of the interaction between impairment, and environmental and attitudinal constraints. As a result, disability is now seen as more of a societal phenomenon ^[6]. This led to ensuring all the rights of persons with disabilities are followed as per the convention, which mandates that state parties create, publish, and oversee the application of minimum standards and directives for the accessibility of facilities and services accessible to the general public ^[4]. Accordingly, India has designed its guidelines for the public as Harmonized Guidelines and Standards for Universal Accessibility 2021, which succeeds the earlier version of Harmonized Guidelines 2016, covering sensitization of diverse stakeholders regarding the design, planning, and implementation of universal accessibility in the built environment, which is yet to be notified in the law. Model Building Bye-Laws, 2016 was prepared for the guidance of the State Governments, Urban Local Bodies, Urban Development Authorities, etc. It features mandated bye-laws for the barrier-free environment on the provisions of the guidelines, which are: i) Guidelines and Space Standards for Barrier Free Built Environment for Disabled and Elderly Person (1998), Central Public Works Department, Government of India (GoI) ^[7], ii) Manual on Barrier Free Environment (2002), O/o the Chief Commissioner for Persons with Disabilities, Ministry of Urban Development, GoI ^[8] (iii) National Building Code (2005), Bureau of Indian Standards, iv) National Policy for Persons with Disabilities (2006), Ministry of Social Justice and Empowerment, GoI ^[9], v) Harmonized Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disabilities and Elderly Persons (Draft 2014), Ministry of Urban Development, GoI ^{[10][11]}.

Literature

As per section 16 of the Rights of Persons with Disabilities Act of 2016, all educational institutions should have accessible buildings, campuses, and various facilities for persons with disabilities ^[12]. The themes such as attitudes, knowledge, disciplinary features and norms, pedagogical choices and factors, and institutional practices are identified as both facilitators and barriers to accessibility ^[13]. Limitations in accessibility to educational institutions hinder students with disabilities and affect teachers with disabilities as well. The implications of inaccessibility for higher education impact the chances of employability and, eventually, quality

of life for persons with disabilities ^[14]. Extensive efforts have been introduced to enhance access to education. One of the most important actions was the adoption of the Rights of Persons with Disabilities Act in India in 2016. The Act was an update to the previous statutes, i.e., the Persons with Disabilities Act of 1995. The Persons with Disabilities Act of 1995 stressed equal access to higher education. It also directed a reservation of a minimum of three percent in admissions to higher education institutions ^[14]. Delhi has its Rights of Persons with Disabilities Rules 2018, which follows the Rights of Persons with Disabilities Act of 2016. The Delhi RPwDs Rules of 2018 include the provision of equal opportunities to persons with disabilities, compliance with the standards for public buildings as specified in the Harmonised Guidelines and Space Standards along with standards for information and communication technology ^[15]. It should be noted that the Delhi Rules do not mandate a time limit for making public buildings accessible however, the rules fall under the purview of the act of 2016 hence, they must follow the deadline as mentioned in the act. This is critical as simple amendments in building bye-laws do not work for buildings in retrospect. In contrast, in 2016, RPwD Act created an over-and-above requirement for existing buildings, compared to the building bye-laws, which apply only to new buildings. The deadline of five years after the enactment of the Act and the subsequent notification of the rules in 2017 has already passed on June 15, 2022. But the same may not have been translated for students, as we have shown, into higher education institutes for varying reasons ^[16].

The studies have reported that, unlike in developed countries, only a small portion of students with disabilities (SwDs) enter the higher education stream in developing countries ^[16]. A notable focus case study in India highlighted the five themes such as accessibility, classroom functions, communication, attitude, and employability which challenged the access to education for SwDs ^[16]. As reported in the Education for All Global Monitoring Report in 2010, reaching marginalized children with disabilities remains one of the main problems leading to the wide exclusion of the group from quality education ^[17]. The ratification of the convention is intended to provide equal rights to all, however, limitations based on law, attitudes, the physical environment, and communication prevent or restrict the participation of people with disabilities ^[18]. Physical access is considered one of the major obstacles hindering students from allowing PwDs to access equal opportunities ^[1]. Lack of classroom accommodation was found to be the most distressing factor as it has a direct impact on their academic needs ^[16]. All the colleges had provisions for ramps, but accessibility to restrooms and other resources, such as the library, was poor ^[16]. Most students with locomotor disabilities used private transport systems to commute to campus, assisted by their parents. But within the campus, their movements were highly restricted, affecting their lack of participation in any of the extracurricular activities ^[16]. If enrolment rates of students with disabilities and students without disabilities are compared, then it can be shown that only 40% of students with disabilities entering higher education as students without disabilities ^[17].

