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Cognitive Consequences of Smartphone Presence and Separation

Video Link

Abstract

As smartphone usage and ownership have increased in recent years, there is an abundance of literature on the potential negative cognitive effects of these devices. However, most of the literature is contradictory, with some studies claiming that smartphone presence leads to poor cognitive scores while others saying that smartphone absence leads to poor cognitive scores. The current research aims to resolve the discrepancy between the mere presence effect and the separation anxiety account. For Experiment 1, N = 200 introductory psychology students were given four computerized working memory, attention, and fluid intelligence tasks in the presence and absence of their smartphones. One-factor ANOVA revealed no significant differences between the smartphone presence and absence conditions, providing no support for the mere presence or separation anxiety accounts. Currently, Experiment 2 replication data collection is underway. The goal for Experiment 2 is to resolve some of the discrepancies we have between our study and the existing literature on smartphone effects on cognition. Our results have implications for daily activities, such as students studying for a later exam as we are trying to determine whether having their smartphones near or away from them will result in better cognitive performance.

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