## The Impact of Smartphone Usage on Students' Attention Span

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## Abstract:

This research examines the effects of smartphone usage on attention spans among students aged 15-18, with an emphasis on how prolonged and frequent smartphone use disrupts cognitive functions related to focus. A quantitative survey design was employed, collecting data from 17 students via structured questionnaires that measured variables such as daily screen time, multitasking behaviors, and self-perceived attentiveness during academic tasks. Statistical analyses, including Pearson's correlation and multiple regression, were conducted to quantify the relationship between smartphone usage and attention span. The results reveal a statistically significant inverse relationship between high smartphone usage and reduced attention capacity, indicating that students with higher smartphone engagement exhibited lower sustained focus and diminished academic performance. Additional analyses explored moderating variables, such as gender and study habits, to uncover nuanced interactions. The findings underscore the need for targeted interventions, such as digital detox strategies and academic policies aimed at promoting mindful technology use, to mitigate the cognitive impairments associated with excessive smartphone use.

## Introduction

The impact of smartphone usage on students' attention spans has become a topic of increasing concern in recent years. With the widespread adoption of smartphones, particularly among younger populations, there has been a significant shift in how students engage with information and manage their cognitive resources. Studies have shown that smartphones, with their constant notifications and easy access to entertainment, can contribute to reduced attention spans and diminished academic performance [1]. The pervasive use of smartphones for activities such as social media, gaming, and instant messaging has been linked to distractions and interruptions in the classroom, leading to challenges in maintaining sustained attention [2].