Accessibility is not limited to the built environment but touches upon innovative technologies to leave no one behind as a fundamental approach to universal design ^[19]. As per the Rights of Persons with Disabilities Rules, 2017, information and communication through online websites should follow the standards specified in the guidelines for Indian Government websites. However, research has reported that only a fraction of universities meet the minimum standards for accessibility ^[20]. As most of the information regarding an institute is shared on online educational websites, barriers in information technology hamper access to resources via internet platforms ^{[20][21]}. Areas like accessibility to built environments as well as assistive technology along with information websites remain overlooked. Thus, the objective of the study is to assess the present status of accessibility in educational institutions in Delhi using the RTI Act to acquire information accessible under the open public domain to evaluate whether the RPwD Act, 2016 has been followed within the stipulated time limit of five years as mentioned in the RPwD Act, 2016.

Need for the Study

Though the Government of India has implemented various schemes to ensure accessibility, an evident gap is reported between policy and practice ^[20]. Barrier-free access in all parts of government and private educational institutions and centers is a right for all. As per section 45 of the Rights of Persons with Disabilities Act, 2016, the time limit of five years from the date of notification imposed by the Central Government for making all existing infrastructure and premises to be accessible has ended on June 15, 2022. The study makes use of a lesser-known methodology, the Right to Information Act of 2005 (RTI Act), as the primary research tool to gather authentic information provided by the information officials in the open public domain. This methodology ensures ethical conduct of the research where no visitor, staff member, or employee is contacted personally for this study. The study provides information regarding the status of accessibility in educational institutions in Delhi to identify the problem areas within the overall implementation regarding the provision of equal opportunities for persons with disabilities assessed by parameters like the presence of PwDs on payroll and accessible internet websites. The purpose of the study is to offer a glimpse of the accessibility situation in Delhi's educational institutions based on data obtained through the RTI Act and to encourage further investigation into this area regarding all-inclusive accessibility and adherence to accessibility guidelines for both physical buildings and online information websites. This study is not only a reflection of the compliance for accessibility but also indicates the inclination towards transparency by government institutes.

Materials and Methods

The study used the Right to Information Act of 2005 as the primary research tool to acquire data from government institutions that are bound to provide the information under the act. Using RTI Act as a strategy to

acquire information proves to be quite advantageous because the act permits the acquisition of information that falls under the open public domain, where government organizations may be unwilling to share information ^[22].

Only government educational institutions were approached for this study as they fall under the purview of the RTI Act. Private institutions, which are not bound by the act and may lack comparable transparency and don't abide by the RTI Act leading to exclusion from the study. For the methodology, the first step was to specify the answerable parameters under the RTI Act of 2005. The identified parameters were extracted from the Rights of Persons with Disabilities Act, 2016, in which parameters such as Time Limit, Rules of Accessibility, and others are mentioned ^[12]. The Right to Information Act applications were framed and sent to the identified 43 educational institutions, which were requested to share the information regarding the eight parameters, as in Table 1. To request information through RTI, the applications are submitted via the RTI portal, which is answered by credible and certified sources of information within the institutions. After the application is submitted, there are two possibilities: first, the application is acknowledged, and the response is shared. The response can be shared through at least one of the ways— update of the response on the online RTI portal, delivery of response through mail at the residence, or online email response to the applicant, as shown in figure 1. The second is that if the application is not answered or the response is unsatisfactory, a first appeal can be filed to the first appellant authority within the provisions of the Right to Information Act, 2005. If the first appeal is not answered or answered unsatisfactorily, one can seek redressal in the form of a second appeal to the Central Information Commission (CIC). The CIC is the second appellate authority that acts as a quasi-judicial body with powers almost equivalent to a civil court. It can instruct the Public Information Officer (PIO) of organizations within its jurisdiction to provide the requisite reply. The information gathered through this method ensures accurate, legal, ethical, and certified information from institutions in the open public domain.

