Domestic Environmental Experience Design

Subjects: Construction & Building Technology

Contributor: Sajal Chowdhury, Masa Noguchi, Hemanta Doloi

The term 'domestic environmental experience' was defined as users' experiences of cognitive perceptions and physical responses to their domestic built environments. Domestic environments can be enriched through the implementation of environmental experience design (EXD) by combining users' environmental, spatial and contextual factors that may accommodate occupants' needs and demands as well as their health and wellbeing. Here, an EXD theoretical concept has been developed based on the 'User-Centred Design' thematical framework.

domestic environment

occupant experience environmental design

health and wellbeing

Generally, people spend most of their time in indoor environments [1]. In the domestic setting, occupants' living experiences are diverse, and they have numerous preferences related to their spatial needs and demands [2][3]. These preferences are connected to the environment of a domestic setting and are perceived through occupants' household experiences [4]. Every design component of a domestic environment has a negative or positive impact on occupants' psychological responses [2][4][5]. Several studies identified that surrounding environments stimulate occupants' mediative capacities in their living environments [6]. Therefore, it is necessary to explore occupants' perceptions and experiences in their domestic settings that may enhance their psychological health and wellbeing (4). Occupants' way-of-living conditions may be modified or changed through the adjustment of their subjective perceptions and attachment to their domestic environment given—i.e., "Human experience" [5][7]. Particularly, in developing countries such as Bangladesh, lower- and middle-income families have the minor capacity to change or modify their existing domestic living conditions due to their socioeconomic limitations [8]. Most of these families live in small or congested urban domestic spaces where only physical architectural design configurations are considered today's architectural design practice [8][9]. Such limited design considerations alone may not be sufficient in addressing occupants' wellbeing to improve the quality of their living [8][10][11]. Domestic indoor environmental attributes have been studied extensively, the research on the occupants' domestic environmental experiences is still marginal to date [4]. The architectural environmental design concept may be enriched by integrating human perceptions and experiences in different spaces of the built environment [12]. The key aim of this study is to explore an architectural design concept for the domestic living environment through the occupants' household experiences that may influence their mental health and wellbeing.

References

1. Bluyssen, P.M. Towards an integrated analysis of the indoor environmental factors and its effects on occupants. Intell. Build. Int. 2019, 12, 1-9.

- 2. Caan, S. Rethinking Design and Interiors: Human Beings in the Built Environment; Laurence King: London, UK, 2011.
- 3. Mallgrave, H.F. From Object to Experience: The New Culture of Architectural Design; Bloomsbury Publishing: London, UK, 2018.
- 4. Chowdhury, S.; Noguchi, M.; Doloi, H. Defining Domestic Environmental Experience for Occupants' Mental Health and Wellbeing. Designs 2020, 4, 26.
- 5. Evans, G.W. The built environment and mental health. J. Urban Health 2003, 80, 536–555.
- Goldhagen, S.W. Welcome to Your World: How the Built Environment Shapes Our Lives; Harper Collins: New York, NY, USA, 2017.
- 7. Kopec, D.A. Environmental Psychology for Design, 3rd ed.; Bloomsbury Publishing Inc.: London, UK, 2018.
- 8. BRAC. The State of Cities 2017: Housing in Dhaka. In BIGD Report; BRAC Institute of Governance and Development, BRAC University: Dhaka, Bangladesh, 2017.
- 9. Kamruzzaman, M.; Ogura, N. Apartment housing in Dhaka City: Past, present and characteristic outlook. In Proceedings of the Building Stock Activation, Tokyo, Japan, 5–7 November 2007.
- 10. Choguill, C.L. Problems in providing low-income urban housing in Bangladesh. J. Habitat Int. 1988, 12, 29–39.
- 11. Khare, H.S. Barriers Constraining the Low and Middle Income Housing Finance Market in Bangladesh; World Bank: Washington, DC, USA, 2016.
- 12. Noguchi, M.; Ma, N.; Woo, C.M.M.; Chau, H.W.; Zhou, J. The usability study of a proposed environmental experience design framework for active ageing. Buildings 2018, 8, 167.

Retrieved from https://www.encyclopedia.pub/entry/history/show/52099