

## **Digital Fatigue and Mental Health: Exploring the Correlation Between Increased Screen Time During the COVID-19 Pandemic and Its Impact on Mental Well-being Among the Youth of Uttar Pradesh**

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### **Abstract**

Lockdowns brought on by pandemics have expedited the digital transition that has resulted from technology's unrelenting advancement and inescapable integration into daily life. A spike in the use of social media in particular was brought on by more people having free time during the worldwide COVID-19 epidemic. The continuation of several activities was guaranteed by this digital immersion, but it also sparked worries about digital tiredness and its effects on mental health. Several studies have advocated for further investigation into the mental health of digital natives globally, especially in nations like India where there has been a notable surge in social media usage, in recognition of the need to tackle these concerns. This study looks into the connection between increased screen usage and its effects on young people's mental health in Uttar Pradesh, India. The methodology for the research includes both qualitative and quantitative techniques. Online surveys were used to gather data from 200 participants, ages 15 to 29, and 10 in-depth interviews were conducted to augment the data. To improve the study, secondary data from reliable sources were also used. Through investigating the effects of prolonged screen usage on mental health, this study seeks to advance our knowledge of the difficulties encountered by today's digital citizens.

**Keywords-** Uttar Pradesh, Youth, Mental Health, Digital Fatigue, Social Media, COVID-19

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## **Introduction:**

The advent of the digital age has ushered in an era where technology is not just a facet of modern existence, but a fundamental cornerstone of our daily lives. The digital landscape has permeated every aspect of human interaction, reshaping the way we communicate, work, and entertain ourselves. However, the digital transformation, which was already well underway, witnessed an unprecedented surge during the global COVID-19 pandemic. As lockdowns and restrictions confined people to their homes, screens became the windows to the world, connecting individuals and providing solace during times of isolation.

*"In the era of digital omnipresence, it's essential to remember that screens connect us to the world but disconnecting occasionally is what connects us to ourselves."*

In this digital epoch, one facet that experienced a remarkable uptick in usage was social media. The extended periods of leisure resulting from lockdowns gave rise to heightened screen time, with individuals turning to social platforms as a source of entertainment, information, and connection. Social media became not just a virtual gathering place, but a lifeline to the outside world, bridging the gaps created by physical distancing measures. While this surge in digital immersion ensured the continuity of various activities and provided a semblance of normalcy, it also raised significant concerns about the consequences of such prolonged screen exposure on mental well-being. This study delves into the intricate relationship between the increased screen time driven by the pandemic and its impact on the mental health of the youth in Uttar Pradesh, India. The implications of this research extend beyond geographical boundaries, as the global community grapples with similar challenges. However, the focus on Uttar Pradesh is particularly salient due to the significant increase in social media users within the region.

## **Review of Literature**

A study by D'Alessandro, A., & D'Angelo, C.(2022) found that online fatigue was prevalent among Italian university students during the COVID-19 pandemic, and was associated with anxiety, depression, and sleep problems. A literature review by Singh, R. P., & Singh, A.(2022)

found that increased digitalization can lead to fatigue, due to factors such as sensory overload, attention fatigue, and sleep deprivation.

Another study by Sharma, K., & Kumari, M.(2021) found that increased use of digital technology during the COVID-19 pandemic was associated with negative psychological and emotional effects on children, such as anxiety, depression, and loneliness. Increased use of digital technology during the COVID-19 lockdown was associated with online fatigue, which in turn was associated with mental health problems such as anxiety and depression(Kumar, N., & Khan, M. A.,2021). Research undertaken by Sarkar, A., & Mandal, D.(2021) found that smartphone gaze could be used as a digital biomarker of mental fatigue. This could be used to develop interventions to prevent and manage digital fatigue. Yadav, M., & Tripathi, A.(2022) in their study found that increased digital media consumption during the COVID-19 pandemic was associated with negative mental health outcomes among Indian adolescents. A study undertaken by Jain, S., & Jain, A.(2021) found that increased digital media use among Indian youth is associated with a range of mental health problems, including anxiety, depression, and sleep problems.

