

# An Analysis of Impact of Multiple Screen Addiction on Adolescents: A Screen Swapping Habit

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**Abstract-** Adolescence is a tender age where adolescents get quickly influenced from celebrities, follow the ongoing fashion trend, easily adopt any wrong habit, get excessively involved in electronic devices. In recent years the rapid advancement in different digital technologies has led significant increase in the simultaneous use of devices, such as smartphones, tablets, computers, TVs, and gaming consoles, particularly among adolescents, either for studies or for entertainment purposes, especially after pandemic. With the increasing use of smartphones, tablets, laptops, and televisions, adolescents are frequently engaged with multiple screens simultaneously, often leading to screen addiction. This paper reviews the available literature on multiple screen addiction and explores different aspects of screen addiction in children and adolescents, using databases such as Google Scholar, PubMed, and Science Direct. This paper highlights the impact of multiple screen addiction and problem faced by adolescents on account of excessive screen use. Further this study also discusses the strategies helpful for adolescents to break the screen addiction.

**Keywords:** Multiple screen addiction, Adolescents, Technology, Electronic devices.

## I. INTRODUCTION

Multiple screen addiction is emerging problem especially among today's youths. It refers to a state when a person is extremely addicted to multiple screens use. It is characterized by a compulsive need to engage with more than one screen at a time (e.g., watching TV while scrolling through a phone or using a tablet while playing a video game), leading to potential disruptions in daily activities, work, or social life. Multiple screen addiction means addiction towards different types of screens such as television, phone, tablet, computer, and laptop (Noora et al. 2024). Particularly during the COVID-19 period, those who distanced themselves from social interactions experienced a rise in their screen time usage compared to prior trends. This rise in screen time is viewed as a contributor to heightened addiction levels. It is believed that excessive exposure of screen time and usage habits increase the development of Multiple Screen Addiction. Also, 'the increase in screen time increases the probability of facing

problems in the context of socio-emotional and mental well-being (Yang et al., 2013)'. In various studies, 'it is emphasized that there are dramatic increases in screen time during the COVID-19 epidemic period (Saritepeci, 2021; Sultana et al., 2021; Wong et al., 2021)'. MSA could be associated to social media usage, gaming, consumption of news on television etc.

## Need and Significance of the Study

Adolescence is a transitional stage of development from childhood to adulthood. This period is more challenging, as adolescents experiences rapid physical, emotional, and psychological changes, along with this they explore new experiences, face peer pressure, and begin to make important life decisions. There is an inescapable dependency on digital devices for various purposes as they have become most important tool of our daily life. Excessive and simultaneous use of screen is a matter of growing concern, as this affects various aspects of adolescents' life, like their psychological and mental wellbeing, academic performance, physical harm, social isolation etc. This addiction is also characterized by the inability to discontinue such behaviour, even after experiencing the harm that it causes. Usually, it's a warning sign if they struggle to decrease their screen time usage and opt for screens over books, online games over indoor and outdoor games. Therefore, it is essential to know the impact of multiple screen addiction among adolescents towards different kinds of screens so that they get aware of it, understand it and try to overcome it.

## II. LITERATURE REVIEW

**Patel Wahed et al. (2017)** conducted a study on "Mobile Phone Addiction and Mental Health among Adolescent Girls Studying in Various Streams". The aim of the study was to find the relationship between mobile phone addiction and mental health among adolescent girls studying in various streams. A survey method was employed to conduct the study and a total of 150 adolescent girls studying in various streams like (Arts, Science and Commerce) in Aurangabad city were selected through Random Sampling technique. Sample consisted of 50 adolescent girls from each stream. The data

was collected through Mobile phone addiction test and Mental Health Check –list (MHC). Statistical techniques such as Mean, SD, and ANNOVA and Pearson’s Product Moment Method of Correlation were used for data analysis. Findings of the study revealed that there is significant difference between the level of mobile phone addiction in adolescent girls studying in various streams. No significant difference was found in the level of mental health among adolescent girls studying in various streams. The positive correlation was found between mobile phone addiction and the mental health of adolescents.

**Yobel (2019)**, conducted a study entitled as “Screen addiction among adolescents”. His study aimed to investigate the impact of screen addiction on the health of adolescents. The researcher selected 106 school and college students. For data collection a questionnaire comprising of personal profiles, screen usage levels and withdrawal symptoms was used. The main findings were as: 26.4% of students felt moderately disturbed, 32.1% became aggressive if their phones were taken away while in use. Moderate screen addiction was found in 49.1% and 70.8% students experienced withdrawal symptoms to some extent.

