



Impact of Prolonged Screen Exposure on Students' Aggression: An Exploratory Study

Dr. Rituparna Bask¹ and Dr. Debashree Sinha²

¹Dr. Rituparna Basak,
Assistant Professor,
Department of Psychology, Muralidhar Girls' College, Kolkata.

²Dr. Debashree Sinha
Lecturer,
Department of Psychology, Surendranath College, Kolkata.

Abstract

The aim of the present qualitative research is to focus on the association between screen time for both academics and leisure purposes during the unprecedented Covid-19 situation and aggression of undergraduate college students of Kolkata. Students studying in the government-aided, under-graduation colleges of Kolkata are selected as sample of the study. Different academic groups of students and varied subject backgrounds were taken for the study. Telephonic interviews were conducted with 30 interested students (13 males and 17 females) who had given their consent for participation in this study. To collect data from the students regarding their different activities and pursuits during the lockdown phase, Semi-structured in-depth interviews were conducted. The semi-structured questions were validated by 5 experts and based on their suggestions necessary modifications were done. Results suggest that excessive screen usage disrupt the ability to register and process emotions. The most significant negative aftermath is impaired emotional judgement and desensitisation to violent content. Such prolonged engagement with digital gadgets led to an aggravation of sense of isolation and damaged interpersonal relationships as these youngsters went on losing valuable opportunity to learn key social skills. This virtual engagement not only reduced their possibility to build social bonds and relationships with other people but also decreased their sense of self-identity and confidence. In addition to these, prolonged screen time can impair brain development and even can lead to long-term medical ailments.

Key Words: screen time, emotional judgement, desensitization, isolation, social skills.

Introduction

The mass media's saturation of our culture and daily life has been one of the most noticeable shifts in our social environment in the twentieth and twenty-first centuries. In this new environment, the roles of radio, television, movies, videos, video games, mobile phones, and computer networks have all changed. For better or worse, the media greatly influences our attitudes, beliefs, and actions. Unfortunately, one particular frequent element of electronic mass media has a very negative impact on us, particularly on children and adolescents' well-being (Huesmann, 2009).

Adolescence is a phase of fast psychological maturation as well as sensitivity to the internet and other forms of digital media. Aggression and hostility are significantly more common among teens when it comes to the negative effects of digital addiction and internet use. Excessive Internet/gaming/mobile addiction, which has been a disturbing trend even before the Covid outbreak, has reached new heights during the pandemic, according to psychologists and counsellors, as many adolescents who went online for classes and social interaction became compulsive addicts. It was expected to have an uphill battle as the usage of technology rose and the Internet got cheaper and more accessible. However, Covid-19 has expedited the situation to a point where we would have been five years later otherwise.

Digital devices now take up a large portion of our personal space, and technology has been ingrained in many aspects of our existence. Almost all forms of consumer-level technology, from necessities like food to pleasures like home videos, are designed to provide a satisfying experience. The amount of time spent on digital devices for various activities is referred to as screen time. Screen time includes using digital devices for educational (online education), professional (work from home), and recreational purposes such as gaming, social media, or watching pornography or music videos (DataReportal, 2020).

Children's technology addiction manifests itself in the form of poor academic performance, sleep and food problems, decreased social/family relationships, emotional disorders, and, in some cases, physical aggression and self-harm. The epidemic has facilitated this behaviour by boosting screen time due to classes/work and providing individuals with reasons to participate in it. Social media has been a godsend in terms of connecting with others, but bad behaviour isn't about children losing control and being unable to stop. Cases have virtually doubled every week at Bengaluru's NIMHANS SHUT (Service for Healthy Use of Technology) clinic, where has been noticed a multiple-fold surge in cases (Basu, 2021).

An act meant to damage or irritate another person is referred to as aggressive behaviour. Physical and non-physical aggression are both possible forms of aggression. It encompasses a wide range of behaviours that do not appear to fit the popularly known concept of "violence," but do fulfil the criteria, such as insults and distributing false information. Physical aggressiveness, ranging in severity from pushing or shoving to fighting, serious assaults, and homicide, is certainly the most concerning aggressive conduct (Huesmann, 2009). The most important component of aggressive behaviour is aggression. It can be expressed in a variety of forms, including physical aggressiveness, verbal violence, relational hostility, and so on (Mattson, 2003). Aggressive behaviours have a negative impact on victims, as well as causing issues in the lives of aggressive people and disrupting the entire human system (Ali, 2008).

In today's world, screen addiction and violence are two of the most pressing challenges. Various researchers have attempted to uncover facts and results about violence and screen addiction for many years. Several research has discovered a link between internet addiction and aggressive conduct (Ko et al., 2009; Koo & Kwon, 2014; Yen et al., 2008). Excessive screen time has resulted in lifestyle addictions, which can have both mental and physical consequences if not controlled properly.