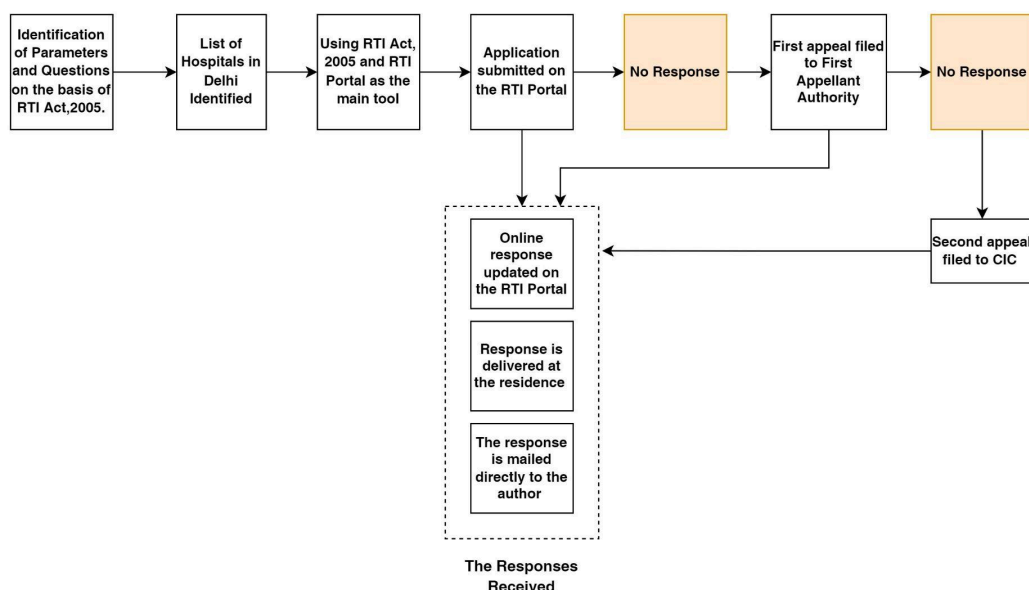


Figure 1. Research methodology adopted for the study

Legend: CIC: Central Information Commission, PIO: Public Information Officer, RTI: Right to Information

The authors received the responses to the applications over the course of seven months (April 2022- November 2022). Some of the applications had to be followed up, and in some cases, appeals had to be filed. A total of 43 institutes in Delhi were approached for this study, and 29 institutes have been taken into consideration. The remaining 14 didn't respond with integrity in an apparent violation of the Right to Information Act, 2005. The sample size can be justified in two ways as per the Survey Monkey sample size calculator available on their website. The first method has a confidence level of 95% with a margin of error of 6% for 45 government colleges of Delhi mentioned in the RTI portal. Another method has a confidence level of 95% with a margin of error of 11% for 69 government colleges in Delhi ^[23]. Regardless of the sample considerations, even one college not providing universal accessibility, is a deprivation of rights for persons with disabilities, especially at a younger age.

S.No.	The information sought under the Right to Information Act, 2005, under the Public Domain
1	Who is the senior officer in your organization responsible for matters related to buildings and the implementation of the law and rules related to buildings?
2	Are you aware of section 45 of the Rights of Persons with Disabilities Act, 2016? It mentions the time limit for making existing infrastructure and premises accessible and action for that purpose.
3	Are all the buildings included in your organization, whether on the main campus or any campus, accessible according to the Rights of Persons with Disabilities Rule, 2017, notified on 15th June 2017?
4	As per Chapter VI points 15.1. (a), of the Rights of Persons with Disabilities Rules, 2017, the standard for public buildings has been specified in the Harmonized Guidelines and Space Standards for Barrier-Free Built Environment for Persons with Disabilities and Elderly Persons. Is every building of your organization compliant with the standard? Kindly provide a tabulated list of the buildings and the compliance status.
5	As per Part 2 of Section 45 of the Right of Persons with Disabilities Act, 2016, has your organization prepared or followed any action plan for providing accessibility in your building?
6	Are you aware that as per Section 45 of the Rights of Persons with Disabilities Act, 2016, the time limit for implementation of accessibility in buildings was five years since the notification of the Right of Persons with Disabilities Rules 2017? What is the date by which all the buildings on your campus have been made fully accessible as per the act, rules, and guidelines mentioned above?
7	Does your organization have persons with disabilities on the payroll?
8	Is your website following the standards for making it accessible for persons with disabilities?

