Formulation of Building Design Principles for Little People in Hong Kong

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Abstract : 'Little people' are those who have extremely short stature as they suffer from rare bone diseases. They are commonly known as 'dwarves' or 'people with dwarfism'. Dwarfism is generally regarded as a type of rare disease for its extremely small odds (~1 in 15,000). On account of its rarity, dwarfism, unlike other types of disability, has attracted relatively little attention from the general public and in various academic fields (e.g. architecture, psychology and sociology) except medical science. In view of the extant research gaps, this study aims to investigate the physical barriers facing the little people in the built environment in Hong Kong. Between November 2017 and July 2018, ten little people or their family members participated in in-depth interviews. Responses of the interviewees were transcribed (i.e., speech being converted to text word for word). Interview data were then analyzed using the interpretative phenomenological analysis methodology developed by J. Smith and others in 2009. The findings of the project reveal that although Hong Kong's built environment has been designed barrier-free pursuant to the prevailing building standards, those standards do not cater to the special anthropometric characteristics of little people. As a result, little people face a lot of challenges when using built facilities. For example, most water closets, urinals, and wash hand basins are not fit for little people's use. As indicated by the project findings, we are still far away from providing a discrimination-free and barrier-free living environment for the little people in Hong Kong. To make Hong Kong society more inclusive to the little people, there is a need for further tailored building design. A set of building design principles for better inclusion of the little people in our society are highlighted. These principles include 'the building design should accommodate individuals with different heights' and 'the building design should allow individuals to use comfortably and efficiently with a minimum of fatigue'. At the end of the paper, the author also calls for an agenda for further studies. For instance, we need an anthropometric study on little people for developing practical building design guidelines. Keywords : dwarfism, little people, inclusive buildings, people with disabilities, social sustainability

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