

Disabled Independent Living: From the Perspectives of Built Environment

Nurul Fadzila Zahari¹, Adi Irfan Che Ani², Robiah Abdul Rashid³,
Haslina Hashim⁴, Nurul Shima Taharuddin⁵

^{1,2}Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, 43600 Bangi,
MALAYSIA

^{1,4}Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Perak Branch, Seri
Iskandar, 32610 Perak, MALAYSIA.

³Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Shah Alam, 40450,
Selangor, MALAYSIA

⁵Faculty of Art and Design, Universiti Teknologi MARA, Perak Branch, Seri Iskandar, 32610 Perak,
MALAYSIA

Published: 28 September 2020

ABSTRACT

In 2006, Malaysia has signed the Convention of Rights of Person with Disabilities (CRPD) and put oath to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities. Even with the advent of the UNCRPD, the existing built environment fails the neighbourhood accessibility needs of people with disability. Little is known about the extent of built environment inaccessibility, and an improved measure, at a neighbourhood scale, is required. This paper argues that built environment practitioners must recognize the disabling potency of current built environment practice. It argues that they need to engage directly with people with disabilities to improve understanding of accessibility needs.

Keywords: *Independent living, Disabled persons, Built Environment.*

eISSN: 2550-214X © 2020. The Authors. Published for Ideology Journal by UiTM Press. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

1. INTRODUCTION

Malaysia signed the Convention on the Rights of Persons with Disabilities (CRPD) in 2006 and vowed to promote, protect, and ensure full and equal enjoyment by all persons with disabilities of all human rights and fundamental freedoms. As a result of the Convention, the Persons with Disabilities Act came into force in 2008 to provide for the registration, protection, rehabilitation, development and well-being of disabled persons, the establishment of the National Council for Persons with Disabilities and related matters. This act recognized the importance of accessibility to the physical, social, economic, and cultural environment, health and education, and information and communication to enable people with disabilities to participate in society fully and effectively.

Globally, years after the adoption of the UN Convention on the Rights of Persons with Disabilities, the existing built environment encompassing infrastructure, public buildings, commercial buildings and private dwellings still fails to meet the accessibility needs of disabled persons (Rahim et al., 2014). Neighbourhood is a place of participation that is difficult to pin down, but one that has received attention as a key spatial and social construct and theory and legislation focus across a variety of fields including planning, community development, and health (Robiah Abdul Rashid et al., 2015; Rothman, 2010; Williams & Willmott, 2012). Numerous, if not most, neighbourhood activities, spanning from the crucial (residing somewhere, attending school) to the ordinary (grocery shopping) to the discretionary (recreation), still require negotiation of discontinuous travel chains and/or are completely hampered by the presence of barriers (Bashiti & Rahim, 2016; Beale et al., 2006; M.D. et al., 2017; Power, 2013). However, empirical evidence of the frequency and severity of impediments, the causes contributing to

impediment, and clear insight into prioritizing impediment correction is still sorely lacking (Zahari, 2019).

2. THEORY

2.1. Person with disability

According to a Malaysian National Welfare Department report in 2018, the number of cases registered had increased from 409,269 people in 2016 to 497,390 people in 2018 (refer Table 1). In 2018 most of the disabled categories are in Physical Impairment 36% and followed by Learning Disability of 34.2% (refer Table 2).

Presently, disabled people are being neglected due to the lack of access and facilities provided. Additional features such as access and facilities for PWDs shall not change the whole view of the heritage buildings but complement the important activity of conserving the buildings (Jafari, Utaberta, & Othuman Mydin, 2016; Zahari et al., 2018).

Table 1: Registration of Person with Disabilities (PWDs), 2017

	2016	2017	2018
Number of Cases	409,269	453,258	497,390

(Source: National Welfare Department, 2018)

Table 2: Registration of PWDs by Category of Disabilities, 2018

Disability	Percentage (2018)
vision impairment	7.3%
hearing impairment	9%
learning impairment	34.2%
physical impairment	36%
speech impairment	0.5%
mental impairment	8.3%
other	4.7%

(Source: National Welfare Department, 2018)

2.2. Built environment and independent living

The Built Environment is aware that building specification and design contribute to one building's ease of entry and egress. Depending on the design, how a person can reach, explore, and appreciate the matters within the building itself. Inclusion was often used to define "inclusion of disability," which is synonymous with accessibility and barrier-free design (Lau et al., 2016). The Convention on the Rights of Persons with Disabilities was adopted in 2006 with the advocacy of the United Nations for the Rights of Persons with Disabilities (PWDs), to establish the rights of persons with disabilities in society and development. The Convention stipulates that signatory states must identify and remove barriers and barriers to accessibility in buildings and other physical settings (UN 2006). Access to buildings for disabled people has become a legal right in many developed countries, including Malaysia, since its introduction. It has also become a major concern and a challenging challenge facing facilities and construction managers (Ismail et al., 2014). According to Person Disability Act, 2008 (Act 685), a disabled person has rights to education, social participation, employment and other like abled person do. Built environment plays a big role in ensure those rights can be done. Inaccessibility into a building, pedestrian, amenities and other facilities can become a great barrier to disabled person in order to live a daily life.