Table 1. Information sought under the Right to Information Act, 2005, accessible under the public domain from educational institutions in Delhi, Source: Authors

Exemption from Ethics Review Committee

No visitor, staff member, or employee was contacted personally for this study. This study relied on information accessible in the open public domain through the Right to Information Act of 2005. The request for information was made through an online portal under an appropriate section of the Act, and the information was supplied. The institutions have provided signed and verified the submitted information. Only information that is not personal or third-party information of any individual may be provided under the terms of the Right to Information Act, 2005. This study does not require Institutional Review Board or an equivalent Ethics Committee approval. The same is stated by the authors ^[24].

Results

The above methodology was adopted to submit applications and appeals to acquire responses. The data received from the 27 institutions in Delhi through the RTI Act of 2005 was compiled and tabulated in Table 2.

It was found that 16 of the institutions were aware of section 45 of the Rights of Persons with Disabilities Act, 2016, while seven didn't share a fully positive reply. 14 of the 27 institutions were accessible, while two accepted being inaccessible, and six were in the process of becoming accessible. 12 institutions admitted to being compliant with accessibility building standards, and five were in the process of being compliant with the building standard. For the time limit of five years mandated by Section 45 of RPwDs, 10 of the 27 institutions had devised action plans, and six were in the process of having plans approved. In this case, only two institutions mentioned the deadline for the upgrade, while the rest didn't. In the majority of the institutions, 17 of the 27 stated having people with disabilities on the payroll, and seven responded negatively about the presence of people with disabilities on the payroll. Out of 27 institutions that responded, only six had accessible websites for people with disabilities, and six didn't supply a fully positive reply.

S.No.	Question	Yes	No	In Process	Didn't Share/Not Applicable
1	Awareness regarding section 45 of the Rights of Persons with Disabilities Act, 2016, concerning the time limit of five years from the date of enforcement, 15 June 2017.	16	0	1	7a
2	Accessibility of buildings with Rights of Persons with Disabilities Act, 2016	14	2	6	4b
3	Compliance with accessibility standards for persons with disabilities and elderly people	12	1	5	5c
4	Presence of an action plan for providing accessibility	10	2	5	7d
5	Accessibility work done as per the time limit	9	1	9	5e
6	Presence of people with disabilities on the payroll	17	7	0	3f
7	Accessible websites for people with disabilities	6	6	6	8g
<p>Notes:</p> <p>a: X1 responded with 'Main office of X1 situated in the building of Department of Delhi Archives, Govt. of NCT of Delhi and not owned by the Parishad.' This doesn't respond to the question. Secondly, X2 responded with, 'No existing infrastructure and premises accessible as per provisions provided; however, the academy will initiate the matter with the appropriate authorities if there is any scope and provision allowed under the norms.' This reply doesn't specifically answer whether the complex is aware of RPWDs or not. Thirdly, X3 has provided ambiguous answers to certain questions such as, 'Essential arrangements are made for barrier-free movements, but all provisions comply in the proposed campus.'</p> <p>This doesn't respond to the query made in the questions.</p> <p>b: Y1 provided the following information below in a letter dated 13.05.2022:</p> <p>"Ramps with supporting grills, lifts, wheelchairs, and a separate washroom." This information doesn't answer whether the building complex as a whole is accessible or not. In another case, X3 responded with, 'Essential arrangements are made for barrier-free movements, but all provisions comply with standards in the proposed campus.' This fails to respond to the query made in the questions.</p> <p>c: Y2, as per reply dated 11.05.2022, stated that 'The University is operating from the heritage campus at Kashmere Gate Delhi, which falls under the purview of ASI, Delhi. All the buildings (Academic and Administrative) of the University are more than 75 years old, and being a heritage campus, no modifications cannot be carried out to the buildings. However, University has made all the possible efforts to make all buildings accessible to the PWD without any hindrances.' Y1, as per the reply dated: 13.05.2022, only informs of having ' barrier-free ramps available on all entry gates.' X3 has provided ambiguous answers to certain questions such as, 'Essential arrangements are made for barrier-free movements, but all provisions comply in the proposed campus.'</p>					

