

MENTAL HEALTH IMPACTS BY ELEVATED DIGITAL SCREEN TIME DURING COVID-19 PANDEMIC

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REVIEW

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ABSTRACT

Introduction – The length of time invested in and the various activities carried out utilizing digital devices are referred to as screen time. The COVID-19 pandemic's restrictions on social interactions exacerbated the overuse of digital gadgets for everyday tasks like socializing, education, shopping, working, meeting, and entertainment. Increased screen usage has been thought to have harmful impacts on psychiatric health in studies.

Methods – Several journal articles were used as references, with the inclusion criteria of literature that discuss the mental health impacts of elevated digital screen time during the pandemic of COVID-19 and its recommended measures to minimize its adverse mental health outcomes and the promotion of healthy digital habits.

Results – During the pandemic of COVID-19, the unprecedented digital life led to higher numbers of anxiety, sadness, confusion, and unpleasant feelings including irritation and violence. It is crucial to know how screen use time evolved during the COVID-19 period of crisis so that the design of health promotion and intervention may be planned and informed. This study aims to discuss the mental health impacts of elevated digital screen time on the pandemic of COVID-19 and strategies to minimize its adverse mental health outcomes, and the promotion of healthy digital habits.

Discuss – Boosting collaborative research involving worldwide nations to tackle COVID-19-related public health concerns can improve global evidence and future policies. Increased screen usage has been displayed to have harmful impacts on psychiatric health in studies. Excessive digital use has been linked to attention deficit disorders, social and emotional cognitive impairment, social withdrawal, phantom vibration syndrome, and major psychiatric diseases such as depression, anxiety, and gaming addiction.

Conclusion – It is critical to promote good digital practices and good applications of digital media to avoid the negative effects of increased screen time. To prevent hazardous screen usage and other behaviors that may influence the mental health and welfare of COVID-19-affected people, it is critical to harness the evidence available and adopt multimodal strategies.

Keywords: mental health, screen time, COVID-19.

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INTRODUCTION

COVID-19 has emerged to become a worldwide disease, infecting over 233.5 million individuals, as of September 28, 2021. It has had a disastrous effect on global health, resulting in the deaths of more than 4.7 million people in 216 nations throughout the world.¹ To restrict the spread of COVID-19, physical and social distancing were implemented all around the world, including massive border, school, and company closures. The closing or limited activities of schools, public places, and workplaces have caused the increased usage of digital devices such as computers, mobile phones, and tablet devices for working, meeting, educating, socializing, shopping, and entertainment. This has increased people's

susceptibility to prolonged duration looking at the screen, which has become a major public health worry.^{2,3}

Digital devices turned out to be a positive thing, allowing people to stay linked emotionally amid their social isolation during this pandemic. Simultaneously, excessive screen use has raised worries about its effects on physical and psychiatric health and wellness. While thoughtful (and controlled) use of digital technology has been associated with wellness, excessive screen use duration has been linked to several negative psychiatric health consequences, including psychological issues, insufficient emotion control, and a higher chance of depression or anxiety. When digital use is irrational,

compulsive, uncontrolled, or obsessive, negative consequences are common.⁵

The length of time invested in and the various activities carried out utilizing digital devices are referred to as screen time. Screen time includes both the usage of digital gadgets for work (restricted hours of labor or educational objectives) and for fun and enjoyment (unrestricted time for gaming, television viewing, or social networking use). In times of social distancing, screen time may not be harmful to one's well-being because it is the only way to stay socially engaged. However, it's important to keep your digital screen use time under check. During the pandemic of COVID-19, the unprecedented digital life led to higher numbers of anxiety, sadness, confusion, and unpleasant feelings including irritation and violence. This is why it's crucial to know how screen use time evolved during the COVID-19 period of crisis so that the design of health promotion and intervention may be planned and informed.^{3,4,10}

METHOD

Several journal articles were used as references, with the inclusion criteria of literature that discuss the mental health impacts of elevated digital screen time during the pandemic of COVID-19 and its recommended measures to minimize its adverse mental health outcomes and the promotion of healthy digital habits.

