The Negative Impact of Screen Time on Teenagers' School Absenteeism

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ABSTRACT

Literature extensively discusses screen time as a significant factor contributing to students' absenteeism. This paper explores the impact of screen time on school absenteeism among Maldivian teenagers. Using a qualitative approach, this study gathered data from 131 participants across focus group discussions organised in 15 sessions involving three cohorts separately, students, parents, and teachers. Participants were selected from five schools, including three in the Greater Malé region and two from the atolls. The findings reveal that excessive screen time significantly disrupts students' sleep, leading to tiredness and sleepiness in the mornings, which in turn contributes to teenagers' school absenteeism. Additionally, the study highlights the limited control that parents and teachers have over students' screen time and underlines the academic challenges associated with sleep deprivation. These findings suggest that school management should focus on raising awareness about the importance of balancing screen use with adequate sleep to improve attendance, academic performance, and overall well-being, ultimately benefiting students' long-term future.

Keywords: School absenteeism, Teenage, Screen Time, Maldives

INTRODUCTION

Over the years, the Children's Ombudsperson's Office (COO) has placed significant emphasis on understanding factors that contribute to children becoming vulnerable or at-risk. As such, it has been noted through the works of the COO that when children disengage from education, it is usually one of the earliest warning signs that a child may be facing increased vulnerability. Thus, the COO and the Islamic University of Maldives (IUM) are dedicated to addressing the factors that contribute to children's vulnerability, aiming to reduce the likelihood of children becoming vulnerable or at-risk. As such, a recent trend that has come up in the local context is the issue of screen time and the excessive use of digital devices among teenagers. As screen time increases, particularly among adolescents, there are rising worries about its negative effects on sleep, mental health and school attendance. With the widespread use of digital devices and social media, teenagers are spending more hours online, often late at night. This overuse of screens disrupts their sleep patterns, leading to sleep deprivation, which becomes a key factor in the evolution of multiple mental health problems, also resulting in frequent school absenteeism.

In the Maldives, the pervasive use of smartphones has raised concerns about its impact on sleep, consequently mental health and school attendance, especially among students. As of January 2024, there were 363.3 thousand active social media users in the Maldives, representing 69.9% of the total population (DataReportal,

2024). This high level of digital engagement is believed to contribute to sleep disruptions and increasing absenteeism, particularly in secondary schools. While specific data on screen time and absenteeism as well as screen time and its implications on mental well-being in Maldivian schools is limited, global studies suggest a clear correlation between increased screen usage and reduced academic engagement as well as mental well-being. A study published in Global Health Research and Policy highlights that excessive screen time can negatively affect children's learning and development, leading to decreased school participation (Qi, Yan, & Yin, 2023). Additionally, the widespread use of technology at night disrupts sleep patterns, as it suppresses melatonin production and interferes with natural circadian rhythms (Uccella et al., 2023). Consequently, this sleep disturbance is linked to increased risk of mental health issues, including depression and anxiety in adolescents (Twenge & Campbell, 2018). These findings underscore the significant impact of screen time on school absenteeism and the potential consequences for adolescent well-being.

As of June 2022, the Ministry of Education reported that the Maldives had 212 schools, with 36,341 students in the Malé region and 57,851 students across the remaining atolls. However, school dropout rates have become a growing concern. An unpublished report from the Department of Juvenile Justice (DJJ) indicated that 44 percent of children referred to the unit had stopped attending school, and only 33 percent completed secondary education. Despite these alarming figures, school dropout issues in the Maldives remain insufficiently explored, leaving many contextual factors unexamined. International literature clearly indicates that dropout and frequent absenteeism are complex phenomena influenced by a variety of factors within both school and home environments. In the Maldivian school system, the term "irregular students" is often used to refer to those who are frequently absent, and some of these students may be classified as school dropouts due to their consistent absenteeism.