Adolescents spend a lot of time on the internet and other digital media throughout their post-covid-19 years, and this is the most important factor that determines their behaviour. According to a study conducted by Sinha and Basak (2022) on college students in Kolkata, the more students become addicted to screens, the more hostile they become. It could be because students did not have many outings during the epidemic and were forced to stay inside, where they spent the majority of their time with devices, either for academic purposes or for recreational activities, which could cause them to lose control and lead to violent behaviour. Along with academics, the entertainment industry was also shut down during Covid-19, making gadgets the only way to pass the time and stay interested. This constant exposure to many of these display screens may erode their mental capacity, patience, and behavioural control, leading to an unpredictable, irritable, and vulnerable future.

In the present time, youth's increased use of cell phones, text messaging, e-mail and chat rooms has opened new venues for social interaction in which aggression can occur and youth can be victimised – new venues that break down the old barriers of family, neighbourhood, and community that may have protected youth to some extent in the past. These global electronic communication mediums have made it much more difficult to safeguard youngsters from threats and have exposed many more of them to threats that just a handful may have encountered previously.

Screen addiction is a collection of undesirable behaviours and effects that can occur when we use too much technology throughout the day. According to him long-term viewing of television, video games, and browsing through social media functions as a digital narcotic for our brain. Dopamine is released in the brain as a result of screen use, which can have a negative impact on impulse control. According to studies, screen time has a similar effect on the brain's frontal cortex as cocaine. Screen usage, like drugs, initiates a pleasure/reward cycle that can negatively affect your life (Lorenz, 2019).

Methodology

The present qualitative research focuses on the association between screen time and aggression of college students of Kolkata. This study was conducted to see how the aggression of students is influenced by the exposure of longer multiple screens during the unprecedented Covid-19 situation. This study threw light upon the multiple screen exposure practised by the undergraduate students for both academics and leisure.

Research Question:

How college students are experiencing aggression both physically and mentally due to longer exposure to multiple screens, during this homebound Pandemic situation?

Sample:

The study was conducted among the students studying in the government-aided under-graduation colleges of West Bengal, India. To ensure appropriate representation students from different academic groups and varied subject backgrounds were taken for the study. Telephonic interviews were conducted with 30 students who have shown interest and have given their consent for participation in the study. The study population had 13 male and 17 female students with an age range of 17-21 years. Out of 30 participants, 10 were taken from each academic year.

Procedure:

Semi-structured in-depth interviews were conducted to collect data from the students to gather information regarding their different activities and pursuits during the lockdown. The questions were open-ended in nature, giving the interviewer the freedom to probe for details. The semi-structured questions were verified by 5 experts and the modifications were incorporated as per the suggestions.

Interviews were conducted through telephonic medium and were recorded in the form of audio clips. All conversations were then transcribed and thoroughly read and coded autonomously by both the researchers. Terminologies that provided insight into the themes were marked and then similar themes were clustered to get higher-order clarity. Only those themes were sustained where the mutual agreement was received from both the researchers.

Findings & Discussions

The interviews taken from undergraduate college students of West Bengal have revealed the following aspects of their experience in the pandemic. For a better understanding of their strategies and challenges in successfully adapting to this situation, the study's findings are presented in 4 themes, which were obtained from clustering the rudimentary themes that emerged from the analysis.

1. Screen time and poor emotional judgement

As soon as the lockdown was declared, educational establishments closed and began offering online classes to ensure that students may continue their studies. Due to the exigencies of the circumstance, all teachers and students were required to learn or improve their technology skills. Online classes, attending different activities like quiz, extempore, debate, and competitions became the part of students' life for which they had to spend most of their time on multiple screens. Both the amount and type of screen time significantly impact how students interact with the world around them. The way the media and video games affect emotions is likely to intensify the long-term socialisation effects of the media. Excessive screen usage also harms the ability to register and process emotions. One of the most concerning side effects of impaired emotional judgement is desensitisation to violent content.

"I got happy or sad easily." - (Student 5)

"I felt like destroying everything around me after spending the whole day on my computer." - (Student 2, 28)

"After attending too many classes at the end of the day I felt like my brain is blocked and am unable to understand anything." - (Student 9, 20)

2. Screen time and impaired social skill

During the pandemic the students were exposed to longer screen time either for academic purposes like attending classes, giving exams or for leisure activities like playing games, watching movies etc. Spending too much time on different screens costs an individual's personal relationship where many went through the feeling of disconnection, worthlessness and loneliness. Another major issue is the isolated condition that screen usage promotes. When a youngster or an adolescent spends hours on end playing video games, scrolling through their phone, or watching television, they are removing themselves from the possibility of social engagement. Digital gadget use is primarily a solitary pastime with few real-life interactions. This could lead to a rise in antisocial behaviour and feelings of isolation. When youngsters spend time on digital gadgets instead of playing with their peers, they miss out on a valuable opportunity to learn key social skills.

