

Effectiveness of urban green space on undergraduates' stress relief in tropical city: a field experiment in Kuala Lumpur

ABSTRACT

This research examined the psychological (perceived restoratives, emotion, stress, and mood) and physiological (blood pressure readings) effects of short-range visits to urban environments. Ninety participants visited two urban areas; Bukit Jalil Urban Park (a green space) and Bukit Jalil Urban Street (an urban built-up city centre as a controlled environment) located in a tropical city Kuala Lumpur. Participants took a 20-minute leisure walk along the given routes in both the study areas. The findings indicate that the urban park has had an overall rehabilitative impact in contrast to the built-up environment. Overall, the positive emotion has increased, and mood disturbance has decreased in the metropolitan green area after the field experiment. The findings demonstrate that even short-term visits to urban parks decidedly influence stress reduction compared to an urban built-up city centre. However, both systolic and diastolic blood pressures decreased insignificantly after walking in the park. Similar variables such as their mental and physiological measures on other urban societies (i.e., working adults, population with hypertension, and their encounters) concerning the effect of a short walk with green ecology should be studied further.

Keyword: Built-up environment; Emotions; Kuala Lumpur; Psychometric test; Urban green area