
Psychology

Screen Time and Student Life: A Mixed-Methods Study on How Smartphone Use Affects the Sleep, Focus, and Academic Performance of Urban Teens in Bangladesh

Author Name: Farhana Khan Sara, Oxford International School

Mentor: Md Sanaul Haque, Md Azmain Yakin Srizon

Abstract

This mixed-methods study investigates the impact of smartphone use on the sleep, focus, and academic performance of urban teenagers in Bangladesh. An online survey of 30 adolescents aged 14-19, along with oral interviews and assessments of their personal academic performance, provided both quantitative and qualitative insights. Results showed that most participants used their phones for 4–6 hours daily, with over two-thirds reporting use before bedtime and many sleeping after 11 PM. Students who reported higher daily screen time (4–10 hours) scored significantly lower on recent tests ($M = 67.5$) compared to those with moderate use (3–5 hours, $M = 85.0$). A strong negative correlation ($r = -0.82$, $p < 0.001$) was observed between prolonged smartphone use and reduced academic performance. Qualitative findings supported these results, with students describing distraction, restlessness, and difficulty concentrating in class, particularly due to late-night use of smartphones. While several participants expressed a desire to reduce screen time, many reported struggling to control their usage. Overall, the findings suggest that excessive smartphone use among urban Bangladeshi teens disrupts sleep, lowers concentration, and hinders academic achievement. These results underscore the need for greater awareness and practical strategies to encourage healthier digital habits during adolescence.

I. Introduction

Recent reports indicate that over 95% of teenagers worldwide own a smartphone [1]. While smartphones are helpful for various purposes, such as communication, entertainment, and education, their excessive use has raised urgent concerns about their impact on academic life, sleep patterns, and concentration. Studies worldwide have consistently shown a connection between screen time and its effect on a teenager's

life. This urgency underscores the critical importance of our research, which aims to address these concerns. However, it also highlights the need for further research in this area to fully understand and effectively manage the impact of smartphone use on teenagers, emphasizing the importance of continuous study and improvement in this field.

In urban Bangladesh, approximately 90% of teenagers use smartphones as part of their