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Research Paper

Impact of Digital Screen Time on Adolescents

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ABSTRACT

Digital technology are continue to grow and advance use in the adolescents. Excessive digital screen time can lead to a sedentary lifestyle, social isolation, and decreased physical activity, ultimately affecting adolescents' physical and mental health. Adolescents in India refer to individuals between the ages of 10 to 19 years, who are in a stage of transition from childhood to adulthood. This phase is characterized by physical, emotional, and psychological changes. According to the 2011 census, there are approximately 253 million adolescents in India, accounting for 20 percent of the country's population. Indian adolescents spend an average of 4 to 5 hours per day on screens (e.g., playing games, video-chatting, online gaming, televisions, watching videos or movies, desktop, smart-phone, tablet, e-readers, watching movies or series on over-the-top platforms, browsing the internet, texting or messaging, playing video games, using apps, online learning or education using devices to make digital art or music and so on). It's essential for parents, caregivers, and educators to be aware of and monitor adolescents' digital screen time to ensure a healthy balance between screen time and other aspects of life. Remember, finding a balance between screen time and other aspects of life is crucial for adolescents' overall well-being.

Keywords: *Digital Screen Time, Social Media, Adolescents*

Screen time refers to time spent on screen-based media devices, including TV and both mobile, and stationary digital devices of different sizes, such as smart phones, tablets, computers, televisions, gaming consoles, e-readers, virtual reality headsets and so on. The use of commonly used screen devices for different time points during the week such as weekday, weeknight and weekend. In the other word, Screen time is a term used for activities done in front of a screen, such as watching TV, working on a computer, or playing video games. In fact, screen time is a sedentary activity, meaning you are being physically inactive while sitting down. At the same time, screen time significantly reduced adolescents reading time, which also indirectly affected their language skills and brain volume.

Many researchers have shown that screen time inhibits teen's ability to read faces and learn social skills, two key factors needed to develop empathy. Face-to-face interactions are the only way teenagers learn to understand non-verbal cues and interpret them.

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How screen time can affect adolescent. Too much screen time can affect adolescent's behaviour, sleep and concentration. For example, the more time they spend on their iPad, phone or computer, the less time teens spending running around outside, letting off steam or interacting with friends and family.

Six Type's of Digital Screen Time

Screen time usage can be categorized into six type's educational screen time, passive screen time, active screen time, interactive screen time, social screen time and creation screen time.

1. **Educational Screen Time -** Educational screen time refers to the time spent by students engaging with digital devices, such as computers, tablets, or smartphones, for educational purposes. This includes online learning platforms and courses, educational software and apps, digital textbooks and resources, online research and information gathering, video lectures and tutorials, interactive simulations and games, virtual classrooms and remote learning. A balanced approach to educational screen time is essential, considering both the benefits and potential drawbacks.

2. **Passive Screen Time –** Passive screen time refers to the time spent watching or consuming content on screens without actively engaging with or interacting with the material. Examples include watching TV shows or movies, streaming videos on YouTube or other platforms, browsing social media or scrolling through feeds, reading articles or blogs without interacting with the content, playing video games that don't require critical thinking or problem-solving and so on. In difference, active screen time, such as interactive learning, creative pursuits, or problem-solving activities, can have cognitive benefits and support learning. A balanced approach to screen time, with a focus on active engagement and moderation, is essential for healthy screen use habits.

3. **Active Screen Time -** Active screen time refers to the time spent engaging with digital devices in a way that promotes learning, creativity, problem-solving, and interaction. Examples incorporate such as interactive learning platforms and educational apps, creating digital content, such as writing, art, or music, coding, programming, developing software, engaging in online discussions, forums, debates, Playing video games that require critical thinking, strategy, problem-solving, conducting research or investigations using digital tools, creating and editing videos, podcasts, or other multimedia content, using digital tools for organization, planning, and time management, participating in virtual labs, simulations, experiments, collaborating with others on digital projects or activities. To ensure healthy screen use habits, it's essential to balance active screen time with passive screen time, physical activity, social interaction, and other aspects of daily life.

