

Sustainability | Individual communication

IC - (20985) - VIEWING NATURAL VS. URBAN IMAGES AND EMOTIONAL FACIAL EXPRESSIONS

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Background and objectives

There is a large body of evidence that exposure to simulated natural scenes has positive effects on emotions and reduces stress. Some studies have used self-reported assessments, and others have used physiological measures or combined self-reports with physiological measures; however, analysis of facial emotional expression has rarely been assessed. The aim of present research was to explore, whether natural images would evoke a higher magnitude of positive emotions in facial expressions and a lower magnitude of negative emotions than urban images.

Process and methods (for empirical research)

Two experiments were conducted. In Experiment 1, participant facial expressions were analyzed while viewing images of forest trees with foliage, forest trees without foliage, and urban images by iMotions' AFFDEX software designed for the recognition of facial emotions. In Experiment 2 images of mundane and attractive nature with various level of visual openness were presented and facial expressions were analyzed. Simultaneously, participants were asked to express their emotions verbally.

Main results (or main arguments in the case of critical reviews)

In Experiment 1 the results showed only very low magnitudes of facial emotional responses, and differences between natural and urban images were not significant. In Experiment 2 significant differences in facial emotional expressions were found only as a function of image openness, but not attractiveness. In contrast, in a verbal expression of perceived emotions attractive images scored significantly higher than unattractive images.

Implications for research and practice/policy | Importance and originality of the contribution

The findings of the present study have methodological relevance for future research. Moreover, not all urban dwellers have the possibility to spend time in nature; therefore, knowing more about the effects of some forms of surrogate nature also has some practical relevance.

Palavras-chave : natural environment; facial emotional expressions; positive emotions; face reading technique