

## **Engaging in social interaction: relationships between the accessibility of path structure and intensity of passive social interaction in urban parks**

### **ABSTRACT**

**Purpose** – Functioning as space connectors, path structures in urban parks may rarely present social interaction opportunities, although centralized activity spaces are available. This paper investigated the interrelationships between the visual and physical accessibility attributes of path structure and their impacts on passive social interaction intensity across urban parks in Kuala Lumpur. **Design/methodology/approach** – The concept of social interaction has been studied elsewhere in social cohesion, social affiliation and sense of communication. Still, it has not been studied in the context of urban park design. This study employed mixed methods using an adaptive and unique combination of qualitative and quantitative data collections to analyze urban parks with a bit of visual vegetation barrier. The experiential landscape method was applied to determine visual accessibility by interpreting experiential landscape maps. The space syntax method based on quantitative analysis is considered to measure physical accessibilities and vigorous activities along the designated paths by conducting integration analysis and gate observation. The data were crossed-analyzed using a Geographic Information System (GIS) classification technique, correlation analysis and Microsoft combo-charts to generate the relationship between patterns of activities and their accessibilities. **Findings** – The results suggested that designated paths with higher accessibility attributes, impressively more elevated than other tracks, could influence the intensity of passive social interactions. The findings supported the understanding that activity nodes and active areas adjoining designated routes could make accessibility attribute areas more critical. These findings verify that visually enriching the spaces along the path structure toward activities is a pivotal contributor to urban planners and designers to enhance the paths' local integration (LI) and visual accessibility to predict more passive eye contact among park visitors. **Research limitations/implications** – The proposed interrelationship among variables in this study has limitations because of not considering other qualitative methods and techniques like cognitive maps and interview simultaneously. These techniques could discover why some paths generate more passive eye contact among park users (Mohammadi Tahroodi, 2018). **Practical implications** – Kuala Lumpur Structure Plan 2020 emphasizes Kuala Lumpur's unique image as a tropical garden city via preserving and developing the iconic historical urban parks in the city center (CHKL, 2004, pp. 3–3). The latest Draft Kuala Lumpur Structure Plan 2040 has outlined the strategy to achieve a conducive, good-quality neighborhood that encourages social interaction. The findings could assist urban planners and designers better public parks by considering accessibility and permeability aspects of design. This research endorses the appropriateness of interrelationship between accessibility attributes of path structure and social interaction in urban design research, which local urban designers have not fully considered until now. Evaluating the visual convenience of designated paths and assessing LI of the axial lines constructing each designated route of urban parks during the primary stage could enable urban designers to estimate to what extent the paths are accessible and respond to passive social interaction. Then they could enrich with

salient landmarks, views and activity nodes to make them attractive. The considerable number of designated paths connections, specifically while they shape the sides of activity nodes, could increase the connectivity and integration of spaces within the parks. These patterns of positioning the activity nodes make the designated routes more legible and provide ease of movement. As a result, it will give urban park users more information about the activities. Allowing people to use the paths will increase people's presence and, subsequently, passive social interaction. One way is to locate accessible lands that provide social activities at direct visual access paths within urban parks for legibility. Social implications – The socially responsive urban design enhances the quality of life and provides life satisfaction, happiness and society's overall health. Being in urban social parks in any passive and active situations has psychological benefits. It facilitates relief and rests from a stressful modern lifestyle that significantly impacts their mental health and well-being. The framework applied in this research integrates the social, spatial and physical aspects of parks design. With this regard, principles and indicators facilitate physically and socially attractive urban parks for Kuala Lumpur city center and applicable to similar contexts elsewhere. Originality/value – The concept of social interaction has been studied elsewhere in social cohesion, social affiliation and sense of communication. Still, it has not been studied in the context of urban park design. This study employed mixed methods using an adaptive and unique combination of qualitative and quantitative data collections to analyze urban parks with a bit of visual vegetation barrier.

**Keyword:** Passive social interaction; Physical accessibility; Visual accessibility; Path structure; Urban park