

Influence of Urban Microclimates on Human Perceptions and Behavioral Patterns: A Relational Context of Human Parameters in Urban Design

Authors : Naveed Mazhar

Abstract : Our cities are known to have significant modifying effects on the local climate. The nature of the modifications depends on a range of physical variables, usually assessed at a wide range of spatial scales. Physical spatial dimensions, such as measured parameters of microclimates and their significant influence on human sensations, are known to have far-reaching effects on human thermal comfort and by corollary a force that influences human perception. Less scholarship has thrown light on the subjective dimension and insufficiently demonstrates a relational approach between human behavior and how it is affected by the phenomenon of urban microclimates. Other than identifying gaps in the most recent scholarship and providing future research opportunities, the scope of this study will help improve urban design guidelines and raise framework standards of socially responsive urban design. This study will help equip future professionals to ameliorate the effects of urban microclimates on participant's perceptions enabling more frequent usage of the outdoor urban spaces. However, it is informed that the physical parameters of an outdoor open space determine psychological human adaptations and is a measure of the degree to which people are willing to adapt to their surroundings. A large amount of research is available related to urban microclimates. However, very few studies are focused on the elucidation of the critical factors influencing human perceptions of the microclimates in urban spatial configurations. Based on the most recent scholarship, this study has evaluated the role urban microclimatic conditions have in the formation of human perceptions and, by extension, behavioral patterns formulating in outdoor open spaces. Furthermore, this study also defines, in the backdrop of the current scholarly literature, the socio-spatial interdependence of behavioral patterns with relationship to the built urban fabric and its resultant correlation with human perception. A comprehensive review and analysis of the recent research conducted within the scope of the study will help frame gaps, issues, current research methods and future research opportunities.

Keywords : urban design, urban microclimate, human perception, human behavioral patterns

Conference Title : ICSUUDP 2018 : International Conference on Sustainable Urbanism, Urban Design and Planning

Conference Location : Sydney, Australia

Conference Dates : January 29-30, 2018