4. **Interactive Screen Time -** Interactive screen time refers to the time spent engaging with digital devices in a way that requires active participation, engagement, and feedback. For instance educational apps and games that require problem-solving or critical thinking, interactive simulations, models, or virtual labs, online quizzes, puzzles, or brain teasers, creative tools like digital art software or music composition programs, video conferencing or virtual discussions with real-time feedback, interactive e-books, multimedia presentations, or interactive videos, online collaborative projects or group work, Virtual Reality (VR) or Augmented Reality (AR) experiences, interactive coding or programming environments, adaptive learning systems that adjust to individual needs. To ensure healthy screen use habits,

it's essential to balance interactive screen time with other aspects of daily life, including physical activity, social interaction, and passive screen time.

5. **Social Screen Time -** Social screen time refers to the time spent using digital devices to interact with others, share experiences, and maintain relationships. Examples include - Social media platforms (e.g., Facebook, Instagram, X), Video conferencing or virtual meetings (e.g., Zoom, Skype), Online communities or forums (e.g., Reddit, Discord), Messaging apps or text messaging (e.g., WhatsApp, SMS), Virtual events or webinars, Online gaming with others (e.g., multiplayer games), Sharing content or collaborating on digital projects, Virtual clubs or groups (e.g., book clubs, hobby groups), Social learning platforms or online courses with discussion forums, Virtual volunteering or remote community service. Social screen time can have both positive and negative effects, including:

   Positive Effects

   - Maintaining social connections and relationships.
   - Expanding social networks and meeting new people.
   - Accessing support groups or communities.
   - Enhancing collaboration and teamwork.
   - Developing communication and social skills.

   Negative Effects

   - Social isolation or decreased face-to-face interaction.
   - Cyber-bullying or online harassment.
   - Addiction or excessive screen time.
   - Decreased attention span or deep thinking.
   - Privacy concerns or online safety risks.

   A balanced approach to social screen time, with awareness of both benefits and risks, is essential for healthy screen use habits.

6. **Creation Screen Time –** Creation screen time refers to the time spent using digital devices to create, express, and bring new ideas to life. Examples include digital art or graphic design, Writing, editing, or publishing content (e.g., blogs, stories, poetry), music or audio production (e.g., composing, recording, editing), Video production or filmmaking (e.g., scripting, filming, editing), coding or software development, 3D modeling or animation, Photography or photo editing, crafting or designing digital products (e.g., printables, templates), creating educational resources or tutorials and Developing websites or apps. By embracing creation screen time, individuals can unlock their potential, express themselves, and bring new ideas to life.

Counsellor, Psychologist and Psychiatrist

Screens make it harder for adolescent to focus, which unsurprisingly affects their behavior. As students develop into lifelong learners, they deserve to put their best foot forward in the classroom. When screens are involved, sometimes it hinders students' ability to be attentive during lessons and assessments.

According to counsellor, psychologist and psychiatrist are recommended to have no more than 2 hours of screen time per day for teenagers. Excessive screen time negatively impacts children's academic performance by causing distractions, disrupted sleep, impaired memory, learning abilities, focus, concentration, and physical health. Overall, screen time can impact

on myopia development and progression, and is also linked to dry eye syndrome, digital eyestrain, and poor head and neck postures which can cause pain.

The American Academy of Pediatrics (AAP) recommends acceptable amount of screen time limits for two hours per day for teens. The screen has become the gateway to entertainment, social interaction, information and education. Digital Screen Time (DST) and mobile touch-screen devices have become even more embedded in our everyday lives for adolescents.

In pan India, adolescents are growing up surrounded by digitally mediated communication, gaming and a plethora of information and entertainment on screens. Adolescents today live in a digitally connected world. Irrespective of the type of digital device used, the screen is the key portal that connects the user with the digital world and digital life.

Theoretical Background

According to a study of 550 adolescents in New Delhi, India, they spend an average of 3.8 hours per day on Screen-Based Media (SBM), with 68 percent of them using SBM for more than two hours. The study also found that adolescents spend more time on SBM on vacation days (3.9 hours) than on school days (3.2 hours). The most popular SBM activity was playing video games (50.7%), while emailing was the least popular.

While we cannot overstate the need to address the digital divide within and across states, the adolescents of today the digital natives are practically born with a screen in their hands. Adolescents have use touch-screen technology (Cristia and Seidl 2015).

