

Impact of Landscape Elements on the Psychological Safety of Pedestrians in Urban Streets of Sri Lanka

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Irrespective of having confronted a crime or not, many users feel insecure in public spaces. This feeling of insecurity is directly related to the mental conditions of an individual and sometimes to many other environmental cues or different physical elements. This insecurity is perceived frequently in urban streets as it is a widely used urban component by most of the urbanites. Out of the many physical elements present in streets, trees play a vital role in aesthetic quality, thermal comfort and enhancing physical and mental health of the users. Up until now, only a limited amount of research has been carried out in search of the contribution of trees on the assurance psychological safety of the pedestrians. This study aims to identify the impact from different characteristics of trees in urban streets on the psychological safety of the pedestrians. This is achieved through an exploratory survey study in identifying the characteristics of trees and, an evaluation of the appropriateness of the explored characteristics in ensuring psychological safety in urban context of Sri Lanka. The exploratory study has identified a total of 11 characteristics of trees as important in assuring psychological safety. The evaluation was conducted with the aid of a questionnaire using 7 point rating scale, and a total of 60 responses from both experts (with more than 5 year experience in designing, planning and similar disciplines) and non-experts (general public) were obtained for the analysis through snowball sampling technique. The results from the questionnaire indicated that the relative size of the tree (with respect to human scale) make the highest impact on the psychological safety of the users whereas the texture of the tree bark makes the least impact. Mann Whitney U test results claim that only the response for spread of the canopy has shown differences across two samples where experts claim a high importance when compared with the non-experts. Extension of these results for a comprehensive outcome can be accommodated in the planning and designing of urban streets in a tropical country like Sri Lanka.

Keywords: Psychological safety; Trees; Urban streets; Pedestrians

Acknowledgement: This work is supported by the Accelerating Higher Education Expansion and Development (AHEAD) - DOR Grant affiliation with Ministry of Higher Education & University Grants Commission and funded by the World Bank