

Smartphone screen time linked to preference for quicker but smaller rewards

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In a new study, people who spent more time on their phones—particularly on gaming or social media apps—were more likely to reject larger, delayed rewards in favor of smaller, immediate rewards. Tim van Endert and Peter Mohr of Freie Universität in Berlin, Germany, present these findings in the open-access journal *PLOS ONE* on November 18, 2020.

Previous research has suggested behavioral similarities between excessive smartphone use and maladaptive behaviors such as alcohol abuse, compulsive gambling, or drug abuse. However, most investigations of excessive smartphone use and personality factors linked to longer [screen time](#) have relied on self-reported measurements of smartphone engagement.

To gain further clarity, van Endert and Mohr recruited volunteers who agreed to let the researchers collect actual data on the amount of time they spent on each app on their iPhones for the previous seven to ten days. Usage data was collected from 101 participants, who also completed several tasks and questionnaires that assessed their self-control and their behaviors regarding rewards.

The analysis found that participants with greater total screen time were more likely to prefer smaller, immediate rewards to larger, delayed rewards. A preference for smaller, immediate rewards was linked to heavier use of two specific types of apps: gaming and social media.

Participants who demonstrated greater self-control spent less time on their phones, but a participant's level of consideration of future consequences showed no correlation with their screen time. Neither [self-control](#) nor consideration of future consequences appeared to impact the relationship between screen time and preference for smaller, immediate rewards.

These findings add to growing evidence for a link between smartphone use and impulsive decision-making, and they support the similarity between smartphone use and other behaviors thought to be maladaptive. The authors suggest that further research on smartphone engagement could help inform policies to guide prudent use.

The authors add: "Our findings provide further evidence that [smartphone](#)

use and impulsive decision-making go hand in hand and that engagement with this device needs to be critically examined by researchers to guide prudent [behavior](#)."

More information: Schulz van Endert T, Mohr PNC (2020) Likes and impulsivity: Investigating the relationship between actual smartphone use and delay discounting. *PLoS ONE* 15(11): e0241383.

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