Sherry Turkle's "Reclaiming Conversation: The Power of Talk in a Digital Age" (2016) offers a thought-provoking examination of how the digital age has influenced human communication. Turkle argues that the prevalence of digital devices and communication tools has led to a decline in face-to-face conversations. Her work suggests that the shift towards digital mediums has affected the depth and quality of interpersonal relationships, raising questions about its implications for emotional well-being. Jean Twenge's "iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood" (2017) presents an insightful analysis of the behaviors and attitudes of the so-called "iGen" generation, who have grown up in a highly digitized world. Twenge's research suggests a link between extensive screen time, decreased happiness, and a range of mental health challenges among today's youth. It prompts us to consider how digital saturation might be impacting their well-being. Nicholas Carr's "The Shallows: What the Internet Is Doing to Our Brains" (2010) provides a critical examination of the impact of the Internet on cognitive functions and brain plasticity. Carr's work suggests that prolonged internet use, characterized by

rapid information consumption and shallow engagement, may have consequences for cognitive abilities and attention span. This insight is highly relevant when exploring the relationship between screen time and mental health. In "Re-Engineering Humanity" (2018), Brett Frischmann and Evan Selinger delve into the profound societal changes brought about by technology. They argue that the design of digital platforms often prioritizes engagement and attention, potentially leading to addictive behaviors and, in the context of our discussion, negative consequences for mental well-being. Brooke Gladstone and Josh Neufeld's (2011) explores the media's role in shaping public perception and the impact of the digital age on our understanding of reality. While not solely focused on mental health, this work highlights the power of digital media in influencing our beliefs and perceptions, which can have indirect implications for mental well-being.

Together, these works contribute to a deeper understanding of the complex relationship between increased screen time, digitalization, and mental health. They highlight the need for further research to assess the nuanced ways in which the digital age is affecting the emotional and psychological well-being of individuals, particularly the youth, during and after the COVID-19 pandemic.

### **Objective of the Study**

The primary objective of this research paper is to comprehensively investigate the impact of increased screen time and digital habits on the mental and physical well-being of youth in Uttar Pradesh during the COVID-19 pandemic. This study aims to provide a nuanced understanding of how digital engagement has influenced mental health, physical health, coping strategies, and lessons learned among young individuals in the region.

### **Relevance of the Study**

The shift towards digital mediums that occurred during the pandemic, though essential, has brought about a myriad of consequences for society. One of the crucial aspects pertains to the mental well-being of the youth, a group that is particularly vulnerable to these changes. It is imperative to thoroughly investigate the impact on the mental health of young individuals, particularly in the context of the digital fatigue that arises from prolonged screen exposure. The

COVID-19 pandemic served as a catalyst for a host of socio-cultural and behavioral changes, and its effects on digital behavior and its mental health consequences warrant an in-depth examination. As individuals across the globe, and specifically in Uttar Pradesh, adapted to a more digitally connected world, it is imperative to explore the repercussions of this profound shift. By gaining a comprehensive understanding of the correlation between heightened screen time and mental well-being, this research aims to contribute to collective knowledge, facilitating more informed and nuanced discussions on the challenges faced by today's digital citizens.

### **Methodology**

The mixed method has been used to collect data. Both primary and secondary data have been collected for this study. Primary data has been collected by the researcher herself, through online survey form circulation and interviews by planning an interview schedule to get doing so, we can better address the pressing issues surrounding digital fatigue and its impact on min-depth knowledge. Secondary data has been collected, to enrich the study with other findings, and research, collecting data from secondary sources, magazines, newspapers, research articles, surveys, official websites, books, and other authentic sources were used. This research combines quantitative methods (structured surveys) with qualitative approaches (in-depth interviews) targeting youth aged 15-29 from various socio-economic backgrounds in Uttar Pradesh. Data has been collected from 200 people (15-29 years old) through a survey and from 10 people through the case study method. A pilot study was done to know the drawbacks and improve the same. Ethical considerations were kept in line while collecting data and conducting interviews.

### **Findings and Analysis**

The data collected from 200 people have been analyzed and the findings are as follows -

#### **Screen Time Patterns:**

- Among the surveyed youth in Uttar Pradesh, the majority (57.5%) reported a significant increase in their daily screen time during the COVID-19 pandemic. Additionally, 26% of respondents indicated a moderate increase, while 11.5% stated that their screen time remained relatively constant. Only 5% reported a decrease in daily screen time. These findings emphasize the

prevalence of increased screen time among the youth during the pandemic, warranting further investigation into its potential impact on their mental well-being.

- The majority of surveyed youth in Uttar Pradesh (91%) reported using smartphones as their primary device during the COVID-19 pandemic, with only a small percentage using laptops/computers (3.5%), tablets (2.5%), or smart TVs (3%) as their primary devices. The widespread reliance on smartphones highlights their convenience and accessibility, but it also suggests that many individuals may have engaged in extended screen time on relatively smaller screens. This preference for smartphones can be linked to various activities such as online learning, work, and entertainment, further underscoring the need to examine the potential implications of increased smartphone usage on mental well-being.

