

Perceived Potential for Attention Restoration and Stress Recovery of Attractive and Less Attractive Natural, Urban, and Mixed Scenes

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Introduction

Although theories explaining the benefits of restorative environments for attention restoration and recovery from stress differ, settings found to most effectively promote those processes are similar. Natural settings are usually much more effective than built and urban settings. Some authors argue that sharply dichotomous findings result from comparing attractive natural settings to less attractive built settings. Others suggest that seasonal changes can affect the attractiveness and restorative potential of natural settings. There has been little study of these issues. Also unexplored is whether personality is linked to actual or perceived potential for restoration and recovery in various settings. The present studies addressed these issues.

The Present Studies

Three studies assessed attractiveness of natural, urban, and mixed scenes, and perceived potential for attention restoration and stress recovery of the scenes. They also tested personality as a predictor of perceived potential for restoration and stress recovery.

The goal of Study 1 was to identify an attractive natural scene and urban scene, a moderately attractive natural scene and urban scene, and an attractive mixed urban/natural scene to be used as stimuli in Studies 2 and 3. Environmental stimuli were chosen based on studies that compared features of settings to ratings of attractiveness and preference.

In Study 1, 150 university students rated attractiveness of scenes using a 6-item scale composed of measures of preference and scenic beauty. Students rated a natural scene in spring and a European street scene equally attractive, a natural scene in winter and a scene with a skyline and prominent roadway moderately attractive, and a scene with

flower gardens in front of an urban skyline between moderately attractive and attractive. These scenes provided the range of setting characteristics needed for studies 2 and 3.

In Study 2, 91 students completed a five-factor personality inventory and rated the five scenes using a 21-item inventory of perceived restorative potential. Students rated nature in spring and the European streetscape equally high and rated nature in winter lower than nature in spring, but equal to the European streetscape. They rated the urban scene with roadway and mixed urban/natural scene equally lower, but still moderate in perceived restorative potential. Personality measures of extraversion, agreeableness, and openness were associated with higher scores for perceived restorative potential for most scenes; neuroticism predicted lower scores.

In Study 3, 121 students completed the personality inventory, imagined a demanding situation, and rated perceived stress from the situation. Then they rated perceived potential for stress recovery for the five scenes using a 6-item scale with physiological, cognitive, and affective measures of stress recovery. Students rated the natural scenes highest, the mixed scene intermediate, and the urban scenes lowest. Perceived stress and measures of personality did not consistently predict ratings of perceived potential for recovery.

Although these results contribute to our understanding of features of environments that are perceived to affect potential for attention restoration and recovery from stress, future studies should assess actual attention restoration and stress recovery. Future studies could also go beyond testing correlations between domains of personality and measures of restoration and recovery to assess whether personality is a moderator of relationships between environmental features and attention restoration and stress recovery.