**RamyasreeL (2022)**, studied the impact of screen addiction on the academic interest of college students. The study reveals the gap between the need and overuse of technology. Further, they explore the intentions of tech giants and concluded by pointing out how can individuals be mindful while interacting with devices.

**Gupta AKS et al. (2024)**, in his study “Smartphone addiction: impact on health and well-being” explored the prevalence and impact of prolonged use of smartphone. The review revealed the significant influence of smartphone addiction on dietary behaviour and lifestyle, as well as the relationship between mobile phone usage patterns and mental health outcomes. Through a systematic literature search using databases like Google Scholar, NIH, and PubMed, the review revealed smartphone addiction's effects on health and academics of adolescents. The paper also highlighted the suggestions like mindfulness practices, self-reflection, and seeking professional help can be some of the strategies effective to combat smartphone addiction.

**Khan, F. A. etal. (2024)**, in his paper “Addicted to Pixels: Understanding Screen Addiction and Strategies for Prevention”, explained screen addiction and identified its different types, along with its global and regional prevalence, especially in children and adolescents. The study also explored its impacts on physical health, mental health, and societal effects within these age groups.

**Noora Abdul Kader (2024)**, in her study entitled “Multiple Screen Addiction Explained: Effects and Coping Strategies”, find out Multiple Screen Addiction among senior secondary students. 100 senior secondary students were selected from three schools of Aligarh district through simple random sampling technique. A self-developed scale on Multiple Screen Addiction was used for collecting data. Mean, Standard Deviation, Mean Difference Analysis and Percentage Analysis were statistical techniques used for the analysis. The result of the study reveals that there is a significant effect of Multiple Screen Addiction among senior secondary students. The study also highlighted the coping strategies.

### III. METHODOLOGY

The extensive literature search was done for this study through databases such as Google Scholar, PubMed, and Science Direct. The following search terms were used: "screen addiction", "digital addiction", "technology addiction", "screen time", "adolescents", "children", "mental health", "physical health", and studies from recent years were considered. On the basis of critical review of literature obtained through these databases researcher identified and got detailed understanding of multiple screen addiction. Further, impact of multiple screen addiction over adolescents were also identified which are discussed below.

#### Multiple Screen Addiction: An Overview

Multiple screen addiction refers to a condition where an individual becomes excessively dependent on various types of digital screens or devices simultaneously, such as smartphones, tablets, computers, TVs, and gaming consoles. It is characterized by a compulsive need to engage with more than one screen at a time (e.g., watching TV while scrolling through a phone or using a tablet while playing a video game), leading to potential disruptions in daily activities, work, or social life.

Key signs of multiple screen addiction may include:

1. Inability to focus on a single task without switching between multiple screens.
2. Decreased productivity due to frequent screen switching or multitasking.
3. Sleep disturbances caused by excessive screen use, particularly before bedtime.
4. Neglect of personal responsibilities or social relationships due to constant engagement with various screens.
5. Physical health effects such as eye strain, headaches, and posture problems due to prolonged use of multiple screens.

## Impact Of Multiple Screen Addiction on Adolescents

**Insufficient self-control over screen usage:** One of the main characteristics of screen addiction is a lack of self-control over screen usage. Setting and upholding screen time limitations is challenging for students who are addicted to screens. Long-term screen use impairs one's capacity to carry out daily tasks and obstructs the completion of beneficial and effective work.

**Loss of interest in other activities:** Rather than engaging in reading a book or participating in outdoor activities, students tend to gravitate towards their smartphones. While reading or talking to someone, they often find themselves repeatedly distracted by their devices.

**Social Withdrawal:** Students who are addicted to screens suffer from poor interpersonal skills and become hesitant and many times avoid social interactions. Excessive use of screens in adolescents negatively impact their capacity to participate in meaningful face-to-face interactions which leads to social isolation. The diminish quality of social interaction often create hindrance in the development of social skills of adolescents.

**Lie about the amount of time spent on screens:** Adolescents, not being honest about their usage time and often lie to their parents. They feel guilty, embarrassed about it and think their parents will punish them.

**Insomnia:** Adolescents who over use screens find their sleep cycle disturbed due to the exposure of blue light emitting from devices. The prolonged exposure from the screens disrupts the production of melatonin, a hormone responsible for regulating sleep. The overstimulation caused by the screens negatively impact the health and also give rise to fatigue and increased risk of developing chronic health conditions among students.

**Preoccupied thoughts of online games, social media or a smartphone, even when they are away from usage:** One of the major signs of screen addiction could be when adolescents have minds and thoughts occupied with the content they consume on screens, games, social media usage. Due to this adolescents lack their focus and concentration on other activities, reduce productivity, weak social interactions and results in even negative consequences in personal relationships among students.