"I involved getting in the argument when people disagree with me." - (Student 11, 24)

"I sometimes showed arrogance, anger towards people who tried to rectify my activities." - (Student 4, 17)

3. Screen time and lower self-esteem

Screen time is not dangerous in and of itself. However, abusing the device and failing to supervise the content on the screen can have harmful consequences. It might be tough to find time for leisure, exercise, socialising, and even work when someone is addicted to a screen. Even when not in front of a screen, the addiction can be all-consuming, with the mind fascinated with the game while trying to maintain a normal conversation. The chronic consumers of media violence become desensitised to violence are supported by a study that found increased self-reported pleasant arousal to scenes of violence in the media (Krahe et al., 2011). Spending too much time in front of a screen might also have a negative effect on one's self-perception. A reduced sense of self-identity and confidence results from the time a student loses that could have been spent building relationships with other people, discovering and honing passions, and experiencing new things.

"I worry a lot about my future as our evaluation is done online." - (Student 9, 23)

"I doubt whether I will get a chance for higher study as we are giving online exams and all are getting almost the same marks." - (Student 7, 29)

4. Screen time and chronic health condition

Excessive use of television, computers and mobile devices daily by the students leads to serious physical or mental health-related problems. While screen time isn't always a problem in tiny amounts, the longer hours might cause withdrawal, irritability, and sadness. Too much screen time can also lead to health problems, as a result of the mental hazards and sedentary lifestyle that it promotes. Excess screen time can impair brain development or even lead to long-term medical conditions such as myopia, diabetes, sleep deprivation, obesity, and neck and back pain. The danger of behaviour issues and aggression, which is often the result of exposure to violent shows and games, is added to the physical health risks.

"My eyesight got decreased due to long exposure to the mobile screen." - (Student 6, 22, 14)

"I experienced back pain during classes for sitting a long time." (Student 13, 26)

Conclusion

During a pandemic, everyone is forced to use digital platforms for a variety of objectives, including education, working, socialising, amusement, and shopping. Online mode has evolved into an active medium for meeting needs that were formerly linked with offline mode. As a result, adolescent use of digital gadgets and media increased almost instantly. It would be nearly impossible to live without digital devices now that they have become such an integral part of their daily lives. Screen time addiction has negative repercussions such as anxiety, despair, and aggression, and it is linked to teenage brain development, social skills, emotional control, and academic accomplishment.

Funding: No funding is provided for the study.

Declarations: Not applicable.

Conflict of Interest: The authors declare that they have no conflict of interest.

Acknowledgement: Not applicable.

References

1. Ali, M. (2008). *Impact of parental attachment on aggressive behavior of adolescents*. Unpublished MSc. Dissertation, National Institute of Psychology, Quaid e Azam University, Islamabad.
2. Basu, S. D. (2021, September 4). Covid brings about another illness: Gadget addiction. *ET Bureau*. <https://economictimes.indiatimes.com/news/india/covid-brings-about-another-illness-gadget-addiction/articleshow/85917380.cms>
3. DataReportal (2020). *Digital: 2020 Global Digital Overview [Internet]*. Available at: <https://datareportal.com/reports/digital-2020-global-digital-overview>.
4. Huesmann, L. R. (2009). The impact of electronic media violence: scientific theory and research. *Journal of Adolescent Health, 41*(6), S6-S13. DOI: 10.1016/j.jadohealth.2007.09.005
5. Ko, C. H., Yen, J. Y., Liu, S. C., Huang, C. F., & Yen, C. F. (2009). The associations between aggressive behaviors and internet addiction and online activities in adolescents. *Journal of Adolescent Health, 44*, 598–605. <https://doi.org/10.1016/j.jadohealth.2008.11.011>
6. Koo, H. J., & Kwon, J. H. (2014). Risk and protective factors of internet addiction: A meta-analysis of empirical studies in Korea. *Yonsei Medical Journal, 55*(6), 1691–1711. <https://doi.org/10.3349/ymj.2014.55.6.1691>
7. Krahé, B., Möller, I., Huesmann, L. R., Kirwil, L., Felber, J., & Berger, A. (2011). Desensitization to media violence: links with habitual media violence exposure, aggressive cognitions, and aggressive behavior. *Journal of personality and social psychology, 100*(4), 630–646. <https://doi.org/10.1037/a0021711>
8. Lorenz, K. E. (2019, December 5). Screen addiction affects physical and mental health. *Premier Health*. <https://www.premierhealth.com/your-health/articles/health-topics/screen-addiction-affects-physical-and-mental-health>
9. Mattson, M. P., (2003). *Neurobiology of aggression: understanding and preventing violence*. New Jersey, Human press.
10. Sinha, D. & Basak, R. (2022). Does screen addiction affect aggression? – An exploratory study on undergraduate students of Kolkata during pandemics. *International Journal of Multidisciplinary Educational Research, vol. 11* issue 1(1), 71-77.
11. Yen, J. Y., Ko, C. H., Yen, C. F., Chen, S. H., Chung, W. L., & Chen, C. C. (2008). Psychiatric symptoms in adolescents with internet addiction: Comparison with substance use. *Psychiatry and Clinical Neuroscience, 62*(1), 9–16. <https://doi.org/10.1111/j.1440-1819.2007.01770.x>