S.No.	Question	Yes	No	In Process	Didn't Share/Not Applicable
d:	As per the letter dated 12.05.2022, Z1 doesn't provide a direct answer and states, 'This office always follows and takes appropriate action as per prescribed and relevant provisions of the Person with Disabilities Act 2016 (Person with Disabilities Act Rules 2017).' Y2, which mentioned falling under the purview of ASI as per letter on 11.05.2022.				
e:	As per the letter dated 12.05.2022, Z1 doesn't provide a direct answer and states, 'This office always follows and takes appropriate action as per prescribed and relevant provisions of the Person with Disabilities Act 2016 (Person with Disabilities Act Rules 2017).' Likewise, Y2 provided the reasoning for being unable to make accessible buildings as it falls under the purview of ASI, Delhi.				
f and g:	Z2 hasn't responded to these questions directly with a reply stating, 'No existing infrastructure and premises accessible as per provisions provided; however, the academy will initiate the matter with the appropriate authorities if there is any scope and provision allowed under the norms.' While Z3 has only responded to one question out of eight, regarding the presence of people with disabilities on the payroll as 'No'.				

Table 2. Compilation of the information received from the institutions through the RTI Act, 2005

Legend: PWD: Persons with Disabilities

The results showcased that most of the responses were positive, as shown in figure 3. But, most of the institutions didn't respond or responded as 'not applicable' in an apparent violation of the RTI Act of 2005.

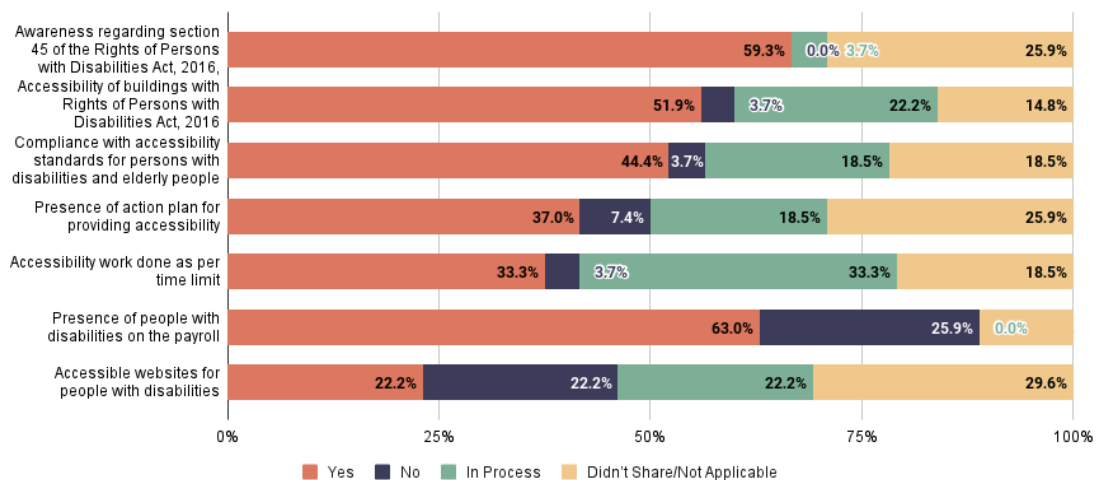


Figure 2. Chart showing the responses from educational institutions in percentages, Source: Authors

One of the highlights of the study was the status of Y2, as a heritage campus. As per the response by the University, it mentions falling under the purview of ASI, Delhi as a heritage campus where no modifications cannot be carried out in the buildings. Although, the response dated 22 July 2022 by ASI Delhi Circle mentions that it doesn't deal with heritage buildings. This response demonstrates the apparent misinformation has led to restrictions in the institute's efforts to upgrade for persons with disabilities.

