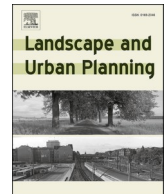


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Building safer public spaces: Exploring gender difference in the perception of safety in public space through urban design interventions

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HIGHLIGHTS

- We examine the impact of three urban design interventions on people's perception of safety in the public space.
- Photo simulation is used in a randomised control trial setting.
- Safety-enhancing design interventions have a significant impact on enhancing perceived safety.
- Removing solid walls leads to significant improvements of perceptions of safety for women.
- Eliminating graffiti from streetscapes has a weak significant impact on perceived safety only for women.

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ABSTRACT

Concern around personal safety is a significant factor in constraining women's access to and use of public space. One strategy presented to address this involves altering the design of built environments. However, tension and controversy surround these arguments in the literature on safety perception in public space. This study seeks to explore whether the presence of three design interventions commonly cited in the literature act to enhance or reduce perceptions of safety in public space, focusing on women's experiences in particular. Three design interventions are examined: public toilets, solid walls, and graffiti removal. To test these interventions, an image-based randomised control trial with 104 participants was conducted in 2018 in London (UK). A series of control and treatment images simulating each design intervention was viewed and ranked by participants according to perceived safety. The findings of this study suggest that: the presence of public toilets does not affect perceived safety; eliminating graffiti has a weak significant impact on perceived safety; and removing solid walls leads to significant improvements of perceptions of safety, with the effect being stronger for women. These results suggest that to maximise investment effectiveness, urban design and planning policies that aim to increase perceptions of safety should be evidence-based, and need to integrate a gendered perspective. The presented technique could support urban design processes by examining the safety-enhancement impact of proposed public space interventions prior to their being rolled out.

1. Introduction

The ability to safely utilise the urban public realm has profound implications for people's wellbeing. A wealth of research (Anderson, Ruggeri, Steemers, & Huppert, 2017; Cattell, Dines, Gesler, & Curtis, 2008; Giddings, Charlton, & Horne, 2011) illustrates the benefits of

public space utilisation including strengthened social inclusion, reinforced feelings of belonging and improved mental health. Studies also suggest that intensive use of public space can stimulate the local economy by boosting tourism and recreational activities and thereby increasing property values (CABE, 2004). Despite interest over recent decades in rejuvenating public spaces to stimulate their use – notably in

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