

USE OF ELECTRONIC DEVICES DURING COVID-19 IN INDIA

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ABSTRACT

purpose of this article is to evaluate the use of electronic devices during Covid-19 lockdowns in India. It discusses the increased use of electronic gadgets, the health impacts of electronic devices, and how electronic devices may be addictive. A sample of 53 participants was collected in which 34 were female and 18 were male. The findings suggest that individuals were influenced by excessive screen time and are attempting to limit their screen time due to health risks induced by electronic gadgets. We have then compared them with researches conducted by others across the world and we found similarities in the increase of screen time, health issues, etc. among people across the world. This research will form the foundation for similar research of these areas.

Keywords: Electronic Devices, COVID-19, Screen Time, Usage of Electronic Devices

INTRODUCTION

The use of digital technology has increased dramatically over the last two decades. It has increased people's exposure to long periods of screen time, which is becoming a growing concern. Digital technology is the use of electronic devices to store, generate, or process data; it also facilitates communication and virtual interactions on social media platforms that use the internet (Vizcaino et al., 2020). Computers, laptops, palmtops, smartphones, tablets, and other similar devices with screens are examples of electronic devices. They serve as a means of communication, virtual interactions, and interpersonal connectivity. Because of the COVID-19 pandemic, digital platforms have become the only way for people to maintain socio-emotional connections (Kanekar and Sharma, 2020). Digital technology influences how people use digital devices to maintain or avoid social relationships, as well as how much time they devote to virtual social connectedness (Antonucci et al., 2017).

Screen time refers to the amount of time spent online and the various activities performed on digital devices (DataReportal, 2020). For example, screen time includes both the use of digital devices for work (regulated hours of work or educational purposes) and for leisure and entertainment (unregulated hours of gaming, watching movies/ series, or social media use).

The COVID-19 pandemic was accompanied by restrictions, regulations, and orders to stay at home. This meant that people stayed at home, offices remained closed, playgrounds were deserted, and streets were devoid of human interaction. Many people were unable to return home, many were stuck in foreign lands, and many were left alone. As a result, the global adoption of digital devices has skyrocketed.

People of all ages are being pushed to rely on digital platforms. Education, shopping, working, meeting, entertaining, and socializing have all made the transition from offline to online. In this case, digital technology was a blessing in disguise, allowing people to remain emotionally connected despite the social distance. Simultaneously, prolonged screen time has raised concerns about its impact on physical and mental health. While mindful (and regulated) use of digital devices is associated with well-being, excessive screen time has been linked to a variety of negative mental health outcomes, including psychological problems, low emotional stability, and an increased risk of depression or anxiety (Allen et al., 2019; Aziz Rahman et al., 2020; Ministry of Human Resource Development, 2020). When digital use is impulsive, compulsive, unregulated, or addictive, negative consequences frequently occur (Kuss and Lopez-Fernandez, 2016).

The pandemic's restriction on social interactions exacerbated the overuse of digital devices for socializing, which included virtual dates, virtual tourism, virtual parties, and family conferences (Pandey and Pal, 2020). Notably, in times of social distancing, screen time may not negatively interfere with well-being because it is the only way to stay socially connected. However, the mindful use of digital screen time must be monitored. The unprecedented digital life during the pandemic also increased levels of anxiety, sadness, uncertainty, and negative emotions such as irritability and aggression, which is a normal response to a pandemic (Rajkumar, 2020). However, increased anxiety and aggression resulted in an increase in cybercrime and cyber-attacks (Lallie et al., 2021). Concerns have been raised about the impact of screen time on mental health. A survey found that internet use increased by 50-70% during the COVID-19 pandemic, with half of that time spent on social media in 2020. (Beech, 2020).

During the coronavirus outbreak, children and adolescents had lower levels of physical activity, less outdoor time, more sedentary behavior, including leisure screen time, and more sleep (Bahkir and Grandee, 2020). The media has reported a sudden increase in complaints of irritability without internet connectivity and smartphone; gambling, inability to concentrate;

absenteeism in online educational classes or work due to disturbed sleep cycles; and unavoidable excessive use of smartphones (Smith et al., 2020).