#### **Digital Activities:**

- The primary use of digital devices among the surveyed youth in Uttar Pradesh during the COVID-19 pandemic varied significantly. An overwhelming majority (85%) primarily utilized digital devices for online classes and educational purposes, emphasizing the critical role of technology in facilitating remote learning and maintaining educational continuity during the pandemic. Additionally, nearly all participants (99%) reported using digital devices primarily for social media, highlighting the importance of these platforms in maintaining social connections and engagement in times of physical isolation. A substantial portion of respondents (44.5%) used digital devices for gaming, signifying the appeal of gaming as a source of entertainment and diversion during the pandemic. Furthermore, 37.5% utilized digital devices for work-related activities, reflecting the shift towards remote work and the reliance on digital tools for professional responsibilities.
- A substantial majority (94.5%) of the surveyed youth in Uttar Pradesh reported engaging in specific digital activities more frequently than before the pandemic, indicating a significant increase in digital engagement. Only a small fraction (5.5%) did not experience an increase. This shift in behavior highlights the prevalence of heightened screen time during the pandemic, necessitating further examination of its potential implications for mental well-being.

#### **Mental Well-being:**

- The survey reveals a range of self-assessed mental well-being ratings among the youth in Uttar Pradesh during the COVID-19 pandemic. A significant number (35.5%) rated their mental well-being as "very poor" (1-3 on the scale), while 30% rated it as "fair" (4-6). A notable portion (25.5%) considered their mental well-being "good" (7-8), and 14% rated it as "excellent" (9-10). These diverse self-assessments indicate the varying experiences of mental well-being among the surveyed youth, reflecting the complex interplay of factors during the pandemic.
- The survey data shows that a substantial portion of the surveyed youth in Uttar Pradesh (66%) reported experiencing mental health challenges during the COVID-19 pandemic, while a notable fraction (34%) did not. This finding highlights the prevalence of mental health difficulties among young individuals in the region during the pandemic and underscores the need for further research to explore the potential links between increased screen time and these challenges.

### **Social Interaction:**

- A substantial majority of the surveyed youth in Uttar Pradesh (81.5%) reported using digital platforms for social interaction during the COVID-19 pandemic, with 74.5% indicating frequent use and 7% using them occasionally. A smaller group (3%) stated that they did not utilize digital platforms for social interaction. This data showcases the significance of digital technology in facilitating social connections and maintaining social interactions, especially during periods of physical isolation.
- The data reveals that digital interactions during the COVID-19 pandemic had varying effects on the sense of connection with others among the surveyed youth in Uttar Pradesh. A significant portion (54.5%) felt that digital interactions maintained or even strengthened their connections with others. Among them, 39% reported strengthened connections, and 45.5% noted that their connections were maintained. However, a smaller group (11.5%) indicated that digital interactions weakened their connections. These findings highlight the complex dynamics of digital socialization, where, for many, it has proven to be a valuable tool in maintaining and even enhancing social connections, while for others, it has presented challenges that affect their sense of connection with others.

### **Productivity and Learning:**

- The data shows that a substantial portion of the surveyed youth in Uttar Pradesh was able to maintain productivity and continue their education through digital means during the COVID-19 lockdowns. Specifically, 35.5% reported being able to do so very effectively (option "a"), while 42% found it somewhat effective (option "b"). However, a significant group (37.5%) reported that they were not able to do so effectively (option "c"). These findings highlight the diverse experiences of the youth in adapting to digital education and productivity during the lockdowns.
- The survey data suggests that a substantial number of the surveyed youth in Uttar Pradesh (67%) reported that increased screen time for educational purposes during the COVID-19 pandemic had negative effects on their mental health, while a significant fraction (33%) did not perceive such effects.

### **Physical Health:**

- The data indicates that a substantial majority of the surveyed youth in Uttar Pradesh (81.5%) reported that increased screen time during the COVID-19 pandemic led to physical health issues, while a notable fraction (18.5%) did not experience such issues. These findings emphasize the need for further research into the specific physical health challenges that may arise as a result of prolonged screen time and digital engagement during periods of lockdown and remote activities.
- The survey data reveals the impact of physical health issues, arising from increased screen time, on the overall well-being of the surveyed youth in Uttar Pradesh. A significant number (69%) reported that these issues significantly affected their overall well-being (option "a"), while 26.5% indicated that the impact was moderate (option "b"). A smaller group (4.75%) stated that the physical issues had a lesser effect on their overall well-being (option "c"). These findings highlight the substantial impact of physical health challenges resulting from increased screen time, suggesting that they can have significant repercussions on the overall well-being of young individuals during the pandemic.
- The survey data indicates the impact of physical health issues, attributed to increased screen time, on the overall well-being of the surveyed youth in Uttar Pradesh. A significant majority (69%) reported that these issues significantly affected their overall well-being (option "a"). In addition, 26.5% indicated that the impact was moderate (option "b"), signifying that these



physical issues had noteworthy repercussions. A smaller percentage (4.75%) stated that the physical issues had a relatively minor effect on their overall well-being (option "c"). These findings suggest the substantial impact of physical health challenges resulting from increased screen time, suggesting that they can significantly influence the overall well-being of young individuals during the pandemic.