In order to make buildings and constructed environments more socially sustainable, there should be equity and accessibility for people with different skill levels. The World Health Organization (WHO) identifies participation in social and community activities as a fundamental right (WHO 2002). In the

International Classification of Functioning, Disability, and Health (ICF), participation is defined as involvement of an individual in life situations (World Health Organization, 2015). In individuals with spinal cord injuries, participation in social and community activities has the strongest association with quality of life (Chang et al., 2012). It has been shown that disabled people have reduced opportunities to participate in social and community activities (Blichfeldt & Nicolaisen, 2011; Vale et al., 2017; Zahari, 2019). Because of inaccessible buildings and difficulties moving around the space between buildings, disabled users suffer many disadvantages (Imrie, 2012; Zajadacz, 2015). Details concerning barriers such as long inclines without resting places, high kerbs, steep ramps, steps, or uneven surfaces, which are the types of obstacles that are most problematic for disabled travellers (Beale et al., 2006; Kassim, 2017; Silva & Perera, 2017).

3. METHODOLOGY

This research is focused on the discovery of literature related to the independent of disabled accessibility in Built Environment perspective. This paper was carried out in addition to literature, random observation in built environment. As this subject is common, the literature referred to and examined starts in the year 1970. The quest for literature is by publishing research journals such as Emeralds, Elsevier, Sage and by reading the current laws, guidelines, and actions relating to senior citizens and nation heritage. Terms used to locate reading literature are divided into three categories: Independent living, Disabled person and Built environment. These words are used to evaluate the path toward this analysis.

4. RESULTS AND DISCUSSION

Most of the built environment has limited accessibility for the disabled person. Especially for the existing buildings, heritage buildings and existing amenities (refer to photo 1, 2 and 3).



Photo 1: There are no facilities such as ramps and a hand holder provided for senior citizens and disabled people to visit the heritage building.



Photo 2: Inaccessible of wheelchair user egress and ingress of building.



Photo 3: The high sill that prevented the wheelchair to get to the other side of the building.



Photo 4: The initiative ramp to provide facilities passage for the Senior citizen and disabilities.

As shown in photo 6, the passage initiative for senior citizens and persons with disabilities is set up, but not in accordance with the right specifications. Thus, this group cannot enjoy all the facilities in and around the built environment. Consequently, the policies implemented by the government for disabled person could not be fully realized.

5. CONCLUSION

Accessibility in built environment is still in the unsatisfactory situation. Through the observation to the built environment, most of the inaccessible happened at the external area such as pedestrian, walkway, entrance into a building and entrance stairways. Without a proper disability specification in built environment, it causes difficulties for disabled person in participating social daily life as suggested and stated in Act 685.

