Music listening as a means of stress reduction in daily life.
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Abstract
The relation between music listening and stress is inconsistently reported across studies, with the major part of studies being set in experimental settings. Furthermore, the psychobiological mechanisms for a potential stress-reducing effect remain unclear. We examined the potential stress-reducing effect of music listening in everyday life using both subjective and objective indicators of stress. Fifty-five healthy university students were examined in an ambulatory assessment study, both during a regular term week (five days) and during an examination week (five days). Participants rated their current music-listening behavior and perceived stress levels four times per day, and a sub-sample (n = 25) additionally provided saliva samples for the later analysis of cortisol and alpha-amylase on two consecutive days during both weeks. Results revealed that mere music listening was effective in reducing subjective stress levels (p = 0.010). The most profound effects were found when 'relaxation' was stated as the reason for music listening, with subsequent decreases in subjective stress levels (p ≤ 0.001) and lower cortisol concentrations (p ≤ 0.001). Alpha-amylase varied as a function of the arousal of the selected music, with energizing music increasing and relaxing music decreasing alpha-amylase activity (p = 0.025). These findings suggest that music listening can be considered a means of stress reduction in daily life, especially if it is listened to for the reason of relaxation. Furthermore, these results shed light on the physiological mechanisms underlying the stress-reducing effect of music, with music listening differentially affecting the physiological stress systems.

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