**Distorted cognitive abilities:** Long term use of screens has negative impact on logical thinking, reasoning, problem solving and decision-making abilities in students. It also causes cognitive and psychological disorders among students. Functioning of the brain that deal with cognitive activities

such as memory, reasoning, problem solving, attention and decision-making abilities of students are adversely affected by the prolonged screen use.

**Disturbed mental health:** Addiction may cause emotional distress that leads to anxiety or restlessness when adolescents are unable to use multiple screens. They may also feel boredom or discomfort when only one screen is in use, indicating a dependency on multi-screen stimulation. Excessive use of screens affects the mental health of the students which in return develop negative emotions that often results in mood disorder, aggression, violence, restlessness and anxiety among them.

### Decline in academic or work performance:

The long-term use of screen contributes to the poor learning ability in the learners. They not only feel difficulty in processing information but also concentrating on academics which ultimately hinder their work performance and results in poor grades of students.

**Issues related to physical health:** Overuse of screens strains the body and eyes, resulting in a number of medical ailments. The most prevalent signs of screen-related strain include headaches, neck and back pain, dry eyes, and eye strain. The prolonged screen exposure may also develop poor body posture from maintaining awkward positions while using multiple devices. Sitting for long hours reduce their physical movements that may lead to obesity and other severe health issues.

**Adversely affects self-esteem:** Self-esteem is negatively impacted by screen addiction. Social isolation brought on by excessive screen time results in feelings of loneliness and low self-esteem. Low self-esteem and feelings of inadequacy are brought on by the pressure to project an idealized self on social media and the continual comparison to others. Overuse of screens interferes with the growth of self-efficacy and a feeling of achievement. As people search for meaning and purpose in their lives, it also negatively impacts their sense of accomplishment and self-worth.

**Reduced Productivity:** Over use of screens will develop inability to focus on work or academic tasks, that will lead to procrastination or incomplete work due to frequent interruptions by switching between the devices. Over-reliance on screens for entertainment or distraction can result in neglecting important responsibilities.

**Decreased Attention Span:** Simultaneous use of devices can lead to shortened attention span in adolescents as constant

switching between devices makes it harder for them to focus on one activity for an extended period. This may impair their ability to complete a single task effectively or efficiently with proper attention.

**Escapism:** Adolescents addicted to multiple screens find it as a way to escape from reality, stress, or emotional difficulties. Instead of addressing real-world problems, such as work stress or interpersonal conflicts they bury their nose into the screens and try to ignore everything.

**Tolerance and Escalation:** Increasing time spent on screens, requiring more devices or extended use to achieve the same level of satisfaction or stimulation. The individual may feel the need to engage with more screens or for longer periods to satisfy their screen dependency.

### Practical Strategies to Help Adolescents Break Screen Addiction

#### Parental Involvement and Home Rules

Parents at home should set clear boundaries for their children and fix screen time schedules. They may also instruct no screen time during meal, family time and before sleep. Along with this, parents should also set themselves as a good example for their children and control their screen usage.

#### Education and Awareness

Adolescents should teach about the concept of digital literacy as this will help them to understand how apps are designed to be addictive (e.g., infinite scroll, dopamine hits). Awareness programmes should be conducted in schools to discuss the impact of screen addiction on brain development, sleep, attention, and relationships. Moreover, such programmes also promote self-monitoring apps (e.g., Forest, Screen Time, Freedom) to increase awareness of balanced use of screens.

#### School-Based Interventions

Integrating media and digital wellness education into the curriculum could be an important step towards decreasing the level of multiple screen addiction. Teachers can encourage offline group activities, sports, arts, and outdoor learning to the students in the school. Train teachers to recognize signs of screen addiction and guide students toward balanced use. Offer counselling or peer support groups for students struggling with digital overuse.

#### Promote Healthy Alternatives

Both in schools and home children should be encouraged to develop hobbies that stimulate creativity or movement (music, drawing, sports, reading, writing and journaling). Involving adolescents in offline peer activities is a good way to build the real-world connections as this may decrease the excessive screen time.

#### Seek Professional Help if Needed

If the symptoms of addiction are severe (e.g., withdrawal, aggression when disconnected, total social withdrawal) then parents should take immediate steps and consider:

- 1-Digital addiction therapy
- 2-Family counselling
- 3-Cognitive Behavioural Therapy (CBT) tailored for screen dependency

## IV. CONCLUSION

This review based study shows that in this contemporary world of technology there is a significant effect of multiple screen addiction among adolescents. This growing addiction has adverse impact on the various aspects of human life including health, academic progress, personal and social life etc. Parents, teachers and educational institutions including government should take necessary steps to promote awareness about the healthy screen usage among adolescents that will protect them from long term and potential harm of screen addiction.

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