Naturally, the overwhelming majority of young people are internet users across the India. There is no denying that the increasingly mobile and connected digital devices are becoming an integral part of the daily lives of the adolescents. Just as the book and the printed medium was an integral part of the 20th century, the digital media is the preferred choice in the 21st century especially among the adolescents.

It has been pointed out that screen time guidelines are not always evidence-based, and that it is not possible to give limits or thresholds on screen time given that the effects of screen time depend so much on context (Viner, Davie and Firth 2019; Stiglic and Viner 2019).

As United Nations Children's Fund (UNICEF's) literature review covering research conducted between 2005 and 2017 on the impact of digital technology use on children's well-being (Kardefelt-Winther 2017) has pointed out, research in this area tends to focus on screen harm and the hypothetical idea of addiction to technology, rather than investigating why some children spend more time on screen-based media devices than others and when more screen time under what conditions might have an effect positively or negatively on their well-being.

At the present time, adolescents are using digital media and mobile screen device at ever-increasing rates. Given the elusive notion of 'screen time', one of the problems is overgeneralization of harmful effects of screen time without taking into account the enormously diverse use of screen-based media devices.

We must keep in mind that both positive and negative outcomes of screen time tend to be highly contextual and dependent on the design of activities children engage in through screen devices. A 2015 study on cognition and media concludes that there is no clear

consensus and that effects likely depend on the age, type of content and other contextual factors (Anderson and Kirkorian 2015). Focusing on screen time without adequately considering the internal and external attributes may severely limit the value of the conclusions drawn.

However, more recently, studies looking at newer uses of digital screen devices such as social media showed gendered impact of screen time on mental health outcomes. One study that has received much media attention suggested that adolescents were 13% more likely to experience high levels of depression symptoms if they used social media at least once per day, and 34% more likely to have at least one "suicide-related outcome" (include significant sadness or hopelessness, seriously considering suicide, having a suicide plan and making a suicide attempt) if they used an electronic device three or more hours per day, compared to two or fewer hours per day (Twenge et al. 2018).

As Kardefelt-Winther (2017) summarizes in UNICEF's literature review on the impact of digital technology use on adolescent's well-being, many studies show the use of digital media devices brings benefits to adolescent's, by opening new opportunities for social interaction and active creative expression. These points to the benefits of active screen time, but not all active screen time may lead to positive outcomes; content and educational outcomes are keys if digital devices are to be beneficial for wellbeing.

Interventions on screen-based media use should include curtailed use within an hour before bedtime and particularly in darkness. Adolescents should be made aware of the associations between night-time screen-based media devise use (including TV watching) and sleep outcomes, as these may impact on cognitive function and educational attainment (Mireku et al. 2019).

Guidelines for Healthy Screen use

- Set limits and monitor screen time (AAP recommends 1 to 2 hours per day)
- Encourage physical activity and outdoor play
- Promote face-to-face social interactions
- Teach digital literacy and online safety
- Encourage responsible social media use
- Support mental health and well-being
- Model healthy screen use behavior as a parent or guardian

By being aware of these points, parents, caregivers, and educators can help adolescents navigate the digital world in a healthy and balanced way. It's essential to maintain a balance between digital screen time and other aspects of life, such as physical activity, socializing, and outdoor activities. It's essential for parents, educators, and policymakers to address these risks and promote healthy digital habits among adolescents in India.

CONCLUSION

In nutshell, adolescents' time spent on screens has attracted considerable public and policy attention, with concerns around the effects of screen time on physical and mental health, and educational outcomes. What is the impact of the increased use of digital devices on the well-being of learners and in particular adolescents is a key question on the minds. Time spent on screens from social media to computers and television is a major part of everyday life and a necessary part of digital life today and into the near future. One of the problems is over-

generalization of harmful effects of screen time without taking into account the enormously diverse use of screen-based media devices. Different uses have different effects. On the same media platform (for example on YouTube, X and Instagram), different content will have different effects.

REFERENCES

AAP (American Association of Pediatrics) Council on Communications and Media (2016) 'Media use in schoolaged children and adolescents', *Pediatrics*, 138(5), e2016259.