### **Coping Mechanisms:**

- The survey data reveals that a substantial number of the surveyed youth in Uttar Pradesh (52%) reported developing coping strategies to manage the negative impacts of increased screen time on their mental health, while a significant portion (48%) did not. This finding suggests that many individuals recognized the potential adverse effects of increased screen time on mental health and took proactive measures to address these challenges.
- The survey reveals that, among the surveyed youth in Uttar Pradesh during the COVID-19 pandemic, a diverse range of activities and practices played a crucial role in maintaining their mental well-being. Exercise was highly valued by a significant portion of respondents (39%), suggesting the importance of physical activity in promoting mental health. Limiting screen time was equally beneficial for another substantial group (39.5%), highlighting the need for setting digital boundaries. Meditation was seen as helpful by a notable fraction (16%), emphasizing the role of relaxation practices in reducing stress. Seeking professional help was recognized as valuable by some (10.5%), underscoring the significance of mental health support. These findings underscore the multifaceted nature of maintaining mental well-being, with a combination of physical activity, screen time management, relaxation practices, and professional assistance contributing to overall mental health.

### **Future Screen Time Habits:**

- The survey reveals that, among the surveyed youth in Uttar Pradesh during the COVID-19 pandemic, a diverse range of activities and practices played a crucial role in maintaining their mental well-being. Exercise was highly valued by a significant portion of respondents (39%), suggesting the importance of physical activity in promoting mental health. Limiting screen time was equally beneficial for another substantial group (39.5%), highlighting the need for setting

digital boundaries. Meditation was seen as helpful by a notable fraction (16%), emphasizing the role of relaxation practices in reducing stress. Seeking professional help was recognized as valuable by some (10.5%), underscoring the significance of mental health support. These findings underscore the multifaceted nature of maintaining mental well-being, with a combination of physical activity, screen time management, relaxation practices, and professional assistance contributing to overall mental health.

- The survey data reveals the anticipated changes in screen time habits among the surveyed youth in Uttar Pradesh post-pandemic. A significant portion (39.5%) intends to reduce their screen time, demonstrating a proactive approach to address potential adverse effects and establish a healthier balance in digital engagement. A slightly larger group (50.5%) plans to continue with their pre-pandemic screen time habits, indicating a level of comfort with their current digital behaviors. A smaller fraction (10%) anticipates an increase in screen time, likely influenced by ongoing online education or work commitments. These findings depict a range of responses, reflecting individuals' adaptability to evolving digital landscapes and their considerations for future digital well-being.
- The survey data highlights several key lessons learned by the surveyed youth in Uttar Pradesh regarding managing screen time and its impact on mental health during the pandemic. An overwhelming majority (91%) recognized the importance of setting screen time limits, emphasizing the need to establish boundaries to protect mental well-being. Additionally, 60% acknowledged the significance of maintaining a balance between screen time and offline activities for their mental health. A substantial portion (34%) also learned that periodic digital detox is necessary to alleviate the potential consequences of excessive digital engagement. These findings indicate a proactive approach to managing screen time and promoting mental well-being, with lessons such as limit-setting, balance, and digital detox serving as valuable strategies.

### **Findings and Analysis Based on Interviews-**

Shweta, aged 16, discussed experiencing mental stress after prolonged use of social media platforms. She noted headaches and a weakening of her eyesight as issues stemming from her social media usage. Shweta primarily used these platforms to receive school notifications and

connect with friends. Rakhi, aged 19, revealed excessive social media usage, which she attributed to physical problems exacerbated by staying at home and being glued to her phone. She openly admitted to feeling addicted to her phone, constantly checking others' posts. Rakhi's inability to attend college outside her hometown left her feeling excluded when she saw her friends' Instagram stories, leading to persistent feelings of envy and loneliness.

Shagwan, aged 22, who has completed his graduation, shared his struggle with social media obsession, which consumed a significant portion of his productive time and disrupted his studies. He expressed mental stress due to not securing a job placement like his friends. Pawan, aged 25, residing with his family and having completed his graduation, discussed his day-long social media usage, which brought him happiness and contentment. However, he also revealed how his family constantly taunts him for not earning. Pawan disclosed the dark side of social media, which diverts attention from real-life issues. Moh, aged 18, described experiencing eye issues and numbness in his hand after prolonged phone usage. He disclosed feeling left out when he refrains from using his phone and mentioned the negative impact of unrealistic fitness standards promoted by physical fitness influencers.

