



# Barriers to Restaurant Accessibility for Persons with Disabilities in Bengaluru, India

Author – Dr. Ujwala Sonawane

## ABSTRACT

This paper explores the obstacles that people with disabilities (PwD) face in accessing restaurants in Bengaluru, India, leading to their physical exclusion. It evaluates the current facilities in restaurants from the perspective of PwD, focusing on mobility, circulation, and service access. Despite having the same motivations as other customers to visit restaurants, PwD encounters substantial challenges. The study emphasizes PwD's views on universal design and planning in Bengaluru's restaurants, promoting 'accessible tourism.' A quantitative analysis is conducted to assess the experiences of differently-abled guests regarding universal design and accessibility. The findings reveal that although accessibility is gaining attention in India, many restaurants have yet to adopt universal accessibility standards. The Ministry of Tourism, Government of India, has initiated efforts for barrier-free accessibility, but further improvements in restaurant design are recommended. This study highlights the importance of universal design and suggests a new model for inclusive restaurants, encouraging PwD to explore Bengaluru.

Key Words – Hospitality, Disability, Restaurant operation.

## I. INTRODUCTION

Inclusivity aims to provide equitable opportunities for marginalized groups, such as individuals with disabilities (Lau et al., 2016a). The concept of "inclusive business," introduced by the World Business Council for Sustainable Development in 2005, integrates growth directly into business models rather than relying solely on corporate social responsibility initiatives (Wach, 2012).

Disability, defined as the inability to perform daily tasks due to long-term medical conditions affects physical, auditory, mental, and cognitive health (Dandona et al., 2019). Globally, nearly 15% of the population experiences some form of disability, with 2-4% facing severe physical challenges.

This study focuses on diversity and inclusion, specifically examining accessibility issues for People with Disabilities (PwD) in restaurants. Insights from collected data aim to enhance barrier-free designs and services, advancing towards a more inclusive society.

## ACCESSIBILITY

The United Nations Convention on the Rights of Persons with Disabilities (CRPD) emphasizes the necessity of enhancing accessibility across various environments, including buildings, roads, infrastructure, and communication.

### Difficulties Encountered by Wheelchair Users

Wheelchair users encounter numerous challenges, including attitudinal, communicative, physical, social, programmatic, and transportation-related barriers, significantly impacting their daily lives.

## Importance of Accessibility

Enhancing accessibility fosters diversity (United Nations General Assembly, 1994). The Indian Constitution guarantees equality for all citizens, including individuals with disabilities.

## II. RESTAURANT DESIGN IMPLICATIONS FOR INCLUSIVENESS

Restaurants should cater to all patrons, including wheelchair users. Inclusive restaurant architecture ensures all visitors feel comfortable with diverse furniture and accessories (Piramanayagam et al., 2019).

### Universal Design

"Universal Design" (UNCRPD, Article 2) involves designing goods, systems, and facilities that are accessible to all individuals without requiring modifications (Cen\_joint\_report, 2011).

### Evolution of Universal Design

Originating as "barrier-free architecture" in the 1950s, universal design has evolved, proving cost-effective for the hospitality industry by eliminating the need for customized design solutions.

### Principles of Universal Design

North Carolina State University's Universal Design Centre introduced seven principles in 1997 to guide universal design:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

Restaurants must ensure fail-safe environments to enhance accessibility for wheelchair users.

### Perception of Wheelchair Users Towards Restaurants

While dining out satisfies physiological, social, and intellectual needs, mere removal of physical barriers proves inadequate. Elements like restaurant layouts, including toilets, entrances, doors, service counter heights, and carpet thickness, can cause frustration. Entrances should ideally be level or equipped with ramps.

## III. METHODOLOGY

Data collection occurred from May to July 2021 in Bengaluru, targeting domestic travelers with mobility disabilities and PwD. A survey assessed views on restaurant infrastructure and accessibility. Snowball sampling identified respondents through restaurants, PwD communities, and NGOs. A pilot study ensured questionnaire feasibility, readability, and reliability, leading to adjustments. SPSS v25 coded the data, with Cronbach's alpha indicating high reliability (average = 0.957).

## IV. RESULTS

Descriptive statistics indicated high reliability (Cronbach Alpha values 0.699 - 0.942). T-tests revealed slight gender differences in adherence to universal design principles, with Principle 4 showing significant variation. Respondents with mobility disabilities aligned more with Principle 2, while age groups showed no significant variance. Restaurant visits frequency varied significantly based on universal design features.

## V. DISCUSSION

This study aims to gauge PwD perceptions of restaurant access in Bengaluru, highlighting deficiencies in basic amenities provision, accessible paths, and parking spaces. Universal design principles are pivotal for inclusivity, urging restaurant management adoption to boost accessibility. Government and hospitality sectors should take proactive measures to promote inclusivity and universal access.

## VI. Policy Implications for Universal Access in Restaurants

The Department of Empowerment of Persons with Disabilities (Divyangja) aims to empower PwD, proposing guidelines for policymakers and service providers to ensure inclusive, barrier-free restaurants in Bengaluru:

- Mandatory universal design for new establishments
- Encouragement for existing venues to remodel for accessibility
- Incentives like tax reductions and credits for remodeling
- Staff training and incentives for PwD service excellence

## VII. RESTAURANT DESIGN IMPLICATIONS FOR INCLUSIVENESS

Restaurants should design parking, surfaces, routes, restrooms, and other facilities based on universal design principles to ensure convenience and accessibility for all patrons.