Abramson, M.J., Benke, G.P., Dimitriadis, C., Inyang, I.O. and Sim, M.R. (2009) 'Mobile telephone use is associated with changes in cognitive function in young adolescents', *Bioelectromagnetics*, 30, pp. 678-686.

Anderson, D.R. and Kirkorian, H.L. (2015) 'Media and cognitive development', in Liben, L.S., Müller, U. and Lerner, R.M. (eds.) *Handbook of child psychology and developmental science - Cognitive processes*. John Wiley & Sons Inc., pp. 949–994.

Ashton, J.J. and Beattie, R.M. (2019) 'Screen time in children and adolescents: is there evidence to guide parents and policy?', *Lancet Child Adolescent Health*, 3(5), pp. 292-294. doi: 10.1016/S2352-4642(19)30062-8.

Canadian Paediatric Society, Digital Health Task Force (2019) 'Digital media: promoting healthy screen use in school-aged children and adolescents', *Paediatrics and Child Health*, 24(6), pp. 402–408. doi: 10.1093/pch/pxz095

Carson V, Hunter S, Kuzik N, et al. (2016) 'Systematic review of sedentary behaviour and health indicators in school-aged children and youth: an update', *Applied Physiology, Nutrition, and Metabolism*, 41(6 Suppl 3): pp. S240-S265. doi:10.1139/apnm-2015-0630.

Foerster, M. and Rsli, M. (2017) 'A latent class analysis on adolescents media use and associations with health related quality of life', *Computers in Human Behavior*, 71, pp. 266-274. doi: 10.1016/j.chb.2017.02.015.

Hale L. and Guan S. (2015) 'Screen time and sleep among school-aged children and adolescents: a systematic literature review', *Sleep Medicine Reviews*, 21, pp. 50-58. doi:10.1016/j.smrv.2014.07.007.

Huber, B., Yeates, M., Meyer, D., Fleckhammer, L., & Kaufman, J. (2018). The effects of screen media content on young children's executive functioning. *Journal of Experimental Child Psychology*, 170, 72–85. https://doi .org/10.1016/j.jecp.2018.01. 006

Kabali, H.K., Irigoyen, M.M., Nunez-Davis, R., Budacki, J.G., Mohanty, S.H., Leister, K.P. and Bonner, R.L. (2015) 'Exposure and use of mobile media devices by young children', *Pediatrics*, 136(6), pp. 1044–1050. doi: 10.1542/peds.2015-2151.

Kardefelt-Winther, D. (2017) *How does the time children spend using digital technology impact their mental well-being, social relationships and physical activity? An evidence-focused literature review.* Innocenti Discussion Paper no. 2017-02. Florence: UNICEF Office of Research - Innocenti. Available at: https://www.unicef-irc.org/publications/925-how-does-the-time-children-spend-using-digital-technology impact-their-mental-well.html

Mireku, M.O., Barker, M.M., Mutz, J., Dumontheil, I., Thomas, M.S.C., Röösli, M., Elliott, P. and Toledano, M.B. (2019) 'Night-time screen-based media device use and adolescents' sleep and health related quality of life', *Environment International*, 124, pp 66–78. doi: 10.1016/j.envint.2018.11.069.

OECD (2018) *Children and young people's mental health in the digital age: shaping the future*. Available at: https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf

Orben, A. and Przybylski, A.K. (2019a) 'The association between adolescent well-being and digital technology use', *Nature Human Behaviour*, 3, pp. 173–182. doi: 10.1038/s41562-018-0506-1.

Orben, A. and Przybylski, A.K. (2019b) 'Screens, teens, and psychological well-being: evidence from three time-use-diary studies', *Psychological Science*, 30(5), pp. 682-696. doi: 10.1177/0956797619830329

Stiglic, N. and Viner, R.M. (2019). 'Effects of screentime on the health and well-being of children and adolescents: a systematic review of reviews', *BMJ Open*, 9, e023191. doi: 10.1136/bmjopen-2018-023191.

UNICEF (2017) *Children in digital world: the state of world's children 2017 report*. Available at: https://www.unicef.org/publications/files/sowc_2017_eng_web.pdf

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Conflict of Interest

The author(s) declared no conflict of interest.

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