

Abstract

Mai - Ghazy

An Appraisal of Urban Stress in the Built Environment, A Case Study of La Gaité Commercial Street

Stress nowadays poses a major threat for our wellbeing it has been generally known as physical, mental emotional strain tension that develops anxiety however it has further severe impacts on our health such as diabetes, memory impairment, heart diseases, etc. Moreover, it has been declared by the World Health Organization as the 'Health epidemic of the 21st century'. This has induced researchers from various fields such as physiology, psychology, sociology and others, to investigate stress and explore means that could contribute to resolving and mitigating this daily living tension. Even though the built environment provides the back in which daily living takes place, rarely found is a contribution by the urban field that tackles the issue of stress and explores whether and how the design of the built environment could affect stress of its users. Hence, it was seen vital to examine stress from the urban perspective and propose a tool that could be used to examine whether a street is stressful not and if so highlight the constituents of the street environment that generate stress. In order to reach that tool, three phases of research are necessary where the first research phase is carried out on the psychological literature with the aim of exploring the concepts and approaches of stress. From this investigation a model is deduced that demonstrates the three main parameters of the stress process (users' needs, built environment and activities) and how they correlate with each other. Based on this model, the second phase of research is carried out where each one of these parameters is explored from the urban perspective. From this examination a set of constituents is deduced for each parameter that is placed in framework structure displaying the interrelation between the three main parameters. Henceforth, the third phase of research is concerned with reviewing this interrelation from the urban literature searching for data and evidence that discusses any connection between the constituents of the framework in order to develop it into a tool that could examine the built environment stress causality. This framework is considered the main conclusion reached by the study, where it could be used as a tool to examine whether a street is stressful not as well as pin point the problematic features within it. Finally, an application phase is conducted where this framework is examined in a real life stressful street in order to display how it is used as a tool as well as experiment its efficiency. The findings from its application on 'La Gaité Street', Alexandria shows that the street's experience is stressful especially for night users, moreover, it highlighted three major features that potentially cause this stressful experience which are street furniture (placement and quantity), in-adequate space for its users and high users density. Accordingly, the framework can be utilized on other streets to determine each street's built environment stress generators which specifically respond to their unique nature.