RESULT

Mental Health Impacts of Elevated Digital Screen-Time on The Pandemic of COVID-19

Increased screen usage has been displayed to have harmful impacts on physical and psychiatric health in studies. People who spend more time on screens have a higher risk of depression, according to a meta-analysis reviewing 12 cross-sectional and seven observational research. Screen usage was linked to poor sleep quality in infants, children, and schoolchildren in another review of 31 research. Such psychological health consequences linked to screen use would not be just dependent on the amount of time invested in front of the display screen, as the quality and content of that time can have a significant impact on individuals. massive disaster media coverage was linked to acute psychological stress and post-traumatic stress sequelae, as shown in a meta-analysis evaluation of 43 research of a total of 31162 research subjects, highlighting the psychological ramifications of television material on people who watch it.^{3,9, 12, 14}

During the coronavirus outbreak, children and adolescents had lower levels of exercise, lower outdoor activities, more inactive behavior, including recreational screen time, and increased amount of sleep. The unexpected rise in complaints of irritation on the absence of internet access and mobile phones; gambling habits, difficulty concentrating; absence from virtual learning sessions or employment owing to sleeplessness; and inevitable overuse of smartphones has been widely publicized. Sleep issues and an increased chance of myopia are two of the most serious negative effects of screen usage on children's and teenager's physical health. Excessive screen time, according to a huge set of known original research, has long-term negative health effects such as visual

fatigue, carpal tunnel syndrome, sleep disturbances, and neck discomfort, along with psychiatric issues like difficulty concentrating, preoccupation, and major psychiatric diseases such as depression, anxiousness, and ADHD / attention-deficit hyperactivity disorder. Researchers observed that mobile phone dependence could explain the increased rates of symptoms of depression and isolation in older teenagers aged 18 to 20.^{6,10,11}

Excessive digital use has been linked to attention deficit disorders, social and emotional cognitive impairment, social withdrawal, phantom vibration syndrome, and major psychiatric diseases such as depression, anxiety, and gaming addiction. Though digital devices allow people to stay socially and emotionally engaged, they also cause irritation, coronavirus anxiety, trouble sleeping, mental tiredness, loneliness, social networking exhaustion, and fatigue looking at the screen, as well as phantom vibration syndrome. Decreased sleep or day-night cycle inversion, migraines, neck discomfort, myopia, computer vision syndrome, and cardiovascular disease risks like as obesity, hypertension, and diabetes are all possible side effects of excessive screen usage. Increased screen usage has resulted in worrisome collateral harm to eye health, eating habits, and sleep patterns. Excessive screen usage has been linked to poor mental health in adults, according to studies.^{7,8,10}

DISCUSS

Strategies to Minimize the Adverse Impacts of Elevated Digital Screen Time on Mental Health and Promotion of Healthy Digital Habits during the Pandemic of COVID-19

Despite the possible negative health impacts of screen usage, it is impossible to avoid it in today's world. According to current evidence, the pandemic of COVID-19 led to a significant increase in digital screen time, although research conducted before the pandemic indicated that such gradual usage of display devices could have negative mental health repercussions in the afflicted communities. In the post-pandemic era, such issues could add to the global burden of mental health diseases. It's vital to recognize this impending public health problem and implement mitigation techniques that could help people avoid the health risks linked with excessive screen usage.^{3,10}

Behavioral strategies like personal self-constraints on the usage of digital services, employing digital substitutes where available, and the use of digital services for greater healthiness and wellness are often the most effective ways to minimize technological harm. Screen time that is not restricted can have negative health consequences. Studies clearly show that using digital technology in a controlled, intelligent, and active manner has different results than just ingesting what's on the display. Digital gadgets can be used for a variety of positive activities, including online workout programs, mental focus training, and healthy living seminars, among others. Below are some of the measures that have been advised in past research to foster healthy digital habits.^{10,13,15}