## VIII. CONCLUSION

This study underscores the need for restaurants to collaborate in understanding the needs of visitors with impairments, thereby enhancing inclusivity and universal accessibility in Bengaluru. It suggests that the hospitality industry should adopt inclusive restaurant designs to bolster customer satisfaction and sector growth.

This cross-sectional study acknowledges limitations, such as its modest sample size and respondent reluctance to disclose employment details, hindering deeper exploration of occupational influences on restaurant choices among PwD. Further research is warranted to explore accessible tourism, crucial for enabling full mobility and independence in the built environment for disabled individuals.

## REFERENCES

- 1) United Nations General Assembly. (1994).
- 2) Accessibility Design Guide: Universal design principles for Australia's aid program. (2014) [www.Austin.gov.au](http://www.Austin.gov.au)
- 3) Axelson, P. W., & Hurley, S. L. (2018). Use of two test methods to ensure accurate surface firmness and stability measurements for accessibility. *Disability and Rehabilitation: Assistive Technology*, 13(4), 379-387. <https://doi.org/10.1080/17483107.2017.1328618>
- 4) Ayse Sirel, & Osman Umit Sirel. (2018). "Universal Design" Approach for the Participation of th in Urban Life. <https://doi.org/10.17265/1934-7359/2018.01.002> of *Civil Engineering and Architecture*, 12(1).
- 5) cen \_joint\_report. (2011).
- 6) E Preiser, W. F. (2011). *UNIVERSAL DESIGN HANDBOOK*.
- 7) Gillovic, B., McIntosh, A., Darcy, S., & Cockbur-Wootten, C. (2018). Enabling the language of Journal <https://doi.org/10.1080/09669582.2017.1377209> *Tourism*, 26(4), hotel-manual. (2014).
- 8) Park, Y. W., Cole, S., & Zhang, Y. (2015). Accessibility of Travel and Hospitality Services as Perceived by Travelers with Mobility Impairments. *Tourism Review International*, 19(1), 31-42. <https://doi.org/10.3727/154427215x14327569678795>.
- 9) Piramanayagam, S., Seal, P. P., & More, B. (2019). Inclusive hotel design in India: A user perspective. *Journal of Accessibility and Design for All*, 9(1), 41-65. <https://doi.org/10.17411/jaces.v9i1.185>

- 10) Quinn, G., Degener, T., Bruce, A., Burke, C., Castellino, J., Kenna, P., Kilkelly, U., & Quinlivan, S. (2002). Human Rights and Disability The current use and future potential of United Nations human rights instruments in the context of disability.
- 11) Saleem, H., & Raja, N. S. (2014). The impact of service quality on customer satisfaction, customer loyalty and brand image: Evidence from hotel industry of Pakistan. Middle - East Journal of Scientific Research, 19(5), 706-711. <https://doi.org/10.5829/idosi.mejsr.2014.19.5.21018>
- 12) The persons with disabilities (equal opportunities, protection of rights and full participation) act, 1995 arrangement of sections chapter i preliminary sections. (1995).
- 13) World Health Organization., & World Bank. (2011). World report on disability. World Health Organization.
- 14) Aslaksen, F., Bergh, S., Bringa, R., & Heggem, K. (n.d.). Universal Design Planning and Design for All.
- 15) Dandona, R., Pandey, A., George, S., Kumar, G. A., & Dandona, L. (2019). India's disability estimates: Limitations and way forward. PLOS ONE, 14(9). <https://doi.org/10.1371/journal.pone.0222159>
- 16) Lau, W. K., Ho, D. C. W., & Yau, Y. (2016a). Assessing the disability inclusiveness of university buildings in Hong Kong. International Journal of Strategic Property Management, 20(2), 184-197. <https://doi.org/10.3846/1648715.2015.1107653>
- 17) Lau, W. K., Ho, D. C. W., & Yau, Y. (2016b). Assessing the disability inclusiveness of university buildings in Hong Kong. International Journal of Strategic Property Management, 20(2), 184-197. <https://doi.org/10.3846/1648715X.2015.1107653>
- 18) Verbrugge, L. M. (2016). Disability Experience and Measurement. In Journal of Aging and Health (Vol. 28, Issue 7, pp. 1124-1158). SAGE Publications Inc. <https://doi.org/10.1177/0898264316656519>
- 19) Wach, E. (2012). Measuring the "Inclusivity" of Inclusive Business. [www.ids.ac.uk/ids/bookshop](http://www.ids.ac.uk/ids/bookshop)
- 20) Welage, N., & Liu, K. P. Y. (2011). Wheelchair accessibility of public buildings: A review of the literature. In Disability and Rehabilitation: Assistive Technology (Vol. 6, Issue 1, pp. 1-9). [hanc-/doi.org/10.3109/17483107.2010.522680](https://doi.org/10.3109/17483107.2010.522680)