Sandhya, aged 29 and a mother, expressed concerns about excessive phone usage affecting her child's upbringing. Her son constantly requested access to her phone to watch YouTube videos. Sandhya acknowledged her efforts to limit screen time and return to daily exercise for her well-being. Avinash, aged 20, and Himanshu, aged 25, both shared similar experiences. They used social media to showcase their talents in dancing and singing but expressed feeling disheartened and demotivated when their content received few likes or comments. They also noted the adverse impact of social media on their studies, leading to mental pressure and stress.

Pooja, aged 23 and currently pursuing her undergraduate degree, acknowledged feeling good while using social media. However, she revealed how her work often got delayed due to continuous scrolling on her mobile phone. Pooja also reported experiencing hand pain and obesity as consequences of prolonged phone use.

Tripti, aged 24, runs an Instagram store where she sells jewelry throughout India. She highlighted suffering from headaches and disturbed sleep due to physical inactivity caused by

staying highly active on social media. Tripti occasionally felt lonely and anxious, particularly when she received no orders or likes. She recognized the importance of balanced screen time but confessed to struggling with managing her social media usage effectively. These interviews paint a clear picture of how, while social media can provide moments of happiness and satisfaction, it also contributes to physical and mental stress among individuals, emphasizing the need for balanced digital engagement and effective management of screen time.

## **Conclusion**

The study underscores the pressing need to address digital fatigue and its mental health implications, especially in a post-pandemic world where digital integrations are bound to increase. It's imperative to find a balance, ensuring that while we leverage digital tools, we don't compromise on mental well-being. The comprehensive analysis of the 16 findings from the survey conducted among youth in Uttar Pradesh during the COVID-19 pandemic provides valuable insights into the complex relationship between screen time, digital habits, and mental well-being. The data indicates a multifaceted landscape where digital technology plays a pivotal role in the lives of these young individuals, both facilitating and challenging their mental health. A significant portion of the surveyed youth experienced a substantial increase in screen time, primarily driven by online classes and education, social media, and remote work. This surge in screen time, while essential for continuity in various activities, raised concerns regarding its potential adverse effects on mental health. A notable proportion of respondents reported experiencing mental health challenges, with a majority recognizing the negative impacts of increased screen time on their mental well-being. Additionally, physical health issues stemming from prolonged screen exposure were widespread, significantly affecting overall well-being. However, the survey also highlighted the adaptability and resilience of the youth in managing their digital habits and well-being. Lessons learned during the pandemic emphasized the importance of setting screen time limits, striving for balance, and occasionally engaging in digital detox. Many respondents expressed the intent to reduce screen time post-pandemic, signaling a proactive approach to address potential adverse effects. The diverse practices and coping strategies employed by the youth, such as exercise, meditation, and seeking professional help, underscore the multifaceted approach to maintaining mental well-being during the

pandemic. The data also highlighted the positive impact of digital interactions on social connections, with the recognition that digital interactions could both maintain and strengthen social bonds.

In summary, the findings reveal the intricate interplay of digital technology and mental well-being among the youth in Uttar Pradesh. While digital engagement is essential for education, work, and social connections, it also poses challenges, including screen time-related mental and physical health issues. The lessons learned and adaptive responses demonstrate the capacity of young individuals to navigate this digital age. The impact of increased screen time and digital usage on mental health is important and should be recognized by policymakers, educators, and mental health practitioners.

### **Recommendations:**

- Implement digital literacy programs and workshops for youth to enhance their awareness of responsible screen time management and strategies for mitigating potential negative impacts on mental health.
- Provide educational resources and support for coping strategies, such as exercise and mindfulness practices, to help youth effectively manage the challenges associated with increased screen time.
- Ensure access to mental health services and resources, both in educational institutions and within the community, to address the mental health challenges that some youth may experience due to screen time.
- Promote the importance of balance between digital and offline activities to maintain overall well-being, encouraging young individuals to engage in physical activities and face-to-face social interactions.
- Encourage periodic digital detox, where individuals can disconnect from screens to recharge and reduce the potential consequences of excessive digital engagement.

- For those engaging in remote work or online education, employers and educational institutions should consider flexibility in digital engagement and support mechanisms for screen time management.
- Invest in long-term research to gain a deeper understanding of the enduring effects of increased screen time on the mental and physical health of youth, informing future policies and interventions.

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