Time Limit: Out of 27 institutions that responded, it was found that only two institutions gave a time limit of three months and six months, respectively, regarding the completion of retrofitting of accessible infrastructure.

Persons with Disabilities on payroll: It was found that 17 out of 27 institutions responded to having persons with disabilities on the payroll. It was reported that seven institutions responded negatively to having persons with disabilities on the payroll. This shows high inclusion of persons with disabilities in educational institutions as employees from admin as well as educators. But the absence of persons with disabilities highlights the lack of universal compliance.

Provision of the accessible website: It was found that only six out of 27 institutions responded to having an accessible website. It was reported that six institutions responded negatively to having accessible websites for persons with disabilities. This reflected poor accessibility to online websites for information when compared to accessibility in the built environment.

Discussion

The study reported very high awareness among education institutions regarding Section 45 of the Rights of Persons with Disabilities Act, 2016. But the accessibility was found unsatisfactory on online information websites. This was also noticed in a study in Egypt in 2018 that reported barriers in physical infrastructure and transport across all higher education institutions ^[18]. According to the study, only 11 of the 28 institutions had accessible plans and mechanisms to monitor and evaluate the accessibility of any type, and none were implemented significantly ^[18]. This demonstrates the apparent lack of implementation in both the built environment and the online platforms. As a signatory to the UN Convention, India formulated the Persons with Disabilities Act in 1995 and 2016. Under the former 1995 PWD Act, all the educational institutions had a three percent quota for disabled students, which has been increased to five percent as per the RPwDs Act, 2016, mentioned in Section 32 (1) for persons with benchmark disabilities ^[12]. However, according to the survey conducted by the National Centre for Promotion of Employment for Disabled People (NCPEDP) in India, most of the top colleges contain only half a percent of seats filled by disabled students ^[14]. Inaccessibility is found to be one of the primary reasons behind the lower enrolment of students with disabilities. Lower enrolment cannot

be attributed to inaccessibility non the built environment alone. People with impairments are further distressed when online information websites are inaccessible. In another study done by Ismail and Kuppusamy on accessibility analysis of college websites affiliated with the University of Kashmir and Cluster University Srinagar, it was found that the parameters such as color contrast, list elements, captions, etc. were the key issues requiring further improvements ^[21]. Educational websites are essential for students, especially students with disabilities who cannot access the institutions themselves. Inaccessibility has become a critical issue leading to the lower enrolment of students with disabilities. The number of persons with disabilities in educational institutions has come down since 2017, despite the quota being raised from three percent to five percent under the Rights of Persons with Disabilities Act, 2016 ^[25]. However, it should be noted that the deadline for upgrade fell during the pandemic, which may have shifted the educational bodies' overall priorities to online mode of education and other activities such as postponed admissions and examinations than upgrading accessibility in the built environments ^[26].

This study highlighted the positive results regarding the presence of people with disabilities on the payroll, however, 24.1% of the educational institutions responded not having even a single person with disabilities. Studies have reported that in India, 36.3% of people with disabilities are employed compared to 78% of employed people who have no disabilities, and only 8.5% of persons with disabilities in India acquire a graduate degree ^[3]. This displays that there are evident differences between persons with disabilities and without disabilities. Hence, this study aims to provide a base for future research on accessibility for persons with disabilities in educational institutions to identify the issues and design solutions for them.

Conclusion

In the institutions covered by the study, accessibility was not found to be universal. Many did not reply to the questions, and many acknowledged that they were not entirely accessible. Therefore, the current state of compliance with accessibility standards in educational institutions for universal accessibility needs to be improved. The study highlighted the lack of compliance as the first issue where the institutions didn't provide information with complete integrity under the RTI Act, 2005. The second issue was the apparent failure to comply with the 2016 Rights of Persons with Disabilities Act. Along with providing equal chances for PwDs at educational institutions, improvements in universal accessibility of the built environment and information are necessary. To improve the Indian educational system, inclusive education is undoubtedly a key strategy. The Right to Education Act (2009) ensures providing education to all irrespective of the category to which they belong. This study focused on finding the accessibility standards of institutions concerning the Rights of Persons with Disabilities Rules, 2017, regarding the five-year time limit fixed in the Rights of Persons with Disabilities Act, 2016. The study revealed that even though the awareness of the act was high among the