According to the WHO, increased screen time replaces healthy behaviors and habits such as physical activity and sleep routine, and leads to potentially harmful effects such as reduced sleep or day-night reversal, headaches, neck pain, myopia, digital eye syndrome, and cardiovascular risk factors such as obesity, high blood pressure, and insulin resistance among adults (World Health Organization, 2020).

According to an article by Chaffey (2022), social networks have altered marketing, and our newest worldwide social media statistics study summary for 2022 reveals that their popularity is still expanding. Networks' popularity varies by demography, and they are continually changing. According to research cited in this article by Global Web Index, more than half of the globe currently utilizes social media (59%) and 4.70 billion individuals worldwide use social media. The daily use average is 2 hours and 29 minutes (July 2022).

According to Rosenfield (2011), CVS may have a significant impact not only on visual comfort but also occupational productivity since between 64% and 90% of computer users experience visual symptoms which may include eyestrain, headaches, ocular discomfort, dry eye, diplopia and blurred vision either at near or when looking into the distance after prolonged computer use.

In a cross-sectional survey, 903 female students from four educational districts participated (Al-Khobar, Al-Thuqbah, Al-Dhahran and Al-Rakah). The Beck Depression Inventory and the Generalized Anxiety Disorder 7-item scale were used to collect data, as was a self-administered anonymous questionnaire that included questions on sociodemographics and the use of electronic devices. For categorical data, descriptive statistics comprised frequencies and percentages, whereas continuous variables included mean and standard deviation. The Chi-square test was used to determine the significance of the connection between categorical variables. Approximately 98% reported using electronic devices; 67.3% used them for two or more hours every day, and 81.5% used them before going to bed. Approximately 66% of students reported moderate-to-severe anxiety, and 70% reported mild-to-severe depression.(Al Salman et al., 2020)

According to an article by King University online (2017) stated that according to a recent poll by Common Sense Media research on mobile device usage, 50% of youth "feel hooked" to their mobile devices. According to CNN, 59 percent of parents believed their adolescent was hooked. More than 1,200 parents and teens were polled on mobile device use and family conflict.

According to statistics from 11,000 RescueTime users, the top 20% of smartphone users spend more than 4.5 hours each day on their phones during the week (Zalani, 2022).

METHODOLOGY

Aim:

To assess the usage of electronic devices among individuals during Covid-19 in India.

Sample and It's Selection:

A random sample of participants was taken to assess the usage of electronic devices during Covid-19 in India. The sample space comprises individuals from diverse age groups. Out of 53 participants, 34 are females and 18 are males. The survey was circulated amongst students and working professionals via social media platforms. The participant selection is done to better understand the usage of electronic devices among individuals.

Description of the Tool:

A survey was conducted through google forms and a questionnaire was made to understand the usage of electronic devices among individuals. The questionnaire consisted of 10 multiple-choice questions which describe how covid-19 affected the health of people, the increase in screen time of electronic devices, etc.

Procedure:

The participants were informed about the research and the author tried to maintain the privacy of the data collected. The informed consent is taken from all the participants. The questionnaire was shared and responses were collected through social media platforms like Instagram, LinkedIn, and WhatsApp. The survey took around 10 minutes to fill.

Analysis:

Comparative analysis refers to the comparison of two or more processes, documents, data sets, or other objects. Pattern analysis, filtering, and decision-tree analytics are forms of comparative analysis.

It involves taking one entity or piece of data, such as a statement, an interview, or a theme, and comparing it with others to identify similarities or differences. By isolating these aspects, it is then possible to develop a conceptual model of the possible relations between various entities

There are two main approaches to organizing a comparative analysis:

- Alternating (point-by-point) method: Find commonalities between each subject and alternate writing about them.

- Block (subject-by-subject) method: Discuss the entire first subject, then the entire second.

The researcher used the Alternating Method to compare past studies on customer behavior with their own study using a survey. The analysis of this study was done with the help of the review of literature as well as the data collected by the survey. A comparative analysis was conducted and statistical graphs were used.

