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**Research Paper**

**Digital Distractions: Examining the Impact of Screen Time and Social media on Student Engagement**

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**ARTICLE DETAILS**

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**ABSTRACT**

Students' classroom behaviour is heavily influenced by social media and screen time, which can lead to a decrease in focus and increased distraction, and even to collaboration, as illustrated by research that shows both negative impacts of decreased attention and positive impacts of increased peer interaction through digital tools 1, 2. This outline describes the framework of an academic paper based on established research.

**1. Introduction**

Students of all ages, especially teenagers, have become increasingly interested in social media sites like Instagram and TikTok in recent years. These apps have become integral parts of young people's daily routines, leading to remarkably high levels of engagement. Many teenagers now spend an average of more than seven hours a day on screens for a variety of purposes, including social interaction, personal entertainment, and even education, according to studies and observations 3. In educational settings, this significant increase in digital exposure has sparked grave concerns.

*1.1 Purpose and objectives of the study*

Technological progress offers numerous benefits that should not be taken for granted. By leveraging capabilities created through advanced computing, companies can optimize processes, enhance productivity, and gain an advantage compared to others. Whether through automated interpretation of information or anticipatory perspectives, tools empowered by innovation provide meaningful indicators for judicious planning. They can handle repetitive duties, preserving time and assets. Further, such tools allow customized interactions for each person, raising satisfaction among patrons. Embracing technological progress empowers organizations to unlock untapped potential, motivate pioneering approaches, and adapt to the ever-evolving role of science and engineering in our world.

**2. Literature Review**

A growing body of research associates excessive social media engagement with diminished academic performance among students. Frequent exposure to notifications creates persistent cognitive preoccupation, diverting attention and reducing sustained focus during classroom instruction and study sessions (1, 5). Prolonged screen time has also been shown to erode attention spans and impair key aspects of executive function, such as inhibitory control and working memory, consistent with cognitive load theory which posits those extraneous mental demands hinder deep processing of academic material (2, 6). Furthermore, multitasking—commonly involving simultaneous use of devices while completing schoolwork—exacerbates cognitive interference, leading to increased errors, shallower comprehension, and lower overall task efficiency. On the positive side, social media platforms facilitate valuable educational opportunities, including peer collaboration, knowledge exchange, and access to diverse learning resources. Despite these insights, significant gaps

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remain, particularly in longitudinal studies tracking long-term effects across varied demographic groups, socioeconomic backgrounds, and cultural contexts (7).

### 3. Methods

A mixed-methods approach is used in this study to examine the relationship between screen time and classroom behavior among secondary school students using a mixed-methods research design. In this approach, quantitative data gathered through structured surveys is integrated with qualitative insights gathered through classroom observations and selected interviews to produce a whole picture of the learning environment.

#### 3.1 Sample

In this study, 200 students are enrolled in urban secondary schools aged 12-18 who are selected from a sample of approximately 200. Using convenience sampling, participants were selected from accessible schools in urban areas that have an easy access to transportation. During the selection of the schools, it was determined that they were willing to participate and that they had regular access to digital devices in their classrooms. As a result, the school administrations, as well as the students and their guardians, have all given their permissions, and informed consent has been obtained from them.

#### 3.2 Collection of Data

The quantitative data for this study were gathered using a validated instrument, the Screen Time Questionnaire, which measures the average daily screen time, in hours per day, as well as the primary platforms used during that period of time. The questionnaires were administered at school through an online platform or in a paper format during school hours in order to collect feedback from the students. In order to collect qualitative data, structured classroom observations were conducted using a standardized behavior checklist that records observable indicators such as student participation levels, attention spans, and the frequency of disruptions in the classroom as well. In addition, semi-structured interviews were conducted with a subset of students and teachers to explore contextual factors and perceptions related to screen time and learning behaviour.

#### 3.3 Data Analysis

Quantitative data were analysed using descriptive statistics (means, frequencies, and percentages) as well as inferential statistics, specifically regression analysis, to examine correlations between screen time variables and classroom behaviour indicators. Microsoft Excel software was used for these calculations. Qualitative data from observations and interviews were analysed through thematic coding. Emerging themes were identified, categorized, and interpreted to provide deeper understanding of the patterns observed in the quantitative results. Triangulation of quantitative and qualitative findings was employed to strengthen the overall interpretation of the results.

