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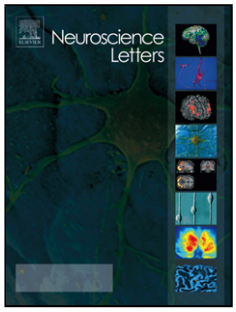

Title: Electroencephalogram oscillations support the involvement of task-unrelated thoughts in the mechanism of boredom: A pilot study

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Electroencephalogram oscillations support the involvement of task-unrelated thoughts in the mechanism of boredom : A pilot study

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Research Highlights

- A cognitive process of boredom is proposed with neuroscientific evidence.
- The boredom experience is associated with cognitive processes involved in task-unrelated thoughts, followed by their appraisal to be bored.
- The mechanism is mediated by EEG alpha and theta activity.

Abstract

Boredom is a universal experience; however, the neural mechanisms underlying the phenomenon remain unclear. Previous research suggests that boredom is related to attentional failure and derives a possible explanation for the cognitive processes of boredom as a product of appraisals made about task-unrelated thoughts. There are little published data regarding proposed processes from neuroscientific perspectives. Therefore, the authors aimed to examine whether cognitive processes of boredom with task-unrelated thoughts followed by appraisals of them can be explained by examining oscillatory correlates. Electroencephalography was used to measure changes in neural oscillatory activity during subjective experiences of boredom or dislike in healthy subjects. Using this approach, temporal information of brain activity particular to the boredom experience was acquired. Additionally, the Adult Attention-Deficit Hyperactivity Disorder Self-Report Scale was used to