RESEARCH OBJECTIVES/AIMS

This paper investigates the impact of students' screen time and sleep patterns on their mental health and school attendance. It addresses the following key objectives:

1. To identify the effect of screen time and sleep patterns on students' absenteeism.

2. To explore how screen time and sleep patterns impact students' academic performance and well-being.

3. To gather parents' and teachers' perspectives on how screen time influences students' absenteeism.

LITERATURE REVIEW

The literature indicates that addressing school dropouts or frequent absenteeism is a multifaceted issue that requires a comprehensive approach. Research consistently shows that excessive screen time, particularly before bed, negatively impacts both sleep quality and duration. Hale and Guan (2015) found that prolonged screen exposure in the evening delays sleep onset and reduces overall sleep time. The blue light emitted from screens suppresses melatonin production, leading to delayed bedtimes and poor sleep quality. This disruption in sleep results in fatigue, difficulty concentrating, and a higher likelihood of school absenteeism (Levenson et al., 2017).

While many studies highlight the effects of screen time on sleep, the direct relationship between screen use, sleep deprivation, and absenteeism is often implied rather than explicitly examined. Pérez-Chada et al. (2023) emphasise that excessive screen use reduces sleep duration, which is crucial for adolescent brain development and academic success. Inadequate sleep contributes to daytime fatigue, which may indirectly result in absenteeism (Perrault et al., 2018). Several studies explore the impact of different types of screen use on sleep quality (Chen et al., 2024), but the connection to school attendance is less frequently explored. Nonetheless, the link between sleep

deprivation and absenteeism is well-documented, with sleep-deprived students struggling to wake up on time, stay focused in class, and maintain regular attendance (Royant-Parola, & Legris, 2018).

Sleep deprivation is not only detrimental to academic performance but also significantly affects mental health of children, both of which are linked to increased absenteeism (Toprak & Karan, 2022). For adolescents, studies indicate a strong connection between excessive screen time and sleep disturbances, which can indirectly influence school attendance (de Jesus et al., 2022). These findings underscore the role of poor sleep in exacerbating well-being issues, leading to higher absenteeism rates (Hale et al., 2019). The compounded effects of sleep disturbances on mental health, including conditions like schizophrenia, depression, further highlight the need for targeted interventions, particularly for professionals in high-stress fields like teaching and social work (Alsaif et al., 2019). Addressing sleep disorders could serve as a critical avenue for improving mental health and reducing stress-related symptoms, particularly among educators (Howarth & Miller, 2024). This body of literature collectively emphasises the pervasive impact of sleep issues on mental health, reinforcing the need for systemic solutions to improve well-being across various populations.

Further research reinforces the relationship between screen time, sleep disruption, and absenteeism. Twenge et al. (2017) found that adolescents who spent more than two hours daily on screens experienced higher levels of sleep disruption and absenteeism. Similarly, Scott et al. (2019) reported that teenagers who exceeded three hours of screen time per day were at a higher risk of insomnia, leading to poor academic performance and increased absenteeism. Dewald et al. (2010) demonstrated a strong association between poor sleep quality, lower academic achievement, and higher absenteeism. Sleep-deprived students often struggle to stay alert in class, leading to chronic absenteeism. Woods and Scott (2016) also found

that excessive screen use contributes to mental health issues such as anxiety and depression, which further exacerbate absenteeism as teenagers contend with both psychological and sleep-related challenges.

In the Maldives, where screen time among teenagers is increasing, there is a pressing need to investigate its impact on sleep, school attendance, and mental well-being. While international studies confirm the negative effects of excessive screen time on sleep, absenteeism and mental well-being, there is a notable lack of region-specific research in the Maldivian context. As digital access and social media use continue to rise among Maldivian teenagers, understanding how these factors contribute to sleep problems, absenteeism and mental well-being is crucial for developing effective interventions.