majority of the institutions that responded, only 14, which is almost half of the respondents, acknowledged being compliant with the building standard. This shows an apparent failure to follow the standards and rules specified in the act. The results also highlighted comparatively low accessibility on digital websites, which is only six out of 27 institutions illustrating unsatisfactory information and communication on the internet for persons with disabilities. The study was done to assess the status of accessibility after the deadline of five years imposed by the Central Government to make all public buildings accessible as per the RPwDs Act 2016. Findings proved that only nine out of 27 had followed the time limit, while nine answered as being under process with no specific date of completion mentioned except for two institutions. The results highlight that compliance with accessibility standards is not considered critical in institutions in Delhi.

Apart from the response regarding the questionnaire, it was observed that 11 institutions didn't respond to the questionnaire displaying the apparent violation of the RTI Act of 2005. Therefore, it is recommended that continuous audits or recurring inspections of public infrastructure by individuals with disabilities or organizations for people with disabilities must be mandated as per policies to ensure that accessibility criteria are being met or maintained. There needs to be a constant sensitization of state governments and institutions on the need for a universally accessible, barrier-free environment for persons with disabilities to provide equal opportunities and increase their access to resources and empower them as productive members of society. A change in the mindset is necessary to ensure that policymakers approach building designs not accessible to a few but as an empowerment for all.

Notes

Appendix

Tabulated and compiled information on the data provided by the educational institutions is available as per request.

Acknowledgments

The authors appreciate the responses from PIO, who provided information accessible in the public domain through the RTI Act 2005.

Conflict of Interest

The authors declare that they have no competing interests.

Authors Contributions

Author-1: R.S.: Conceptualization, Data Curation, Formal Analysis, Project administration, Investigation, Supervision, Writing- review & editing, Writing- original draft

Author-2: L.B.: Methodology, Visualization, Writing- original draft, Writing- review & editing

References

1. ^a ^bGarg S, Sehgal A: *Challenges and Initiatives in relation to Inclusive Education in India: A Case of Persons with Disabilities (PwDs)*. 2018.
2. ^aSinha R, Wagisha, Kar A, Krishnan SD: *An Analytical Study on Accessibility for Person with Disability in India*. *LexForti Leg J*. 2020, 2:96.
3. ^a ^bGovernment of India: *Persons with Disabilities (Divyangjan) in India – A Statistical Profile: 2021*. Ministry of Statistics and Programme Implementation, New Delhi; 2021. http://www.nhfdc.nic.in/upload/nhfdc/Persons_Disabilities_31mar21.pdf.
4. ^a ^b ^cUN General Assembly: *Convention on the Rights of Persons with Disabilities: resolution / adopted by the General Assembly*. (2007). Accessed: 21.8.2022: <https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A.RES.61.106.pdf>.
5. ^aMath SB, Gowda GS, Basavaraju V, Manjunatha N, Kumar CN, Philip S, Gowda M: *The Rights of Persons with Disability Act, 2016: Challenges and opportunities*. *Indian J Psychiatry*. 2019, 61:.
6. ^aKumar S., Kumar S. : *RPwD act, 2016 and school education: concerns and challenges A*. *International Journal of Research and Analytical Reviews*. 2018, 5:382-85.
7. ^a*Guidelines and Space Standards for Barrier-Free Built Environment for Disabled and Elderly Person Guidelines*. C PWD, Ministry of Urban Affairs & Employment: India; 1998. <https://cpwd.gov.in/publication/aged&disabled.PDF>
8. ^a*Manual on Barrier Free Environment*. Chief Commissioner for Persons with Disabilities, Ministry of Urban Development, GoI: India; 2002. <https://cdn.nic.in/SJ/PDFFiles/GuidelinesIndia.PDF>
9. ^a*National Policy for Persons with Disabilities*. Ministry of Social Justice and Empowerment, GoI: India; 2006. <http://disabilityaffairs.gov.in/upload/uploadfiles/files/National%20Policy.pdf>
10. ^a*Harmonized Guidelines and Space Standards for Barrier-Free Built Environment for Persons with Disabilities and Elderly Persons (Draft 2014)*, Ministry of Urban Development, GoI. India; 2014. <https://cpwd.gov.in/publication/harmonisedguidelinesreleasedon23rdmarch2016.pdf>
11. ^aMinistry of Urban Development: *Model Building Bye-Laws (MBBL)– 2016*. Ministry of Urban Development (ed): Government of India, New Delhi; 2006. <https://mohua.gov.in/upload/uploadfiles/files/MBBL.pdf>