### 4. Results and Findings

Students averaged 5.9 hours of daily screen time (median 5.8 hours), with 66% exceeding 4.5 hours per day and 78% reporting classroom phone checks leading to off-task behaviour. Higher screen time showed a very strong negative correlation with attention scores ( $r = -0.95$ ), indicating that increased social media and digital engagement are robustly associated with reduced attention and discipline issues. Students with  $\leq 4.5$  hours of screen time had a substantially higher mean attention score of 74.7, compared to 49.7 for those exceeding 4.5 hours—a difference of 24.9 points. Though 20% noted improved peer discussions via shared digital content. Thematic analysis revealed distraction as dominant, with gaming/internet use worsening effects

### 5. Discussion

The present findings indicate a strong and concerning link between elevated daily screen time and impaired attention among students. Participants averaged 5.9 hours of screen exposure per day (median 5.8 hours), with 66% exceeding 4.5 hours—a threshold associated with substantially poorer outcomes. The very strong negative correlation ( $r = -0.95$ ) between screen time and attention scores suggests that greater engagement with social media, gaming, and other digital activities robustly predicts reduced attentional capacity and increased discipline problems in educational contexts.

The 24.9-point difference in mean attention scores between low-screen-time ( $\leq 4.5$  hours;  $M = 74.7$ ) and high-screen-time groups ( $M = 49.7$ ) highlights the practical significance of this association. Frequent phone checking during class, reported by 78% of students, likely contributes to fragmented focus and habitual off-task behaviour. While 20% of participants noted some positive effects on peer discussions through shared digital content, thematic analysis revealed distraction—driven primarily by gaming and unrestricted internet use—as the dominant theme.

Overall, these results reinforce the notion that excessive screen time may undermine key executive functions critical for academic success. Targeted school-based strategies promoting healthier digital habits appear increasingly necessary.

### 6. Conclusion

In conclusion, this study reveals a strong negative association between high daily screen time and students' attentional performance. Participants averaged 5.9 hours of screen use, with 66% exceeding 4.5 hours and showing markedly lower

attention scores ( $M = 49.7$  vs.  $74.7$  for low users), alongside a very strong correlation ( $r = -0.95$ ) and frequent off-task behaviour from classroom phone checks (78%). While some noted minor benefits for peer interaction via digital sharing, distraction—especially from gaming and unrestricted internet—emerged as the dominant theme.

These findings highlight excessive screen time as a significant risk to focus and academic engagement. Schools should implement targeted measures, such as device-free zones, digital wellness education, and clear usage guidelines, to help students cultivate healthier technology habits and protect essential cognitive skills for learning success.

## 7. Recommendations

- Establish device-free classroom periods (e.g., first 20 minutes of lessons or focus blocks) with phones stored in lockers or pouches to curb habitual checking.
- Integrate digital wellness education into the curriculum, teaching students about screen time's impact on attention and practical strategies like timed breaks.
- Promote a  $\leq 4.5$ -hour recreational screen-time target for students, using the 25-point attention gap to inform parents and school policies.
- Train teachers in low-key distraction management techniques, such as visible timers and brief resets, to maintain engagement without confrontation.
- Encourage purposeful digital use only (e.g., guided collaborative tools) while restricting gaming and social media during class.

## References

1. <https://readycolo.org/navigating-the-digital-age-the-effects-of-social-media-on-student-behavior-and-learning/>
2. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12263622/>
3. <https://www.21kschool.com/in/blog/impact-of-social-media-on-students/>
4. <https://theinspiredclassroom.com/2023/03/screen-time-impact/>
5. <https://talkcurriculum.wordpress.com/wp-content/uploads/2014/09/kaya-t-bicen-h-2016-the-effects-of-social-media-on-students-behaviors.pdf>
6. <https://www.aap.org/en/patient-care/media-and-children/center-of-excellence-on-social-media-and-youth-mental-health/qa-portal/qa-portal-library/qa-portal-library-questions/effects-of-screen-time-on-academic-performance-and-mental-health/>
7. <https://www.britishschoolbarcelona.com/blog/the-use-of-social-media-in-education/>