Without localised studies, policymakers and educators face challenges in addressing the specific needs of Maldivian adolescents. Research on the impact of screen time on sleep, absenteeism and mental well-being in Maldivian schools would help craft targeted strategies to promote healthy screen habits, improve sleep hygiene, reduce absenteeism and nurture mental well-being. It is essential for the Maldives to recognise and respond to these challenges, as failing to do so could exacerbate academic and health issues among adolescents. Ultimately, localised studies are necessary to inform evidence-based policies and interventions that support adolescent well-being.

While existing research highlights a clear connection between screen time, poor sleep, and absenteeism, the indirect nature of this relationship calls for more targeted research. Many studies focus on either sleep disruption or absenteeism but seldom explore how these factors interact within specific social or cultural contexts. Moreover, interventions addressing screen time and sleep hygiene must consider broader factors such as mental health and socio-economic influences to be truly effective. Ignoring these dimensions may result in incomplete strategies that fail to address

the root causes of absenteeism. Future research should adopt a more holistic approach, incorporate localised data and consider a broader range of variables to develop comprehensive solutions that meet the needs of diverse adolescent populations.

RESEARCH METHODOLOGY

This paper focuses on qualitative data gathered through focus group discussions (FGDs) with students, teachers, and parents. Participant students were selected from grades 8-10, representing both regular and irregular attendees. Parents and teachers of the same age group were also included in the discussions. The three groups of participants were gender-diverse, although all parents involved in the FGDs were female.

Figure 1 outlines that FGDs were conducted across five schools, with a total of 131 participants from two schools in the atolls and three schools in the Greater Malé region. A total of 15 sessions were held, involving three distinct cohorts: 63 students, 36 teachers, and 32 parents. Data were analysed using a thematic approach, applying open coding, axial coding, and constant comparison to cross-check and triangulate the data within and across the three cohorts.

Prior to the research, ethics approval was obtained from the Islamic University of Maldives, Ethics Committee and the Ministry of Education's Research Division, ensuring that the study adhered to ethical guidelines and minimised potential risks (Skowronski, 2024). Research involving children requires a careful ethical approach to ensure their protection and well-being. The study aimed to address a relevant research question, with the goal of improving students' well-being or contributing to a better understanding of the issues affecting them. An information sheet and consent form were provided to all participants, clearly stating that participation was voluntary. Additionally, parents' consent for their children's participation was gained via assent forms. The findings of the study are presented and discussed below.

FINDINGS AND DISCUSSION

The findings of this study highlight the significant impact of excessive screen time on students' sleep and, consequently, their school attendance. Data derived from focus group discussions with students, parents, and teachers reveal three main themes: students' feeling of tiredness and sleepiness in the mornings, the limited control that parents and teachers have over students' screen time and academic and mental health implications due to lack of sleep.

LATE NIGHT SCREEN TIME AND ITS

IMPACT ON SLEEP

The most common reason for student absenteeism identified across all three groups was sleepiness and fatigue due to late-night screen use. Students reported staying up late, particularly using social media platforms like TikTok, which disrupts their sleep schedules and leads to difficulty waking up in the mornings. As one student described:

"Every day, my mom wakes me up, but I always feel too sleepy and end up going back to sleep. Some days, I actually get up, but it feels like I don't have the energy to stand up and go to school. I wish the school had more flexible hours." - Student from a school in the Greater Malé region-

Figure 1. Research methods

Confirming the same sleeping problem, another student described, "I'm always a late-night sleeper, and it's really hard to wake up early," indicating how sleep deprivation affects their ability to attend school. This aligns with findings by Hale and Guan (2015), who emphasised that the use of screens before bedtime, especially due to the blue light emitted, suppresses melatonin production, leading to delayed sleep onset and poor sleep quality. This disruption results in daytime fatigue, which significantly contributes to absenteeism (Levenson et al., 2017; Royant-Parola & Legris, 2018).

