Landscape Factors Eliciting the Sense of Relaxation in Urban Green Space

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Abstract : Urban green spaces play an important role in promoting wellbeing through the sense of relaxation for urban residents. Among many designing factors, what the principal ones that could effectively influence people's sense of relaxation? And, what are the relationship between the sense of relaxation and those factors? Regarding those questions, there is still little evidence for sufficient support. Therefore, the purpose of this study, based on individual responses to environmental information, is to investigate the landscape factors that relate to well-being through the sense of relaxation in mixed-use urban environments. We conducted the experimental design and model construction utilizing choice-based conjoint analysis to test the factors of plant arrangement pattern, plant trimming condition, the distance to visible automobile, the number of landmark objects, and the depth of view. Through the operation of balanced fractional orthogonal design, the goal is to know the relationship between the sense of relaxation and different designs. In a result, the three factors of plant trimming condition, the distance to visible automobile, and the depth of view shed are significantly effective to the sense of relaxation. The stronger magnitude of maintenance and trimming, the further distance to visible automobiles, and deeper view shed that allow the users to see further scenes could significantly promote green space users' sense of relaxation in urban green spaces.

Keywords: urban green space, landscape planning and design, sense of relaxation, choice model

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