

Assessing restorative qualities of a wilderness park from the perspective of environmental psychology

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Introduction and aim of research

Need for restoration

In many western, industrialized countries, daily life is defined by high workload, stress, and a sedentary lifestyle. A vast body of literature provides evidence that this lifestyle is associated with, for example, growing incidences of diseases and a higher overall mortality (e.g., Kopp and Rethelyi, 2004; Krantz, Berntsson, & Lundberg, 2005).

Maintaining or increasing health and well-being becomes thus a major challenge for society. Recent research on restorative environments suggests that recreation especially in natural environments can be associated with increased well-being and health (e.g., Bowler et al., 2010; Abraham et al., 2010). Well-being benefitting effects of recreating in natural settings can often be explained by restoring psychological resource needed to willful direct attention. An additional source for maintaining health and well-being may also be found in psychological need satisfaction. In self-determination theory it is assumed that satisfaction of the basic psychological needs *autonomy*, *competence*, and *social relatedness* can be associated with positive well-being (e.g., Deci & Ryan, 2008).

Aim of research

The present study aimed at assessing restorative qualities of visiting the Wilderness Park Zürich (Switzerland). Main objectives were to analyze psychological aspects that impact evaluation of the park and perceived restoration of visits.

Methods

Study Area

The study was conducted as an on-site visitor survey at the Wilderness Park Zürich. The park covers a total area of about 12 km². It comprises of forestland, wilderness, and inherits animals. A visitor centre provides food and drinks, contains a museum and offers a resting place for visitors. A new outdoor playground for children was built in front of it, and several places to make campfires and prepare food are close to the visitor centre. Thus, the visitor centre provided a good location for conducting the survey.

Procedure and measures

The study took place on three weekends in autumn of 2012. Weather conditions were fine and comparable for all days during the field phase. At those weekends when the study was conducted, a total of two researchers were present for the whole day. They were instructed to engage every visitor at the visitor centre or at nearby places. As an incentive, visitors were offered a hot drink of their own choice (coffee, tea, etc.) and they received a small piece of chocolate after completion, which took approximately 15 minutes. Groups were provided one questionnaire per person.

The on-site questionnaire contained items about perceived restoration while at the park, perceived stress, satisfaction of psychological needs, socio-demography, and general aspects of visiting behaviour. If not otherwise indicated, all scales ranged from -2 (*negative*) to +2 (*positive*) and included a neutral option (0). The results of an on-site pre-test suggested that no changes needed to be applied to the questionnaire.

Sample

Data from 142 visitors were collected within three weekends. After data-screening, 26 cases had to be excluded for various reasons (e.g., working instead of leisure time, no need for restoration). The total sample comprises of data from $N = 115$ visitors. Mean age was 44.0 years ($SD = 12.8$ years), 59.5% were female, 33.9% male, and 6.6% did not indicate their gender. The level of formal education was rather high: 42.3% graduated from university or technical college (primary school: 2.7%; vocational school: 22.5%; high school: 11.7%; higher educational training: 18.9%). Most visitors were accompanied by a partner (60%), and 28.3% had children with them. Only 10% visited the park alone.

Results

Main motives for visiting were experiencing nature ($M = 1.7$, $SD = 0.4$), followed by social motives ($M = 1.13$, $SD = 0.9$). On average, visitors reported satisfaction of basic psychological needs (autonomy: $M = 0.7$, $SD = 0.7$; competence: $M = 0.7$, $SD = 0.7$; social relatedness: $M = 0.3$, $SD = 0.8$) and positively evaluated the park visit ($M = 1.5$, $SD = 0.5$). Need satisfaction correlated positively with evaluation of the park visit ($r = .25$, $p \leq 0.01$).

Mean sum score for self-reported perceived stress in everyday life was 13.6 ($SD = 6.1$; items ranged from 0 (*never*) to 4 (*always*)), which is within the norm reported in literature. Participants stated that they felt on average more recovered ($M = 1.1$, $SD = 0.7$), relaxed ($M = 1.1$, $SD = 0.7$), happy ($M = 1$, $SD = 0.8$), healthy ($M = 0.8$, $SD = 0.8$) and less stressed ($M = -0.9$, $SD = 1$) after the visit. However, the more respondents experienced interdependencies between stressful events and the park visit, the less restoration they reported – mainly due to an impaired sense of being psychologically away.

Concluding remarks

The results suggest that satisfaction of basic psychological needs can be associated with a positive visiting experience. Additionally, perceived restorative outcomes may be influenced by presence or absence of stimuli that are associated with daily demands. Creating a superior visiting experience may therefore mean to lower possible interdependencies with stimuli that are associated with demands (e.g., by recommending to leave mobile phones at a safe place in the visitor centre), and by providing opportunities that help people satisfy their needs for autonomy, competence, and social relatedness.

References

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