REFERENCES

- Bashiti, A., & Rahim, A. A. (2016). Physical Barriers Faced by People with Disabilities (PwDs) in Shopping Malls. *Procedia - Social and Behavioral Sciences*, 222, 414–422. <https://doi.org/10.1016/j.sbspro.2016.05.199>
- Beale, L., Field, K., Briggs, D., Picton, P., & Matthews, H. (2006). Mapping for Wheelchair Users: Route Navigation in Urban Spaces. *The Cartographic Journal*, 43(1), 68–81. <https://doi.org/10.1179/000870406X93517>
- Blichfeldt, B. S., & Nicolaisen, J. (2011). Disabled travel: Not easy, but doable. *Current Issues in Tourism*, 14(1), 79–102. <https://doi.org/10.1080/13683500903370159>
- Chang, F. H., Wang, Y. H., Jang, Y., & Wang, C. W. (2012). Factors associated with quality of life among people with spinal cord injury: Application of the international classification of functioning, disability and health model. *Archives of Physical Medicine and Rehabilitation*, 93(12), 2264–2270. <https://doi.org/10.1016/j.apmr.2012.06.008>
- Imrie, R. (2012). Universalism, universal design and equitable access to the built environment. *Disability and Rehabilitation*, 34(10), 873–882. <https://doi.org/10.3109/09638288.2011.624250>
- Ismail, N., Masron, T., & Ahmad, A. (2014). Cultural Heritage Tourism in Malaysia: Issues and Challenges. *SHS Web of Conferences* 12, 9, 1–8. <https://doi.org/10.1051/shsconf/20141201059>
- Jafari, N., Utaberta, N., & Othuman Mydin, M. A. (2016). An Analysis of Physical Factor Impacts on Development of Community Center in Malaysia. *Research Journal of Fisheries and Hydrobiology*, 11(3), 207–212.
- Kassim, A. R. M. (2017). Aksesibiliti dan Mobiliti Orang Kurang Upaya di Tempat Awam: Mendepani Cabaran Menggapai Harapan. In W. N. A. W. Musa, N. Talib, N. S. Ismail, & M. H. A. Su (Eds.), *National Seminar on Elderly and Persons With Disabilities 2017* (pp. 14–26). Pusat Sains & Kreativiti Terengganu.
- Lau, W. K., Ho, D. C. W., & Yau, Y. (2016). 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>
- M.D., S., G., B., C., S., S., W., & Frost K.L. . O. <http://orcid.org/000.-0002-2693-5432>. (2017). Healthcare utilization and associated barriers experienced by wheelchair users: A pilot study. *Disability and Health Journal*. <https://doi.org/http://dx.doi.org/10.1016/j.dhjo.2017.02.003>
- National Welfare Department. (2018). Statistic Report 2018. In *Statistic Report 2018* (Vol. 1, Issue 1). <https://doi.org/10.1017/CBO9781107415324.004>
- Power, A. (2013). Understanding the complex negotiations in fulfilling the right to independent living for disabled people. *Disability and Society*, 28(2), 204–217. <https://doi.org/10.1080/09687599.2012.699280>
- Rahim, A. A., Zen, I., Samad, N. A. A., & Rahim, C. R. C. (2014). Universal design and accessibility: Towards sustainable built environment in Malaysia. *Assistive Technology Research Series*, 35, 299–306. <https://doi.org/10.3233/978-1-61499-403-9-299>
- Robiah Abdul Rashid, Abdullah, A. S., & Elma Dewiyana Ismail. (2015). Adaptive Re-Use of Heritage Buildings in Malaysia—A Case Study of Penaga Hotel in Penang. *Proceedings of the Colloquium on Administratives Science Nad Technology*, 463–477. <https://doi.org/10.1007/978-981-4585-45-3>
- Rothman, J. C. (2010). The Challenge of Disability and Access: Reconceptualizing the Role of the Medical Model. *Journal of Social Work in Disability & Rehabilitation*, 9, 194–222. <https://doi.org/10.1080/1536710X.2010.493488>
- Silva, D. De, & Perera, K. K. S. (2017). *Barriers Aand Challenges of Adaptive Re-use of a Buildings*.

January 2016, 9.

- Vale, D. S., Ascensão, F., Raposo, N., & Figueiredo, A. P. (2017). Comparing access for all: disability-induced accessibility disparity in Lisbon. *Journal of Geographical Systems*, 19(1), 43–64. <https://doi.org/10.1007/s10109-016-0240-z>
- Williams, G., & Willmott, C. (2012). Higher levels of mobility are associated with greater societal participation and better quality-of-life. *Brain Injury*, 26(9), 1065–1071. <https://doi.org/10.3109/02699052.2012.667586>
- World Health Organization. (2015). *WHO Global Disability Action Plan 2014-2021: Better People Health With for Disability All People With Disability*. WHO Press.
- Zahari, N. F. (2019). Factors contribute in development of the assessment framework for wheelchair accessibility in National Heritage Buildings in Malaysia. *International Journal of Building Pathology and Adaptation*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/IJBPA-02-2019-0021>
- Zahari, N. F., Che-Ani, A.-I., Robiah Abdul Rashid, & Ismail, N. (2018). Conducting Go-Along Interview Method to Discover Experience of Wheelchair Traveller's Accessibility in National Heritage Building. *Prosiding Persidangan Senibina Dan Alam Bina Serantau 2018 (SeniBINA2018) 'Tema: Senibina Identiti Kebangsaan', Proceedings of Conference on Regional Architecture and Built Environment 2018 (SeniBINA2018) 'Theme: National Architectural Identity,'* 76.
- Zajadacz, A. (2015). Evolution of models of disability as a basis for further policy changes in accessible tourism. *Journal of Tourism Futures*, 1(3), 189–202. <https://doi.org/10.1108/JTF-04-2015-0015>