RESULTS

Table 1: This table represents the data about why electronic devices are used by individuals during Covid-19.

Electronic devices used for	Responses	
	Yes	No
Social media	34 (65.4%)	18 (34.6%)
Web surfing	37 (71.2%)	15 (28.8%)

Table 2: This table represents the data about health issues caused by electronic devices among individuals during Covid-19.

Health issues caused by electronic devices	Responses	
	Yes	No
Emotionally distressed	31 (59.6%)	21 (40.4%)
Headache	36 (69.2%)	16 (30.8%)

Table 3: This table represents the data on the usage of electronic devices during Covid-19.

Usage of electronic devices	Responses		
	Yes	No	Maybe
Increased during COVID-19	37 (71.2%)	9 (17.3%)	6 (11.5%)

Increase can be linked to your day-to-day productivity	39 (75%)	13 (25%)	
Trying to reduce	17 (32.7%)	4 (7.7%)	31 (59.6%)

Table 4: This table represents the data on time spent on electronic devices by individuals during Covid-19.

Time spent on Electronic Devices	Responses				
	How much time do you spend on your electronic devices?	Less than 3 hours 9.6%	3 to 5 hours 17.3%	5 to 7 hours 57.7%	7 to 9 hours 5.8%
When do you spend more time on the phone?	Morning —	Afternoon 3.8%	Evening 5.8%	Night 15.4%	All 75%

DISCUSSION

The research is conducted to assess the use of electronic devices during Covid-19 lockdowns in India. Electronic devices are used for communication, entertainment, health monitoring, and social media activity. From our research, we found out that 65.4% of people use social media on electronic devices whereas 71.2% of people spend more time on web surfing. According to a study conducted by Chaffey (2022), 59% of people use social media on electronic devices.

In our research, we found that there are a lot of health issues caused by electronic devices 69.2% of people suffer from headaches and 59.6% of people become emotionally distressed after spending more time on electronic devices. According to Rosenfield (2011), between 64% and 90% of people suffer from headaches, and Al Salma et al. (2020), found out that 66% of people suffer from anxiety after spending more time on electronic devices.

We found that 71.2% of people has increased their usage of electronic devices during the covid-19 pandemic and according to Beech (2020), 50% of electronic device usage has increased during the covid-19 pandemic.

According to our study, excessive use of electronic devices can be linked to our day-to-day productivity 75% of people find electronic devices addicting and distracting. According to an article by King University online, they found out that 50% of teens feel addicted to electronic devices and more than 59% of parents feel that their children are addicted to electronic devices.

The time span of electronic devices has increased during covid-19, 9.6% of people spend less than 3 hours on electronic devices whereas, 17.3% of people spend 3 to 5 hours on electronic devices, 57.7% of people spend around 5 to 7 hours, 5.8% of people spend around 7 to 9 hours and 9.6% of people spend more than 9 hours on electronic devices. According to a study by Zalani (2022) found that 20% of smartphone users spend more than 4.5 hours on their phones during weekdays.

According to our research, 32.7% of people are trying to reduce their daily screen time because of headaches, anxiety, depression, etc.

CONCLUSION

This research paper has established the tone for subsequent research efforts. All of our findings echoed those of other researchers throughout the world, but there have been behavioural shifts that our study has been able to detect.

It aims to assess the use of electronic devices during Covid-19 lockdowns in India. As the usage of electronic devices has increased during the Covid-19 pandemic, people are becoming more prone to cyber-attack. Our comparative evaluations reveal that the trends of excessive screen usage have an impact on individual productivity.

This research paper discusses the health consequences of excessive screen usage, how addictive electronic devices can be, and how they are tied to our daily productivity amid the Covid-19 epidemic. It also discusses how many individuals are attempting to minimise their daily screen time due to the health risks associated with excessive use. We need a better understanding of the impact of Covid-19 and how people's behaviour has changed since the outbreak. It has many challenges which should be overcome by future research such as a bigger sample size and the selection of sample such as age, region, etc. There can be more in depth questions focusing on the areas.

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