12. ^a ^b ^cGovernment of India: *The Rights of Persons with Disabilities Act*, 2016. 2016.
13. ^aMarquis E, Jung B, et. al.: *Creating, resisting or neglecting change: exploring the complexities of accessible education for students with disabilities*. *Can J Scholarsh Teach Learn*. 2012, 3: 10.5206/cjsotl-rcacea.2012.2.2
14. ^a ^b ^cJameel S: *Disability in the Context of Higher Education: Issues and Concerns in India*. *Electron J Incl Educ*. 2011, 2(7). <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1125&context=ejie>
15. ^aGovernment of India: *Delhi Rights of Persons with Disabilities Rules*, 2018. 2018. <https://socialwelfare.delhigovt.nic.in/sites/default/files/All-PDF/Delhi%20RPwD%20Rules2018.pdf>
16. ^a ^b ^c ^d ^e ^fKunnath SK, Mathew SN: *Higher Education for Students with Disabilities in India: Insights from a Focus Group Study*. *High Educ Future*. 2019, 6:171–87. 10.1177/2347631119840540
17. ^a ^bZuber M, Ramakrishna P: *Challenges encountered by persons with disabilities in accessing higher education in India*. *J Child Dev Except Educ*. 2021, 2:11–7.
18. ^a ^b ^cLord JE, Stein MA: *Pursuing inclusive higher education in Egypt and beyond through the convention on the rights of persons with disabilities*. *Social Inclusion*. 2018, 6:230–40. 10.17645/si.v6i4.1709
19. ^aMinistry of Urban Development : Ministry of Housing and Urban Affairs: *Harmonised Guidelines and Space Standards for Persons with Disabilities and Elderly*. CPWD (ed): Government of India, New Delhi; 2022. https://cpwd.gov.in/Publication/HG2021_MOHUA.pdf.
20. ^a ^b ^cAhmad W: *Higher education for persons with disabilities in India: challenges and concerns*. *J Disabil Manag Rehabil*. 2016, 2:1–4. 10.29120/jdmr.2016.v2.i1.14
21. ^a ^bIsmail A, Kuppusamy KS: *Web accessibility investigation and identification of major issues of higher education websites with statistical measures: a case study of college websites*. *Journal of King Saud University – Computer and Information Sciences*. 2022, 34:901–911. 10.1016/j.jksuci.2019.03.011
22. ^aSingh R: *RTI for Research: Using the Right to Information Act, 2005 for Research in India*. Sandeep Kaur (BooksBonanza): New Delhi, India (ed): 2020, New Delhi ; 2020. 10.5281/zenodo.6088938
23. ^aDelhi Govt. Portal: *List of Colleges*. Accessed: 30.08.2022: <http://web.delhi.gov.in/wps/wcm/connect/DoIT/delhi+govt/default/list+of+colleges>
24. ^aICMR: *Indian Council of Medical Research : Indian Council of Medical Research: National Ethics Guidelines for Biomedical and Health Research Involving Human Participants*. ICMR (ed): Indian Council of Medical Research , New Delhi; 2017. https://ethics.ncdirindia.org/asset/pdf/ICMR_National_Ethical_Guidelines.pdf
25. ^aChettri S, Mohammad I: *Rise in disabled applicants this year, Delhi University says campuses more accessible*. *Times India*. 2019.
26. ^aJena KP: *Impact of pandemic Covid-19 on education in India*. *International Journal of Current Research*. 2020, 12: 12582–12586. 10.24941/ijcr.39209.07.2020

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