- **Digital Detox or Digital Well-being:** It requires taking breaks in between and developing healthy digital habits to keep digital toxicity at bay.
- **Intermittent Social Fasting:** Avoid using social media while at work to obtain a break for extra screen time, resulting in a good work-life balance.
- **Promoting Physical Activities:** Digital services such as online physical exercise courses, online yoga, fitness mobile apps, and games with a physical exercise element can be used to engage in physical activities.
- **Staying Active during Screen Time:** To break up the monotony of long screen time, have an active period in front of the screen where you can stretch or do exercises while sitting or standing.
- **Family Digital Detox or Digital Free Family Time:** Assuring family time away from digital gadgets not only reinforces staying away from technology but also creates healthier environments for family members to engage. One of the simplest ways to practice this is to make meal times with your family.
- **Modelled Digital Well-Being:** Responsible people must model digital wellbeing for younger students so that it can become ingrained as a habit. Observational learning has a significant impact.
- **Set Screen Time Limits:** Set a daily goal of reducing the number of hours spent in front of the screen by half an hour. Alternatively, keep note of how much time you spend online, what activities you engage in, and how you feel after a few hours of screen time.
- **“Dumb Phones”:** Using phones that just allow for voice calls and do not allow for the additional distractions that smartphones provide. This can aid in the reduction of social anxiety as well as improved involvement with others around you.
- **Use Alternatives to Screen:** Choose activities that do not require the use of a digital screen, such as walking,

cycling, dancing, reading paper books, magazines, and so on.

- **Active Listening while Screen Use:** While conversing electronically, practice attentive listening skills by becoming aware of your surroundings in real life.
- **Indoor Games:** Indoor games can be pushed to keep a family of all ages entertained.
- **Use of Digital Platforms for Promoting Healthy Lifestyles and Seeking Mental Health Care Services:** Healthy habits and learning possibilities such as learning dance, and language, attending yoga sessions, and participating in informative webinars can all be promoted through digital platforms (avoiding the rather pandemic of a webinar). There is also access to mental health information and consultation (reliable resources such as those provided by the government, medical authorities, the United Nations, or the World Health Organization should be considered).^{10,13,15}

It is vital to expand the scientific base to design knowledgeable regulations, guidelines, and management to limit the negative health effects of screen usage. Even though digital screen time is a worldwide problem, research in this field in low-income and middle-income nations is lacking. As a result, boosting collaborative research involving worldwide nations to tackle COVID-19-related public health concerns can improve global evidence and future policies. Such collaborative studies of on-screen time on various demographic groups will necessitate a multi-discipline research team to better comprehend the epidemiologic variations among populations. Furthermore, using digital technology to analyze behavioral aspects and psychosocial correlates can provide a markup that can help drive the creation of new interventions. Examining the dosage-response correlations between screen use and mental health impacts in distinct COVID-afflicted demographic populations could aid in the establishment of more informed practice guidelines.³

CONCLUSION

COVID-19 has influenced various aspects of people's lives, like how they utilize digital devices. While digital technology allows people to connect socially, excessive usage of these devices can be hazardous in the long run. In studies, Increased screen usage has been linked to mental health issues. Obsessive, immoderate, uncontrollable, impulsive, and hurried usage of digital gadgets are all signs of problematic screen time. Excessive digital use has been linked to attention deficit disorders, social and emotional cognitive impairment, social withdrawal, phantom vibration syndrome, and major psychiatric diseases such as depression, anxiety, and gaming addiction. It is critical to promote good digital practices and good applications of digital media to avoid the negative effects of increased screen time. To minimize these negative consequences, individuals must be empowered to make scientifically informed decisions. Because of the world's expanding digitization, developing and adopting a healthier digital practice is a promising health-promoting precautionary approach. Because diverse communities use screens in differently and have varying medical outcomes, healthcare

providers and policy-makers should aim to encourage those groups to adopt healthier habits and lifestyles. To prevent hazardous screen usage and other behaviors that may influence the mental health and welfare of COVID-19-affected people, it is critical to harness the evidence available and adopt multimodal strategies.

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