

Psychological Benefits of Walking: Moderation by Outdoor Environment and Social Context

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Introduction

Various studies have assessed the degree to which psychological benefits of physical exercise depend on the environment in which it is performed. Some studies have focused on social aspects of environments as moderators of exercise benefits, such as the presence of supportive others, while other studies have focused on broader aspects of socio-physical environments, such as the amount of greenery and traffic (Bodin & Hartig, 2003). We integrated these lines of inquiry; we assessed the interactive effects of immediate social context and the urban outdoor environment on change in affective states and cognition during a brisk walk.

We hypothesized that walking would produce positive changes in attention and affect, and that these changes would be greater when walking in an urban park than when walking along streets. Of particular interest was how, if at all, the immediate social context would modify the broader environmental effects. A scenario-study by Staats and Hartig (2004) suggested that having the company of a friend would be more beneficial when walking along streets.

Method

We conducted a field experiment with time (pre-walk, post-walk), type of urban environment (park, street), and social context (alone, with a friend) all manipulated as within-subjects factors. Twenty university students completed the Exercise Induced Feeling Inventory, the Negative Mood Scale, and a symbol-substitution test before and after each of two 40-minute walks in each environment. The routes differed in amount of greenery, proximity to water, and presence of traffic, buildings, and other people.

Results

On average, positive affect increased and negative affect declined while walking. Feelings of time pressure declined to a greater extent with the park walk than the street walk. Revitalization increased during the park walks to a greater degree when alone, while it increased more during the walk along streets when with a friend. We found an inconclusive pattern of results for performance on the symbol-substitution test.

Discussion

We provide evidence that some affective benefits of a brisk walk depend on the outdoor urban environment and the immediate social context. Such results indicate possible consequences of urban design and planning alternatives that open or close opportunities for exercise and physical activity more generally. They further affirm the notion that having a companion can offset some of the deficits in the surrounding environment. Still, while the company of a friend may enhance a walk along streets, our results also suggest that other potential benefits are more dependent on the environment in which the exercise occurs, regardless of the immediate social context.

References

- Bodin, M., & Hartig, T. (2003). Does the outdoor environment matter for psychological restoration gained through running? *Psychology of Sport and Exercise, 4*, 141-153.
- Staats, H., & Hartig, T. (2004). Alone or with a friend: A social context for psychological restoration and environmental preferences. *Journal of Environmental Psychology, 24*, 199-211.