

Navigating Minds in Digital Age: Cognitive Consequences of Social Media Multitasking among Sri Lankan Undergraduates

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Abstract

In today's digitally connected world, social media multitasking (SMM) has become a common usage pattern among university students, raising concerns about its potential effects on cognitive functioning and academic performance. While previous studies have explored this issue mainly in Western contexts, limited attention has been given to South Asian settings where cultural and educational dynamics may influence outcomes. This study investigates the impact of SMM on cognitive functions, specifically working memory, memory retention, reading comprehension, and decision-making among Sri Lankan state university undergraduates. Employing a cross-sectional quantitative design, data were collected through a structured questionnaire from a cluster sample of 384 students across 17 universities. Reliability and validity testing confirmed the robustness of the measurement instrument, and subsequent statistical analyses, including descriptive statistics, correlation, and regression, demonstrated that frequent engagement in SMM significantly impairs all examined cognitive functions. Findings indicate that students who habitually multitask across multiple social media platforms exhibit reduced short-term memory capacity, lower levels of information retention, compromised comprehension of academic texts, and an increased tendency toward impulsive or less reflective decision-making. These outcomes are consistent with cognitive psychology theories such as the limited resource model of attention and cognitive load theory, which explain how constant task switching disrupts concentration and information processing. This research contributes theoretical value to the underexplored domain of SMM in South Asian higher education and emphasises the importance of fostering mindful digital practices. The study offers practical implications for educators, digital literacy initiatives, and mental health practitioners, highlighting the need to develop strategies that encourage responsible technology use and protect students' cognitive well-being.

Keywords: cognitive psychology, memory retention, reading comprehension, social media multitasking, working memory