

Nature and Music Videos Promote Recovery from Induced Stress

Saturday, September 13, 2025 2:10 PM (20 minutes)

Exposure to natural environments supports well-being by reducing psychological and physiological stress, as suggested by the Stress Recovery Theory. However, most studies have focused on the stress-relieving effects of green landscapes and elements, with limited investigation of broader biodiversity or dynamic representations of nature.

This study tested whether digital exposure to nature –videos featuring varied ecosystems with tailored instrumental music –could facilitate recovery after stress.

107 participants completed a stress-inducing task, the Markus and Peters Arithmetic Test. During the recovery phase, the experimental group (n = 55) watched a 15-minute nature video, while the control group (n = 52) sat quietly alone in a room without external stimulation. Anxiety and affect were assessed using the 6-item State-Trait Anxiety Inventory (STAI) and the Positive and Negative Affect Schedule (PANAS), before and after the task and recovery. A wearable sensor continuously recorded heart rate (HR) and skin conductance level (SCL).

Linear mixed effects model analyses revealed no significant differences between groups in anxiety and affect. However, during the recovery phase, the experimental group showed lower HR ($p < .01$) and SCL values ($p < .05$) compared to the control group, reflecting a greater reduction in physiological arousal.

These findings suggest that digital exposure to nature supports physiological stress recovery, even when participants are not aware of it, or this improvement is not reflected in questionnaire responses. Digital experience of biodiverse nature may offer a practical means of supporting well-being, especially where direct access to nature is limited.

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No

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