Moreover, the issue of screen time exacerbating sleep problems is not just a concern for students but also for their parents. Several parents reported feeling helpless in controlling their children's screen time, even when they recognise that it is the root cause of their sleep deprivation and resulting absenteeism. For example, a parent shared, "I know my son spends too much time on his smartphone, but there's not much I can do… I can only remind him not to stay up too late." This sentiment is echoed in the literature, where Pérez-Chada et al. (2023) note that excessive screen use among adolescents reduces sleep duration, impairing their cognitive functions and leading to challenges in academic performance and attendance.

LIMITED CONTROL OF PARENTS AND TEACHERS

The second theme highlights the limited influence that parents and teachers have over students' screen use. Both groups expressed frustration at their inability to curtail students' screen time, which is recognised as a significant contributor to absenteeism. A teacher from an atoll school stated, "When my students are absent, I contact their parents. They usually say their children were too tired or sleepy… the real reason is that they were up late and couldn't wake up." Similarly, parents expressed feelings of powerlessness, acknowledging that their children's

screen time often results in late-night use that leads to excessive sleep and school absenteeism. In line with the same idea, a teacher mentioned:

"The most common reason students give for being absent is that they couldn't wake up. Often, this is because they stay up late, spending too much time on social media or chatting with friends online. In fact, parents have very little control over their children these days. It seems that parents are too worried about controlling their kids. It is very different from our time" Teacher from a school in the Greater Malé region

This finding mirrors the research by Twenge et al. (2017), who found that adolescents who spent more than two hours daily on screens experienced higher levels of sleep disruption, which contributed to absenteeism. Furthermore, as noted by Perrault et al. (2018), the inability of parents and teachers to regulate screen use exacerbates the issue, particularly in an age where digital access is increasingly normalised, and adolescents feel entitled to unrestricted screen time.

SCREEN TIME AND WELLBEING IMPLICATIONS

The relationship between screen time, sleep patterns, and students' academic performance and mental health is well-documented in the literature. Sleep deprivation not only affects school attendance but also has broader implications for students' overall well-being. According to Toprak and Karan (2022), inadequate sleep combined with the mental strain caused by excessive screen use leads to fatigue, poor concentration, and diminished academic engagement, often contributing to a cycle of school absenteeism. This pattern is reflected in students' testimonies. One student shared:

"I usually end up sleeping in class… I get very tired during school because I don't get enough sleep. It also feels like I'm totally sick of everything."

Similarly, parents have highlighted the emotional toll of poor sleep and excessive screen time. One parent remarked:

"My daughter often complains about feeling sleepy and having stomach issues. Some days, it even gets worse, and she vomits. Some days she acts like she is always worried and anxious… she does not want to talk about school at all. I know it's because she doesn't get enough sleep and spends too much time on her phone. I try to disconnect from the internet sometimes, but I feel helpless. I don't want to upset her, especially with the mental health issues she's dealing with" (Parent from a school in the Greater Malé region).

These personal accounts align with findings by Woods and Scott (2016), who reported that sleep deprivation and excessive screen use are strongly linked to mental health issues such as anxiety and depression. Such conditions not only reduce students' ability to attend school consistently but also hinder their academic performance. Research by de Jesus et al. (2022) further supports this, highlighting how frequent absenteeism correlates with higher screen use, which disrupts sleep patterns and exacerbates mental health problems, creating a vicious cycle of disengagement and poor academic outcomes. Another parent shared a similar experience:

"My son doesn't want to go to school because he feels discriminated against due to his academic performance. He's not doing well in his studies and gets very little support from his teachers. He's also dealing with mental health issues after being bullied at his previous school, and despite changing schools, he still struggles. I can't do much except let him stay home. His school attendance is very irregular" (Parent of a student with mental health issues).

The compounded effects of disrupted sleep on mental health manifesting in conditions such as anxiety, depression, and even severe illnesses like schizophrenia underline the importance of targeted interventions. Alsaif et al. (2019) emphasise that addressing sleep disorders can significantly improve mental health outcomes, particularly in high-stress environments like schools. Howarth and Miller (2024) add that improving sleep health could also alleviate stress-related symptoms among educators, enabling them to better support students.

These findings highlight the urgent need to address the interconnected impacts of screen time and sleep patterns on students' academic and mental health. Implementing strategies to regulate screen use and improve sleep patterns could significantly enhance both student well-being and school engagement.

IMPLICATIONS FOR STAKEHOLDERS

The findings emphasise the importance of developing self-regulation and digital responsibility among adolescents. Students at this stage should be empowered to understand the consequences of excessive screen time on sleep, mental health, and school attendance, and to actively participate in managing their own digital habits. Digital literacy programmes that foreground wellbeing, not just online skills, can foster informed decision-making and long-term resilience, supporting both academic success and personal development.

Implications for policymakers and education authorities

The findings identify the urgent need for evidence-based national and school-level policies addressing adolescent screen use in the Maldives. Policymakers should consider integrating screen time management, sleep health, and mental wellbeing into education and youth policies, recognising their direct links to absenteeism and learning outcomes. National guidelines on age-appropriate screen use, aligned with cultural and socio-economic realities, would support consistent implementation across schools and communities. Additionally, investment in digital literacy education, not merely technical skills but responsible, balanced, and healthy technology use,

can equip adolescents with lifelong self-regulation skills.

Implications for school leaders

School leadership plays a critical role in translating policy into practice. The findings suggest that schools should strengthen whole-school approaches to managing screen use, including clear and realistic school policies on digital device use during school hours. Awareness programmes highlighting the relationship between screen time, sleep deprivation, attendance, and academic performance should be systematically embedded into school activities. School management should also support teachers through guidance and professional development, enabling them to address screen-related challenges without placing unrealistic responsibility solely on classroom practice.

Implications for teachers

Teachers are positioned to act as frontline observers and educators, but the study highlights that their influence over students' screen habits is limited. Therefore, teachers should be supported to integrate digital wellbeing and sleep awareness into existing curricula rather than treating them as add-on topics. Classroom discussions, reflective activities, and guidance sessions can help students critically examine their own screen behaviours and their impact on learning and wellbeing. Importantly, teachers require institutional backing so that responsibility for managing screen-related issues does not fall disproportionately on them.

Implications for parents and caregivers

The findings highlight the need for parental guidance and support, recognising that many parents struggle to regulate screen use in an increasingly digital environment. Parents would benefit from structured guidance on setting realistic screen time boundaries, establishing consistent sleep routines, and modelling healthy digital behaviours. School-parent partnerships are essential, as coordinated messaging between home and school can reinforce expectations and reduce conflict around screen use. Community-based awareness initiatives may further help parents navigate the long-term mental health risks associated with excessive screen exposure.

CONCLUSION AND RECOMMENDATIONS

The findings of this study reinforce the substantial body of literature linking excessive screen time with sleep deprivation, absenteeism and mental health problems among adolescents. The data from this study highlights the urgent need for targeted interventions that address screen time management, promote healthy sleep habits, and support both students and parents in managing the long-term challenges that result from excessive screen time such as mental health problems. Given the limited control that both parents and teachers have over students' screen habits, it is essential to explore broader strategies, including the incorporation of digital literacy programs, improved school policies on screen use, and parental guidance on screen time limits.

In the context of the Maldives, where screen time is rapidly increasing among adolescents, localised research is crucial for crafting evidence-based policies that can effectively address these issues. Future research should consider a more holistic approach, incorporating the cultural and socio-economic factors that influence screen use and absenteeism, to ensure that interventions are both effective and contextually relevant. By taking these factors into account, policymakers can develop strategies that improve adolescent mental well-being, academic performance, and school attendance. These findings suggest that school management should focus on raising awareness about the importance of balancing screen use with adequate sleep to improve attendance, academic performance, and overall well-being, ultimately benefiting students' long-term future.

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