

# Decreasing the Screen Time on Social Media using Time Limitations

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**Abstract:** *Overgrown technology spoils audiences with current features, such as social networking, which is a component of today's technical advancements. In recent years, social networking applications have had a significant impact on individuals' health and most of them are students. Many platforms include elements that encourage people to share their impressive routines on these networks. One of the issues that arise as a result of abuse and inadequate use is the rising rate of depression. In addition, Excessive screen time has become a major issue as digital technology has advanced. As a result, researchers and practitioners have turned their attention to digital well-being. The purpose of this study is to reduce the screen time for we proposed the possible approach.*

**Keywords:** Social Media, Online Social Network (OSN), Time Limitation, Physical Health issues, Screen time, Battery usage, Power consumption.

## I. INTRODUCTION

Significant changes have occurred throughout the world in terms of the quantitative and qualitative expansion of the internet, social networks, and the number of individuals who use them in recent years. Websites and applications that allow users to exchange material, ideas, views, beliefs, sentiments, and personal, social, and educational experiences are throughout social networks.

It makes it easy for individuals all over the world to connect via photo or video. Users can also utilize social media to interact with and meet others who are far away. Social networking is the technology that makes it all possible. To the study [1], Currently (Jan 2022), the number of internet users in the world is about 4.95 billion out of the number of unique mobile users 5.31 billion [1], In the last year, the overall number of internet users worldwide increased by 192 million. The study [1] observe Out of that 4.62 Billion people used social media. The difficulties linked with excessive usage and addiction have become increasingly common as the number of Facebook users has grown [3]. In this regard, signs, and symptoms of social media addiction include disruption of daily tasks and activities, more than an hour per day of use on social media, curiosity to view profiles of old friends, and media use. Social networks, as well as feelings of anxiety and stress due to lack of access to social networks increase.

Along with mental health, Excessive use of social media affects physical health such as eyestrain and difficulty in focusing on important tasks. [5] A new study by University of Buffalo researchers found that social media use is associated with biological and psychological indicators of poor physical health among college students.

What is the relationship between social media use and physical health? [5][6] Changing health behaviors might be one way to get there. Several studies have found that excessive usage of social media or screen time might affect sleep quantity and quality. This may be especially true for people who are addicted to social media or who use their phones excessively—addictive social media or mobile phone use can lead to poor sleep quality and insomnia. [7][8].

Nowadays, a new idea known as Instagram reels, YouTube shorts is gaining popularity because it has swipe capabilities that allow users to watch different interesting videos with each swipe. Users become eager to see the next videos and lose track of time. According to Kantar's report [9], the average time spent on Instagram per day has more than doubled (2.3X), while time spent on Facebook has increased by 35%, with the majority of this additional involvement coming from consumers in smaller towns. During the pandemic, the average daily time spent on Instagram increased by 35%

among young people under the age of 24. To solve this problem we proposed the possible approach to diminish the use, which also reduces the screen time.

## **II. REVIEW OF LITERATURE**

### **Impact of Social Media on Physical and Mental Health**

Despite the potential negative health impacts of screen usage, it is hard to avoid it in today's world. According to a study [10], Screen time that is not restricted can have negative health consequences. The impacts of regulated, sensible use and actively engaging with digital gadgets are different than simply absorbing what is on the screen. In the study [11] American Optometric Association, as little as two hours of continuous digital gadget use per day is enough to cause digital eye strain, which affects a variety of eye and vision-related disorders. Long-term usage of these devices, according to a study [12], not only strains the visual system but also causes musculoskeletal strain and disrupts the circadian cycle. Furthermore [21], lowering the duration of sleep may interfere with the release of serotonin and melatonin, raising students' stress and anxiety levels. As a result, these hormone changes hurt cognitive ability and brain function.

### **The Consequences of Social Media Addiction**

Social networking addiction is one of the drawbacks that many social network users may face. Social networking addiction is defined as a mental preoccupation with the usage of social networks and the allocation of time to these networks to the point where it interferes with other social activities such as professional and interpersonal relationships. As a result, increasing usage of social media represents a new type of soft addiction [14]. Addiction varies by demographic characteristics such as sex, according to the social control theory [14], some forms of addiction are more likely to be found in particular groups of society than in others. According to the behavioral explanation hypothesis, people utilize social networks for a variety of reasons, including escape from reality and enjoyment. The presence of particular chromosomes or hormones, or the lack of specific substances that govern brain activity, according to the biological explanation theory, is effective in addiction [15, 16].

### **Study of self-Esteem and Satisfaction**

There is a favorable association between self-esteem and Internet addiction, according to various research [18]. Certain trends were identified by Kraut et al. in the study [17], People with poor self-esteem use the Internet to compensate for their difficulties in social relationships, according to their notion, known as "social compensation" in the literature. The "rich become richer" theory states that individuals with high self-esteem enjoy the great pleasure on the Internet; they are active online and have a big number of friends, implying that those who manage well in the real world would also manage well in the virtual world.

For instance, according to an Australian study [19], Facebook connectivity is linked to decreased depression and anxiety, as well as improved life satisfaction. Similarly In a study [20], In a sample of 2603 college students from throughout Texas, a positive association between Facebook intensity and life happiness was discovered.

### **Excessive Data and Battery Usage Play a Role in Energy Consumption**

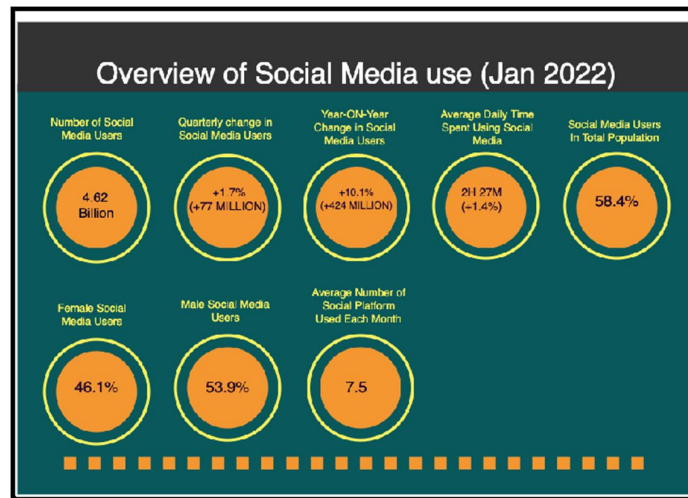
The study [22], shows that the amount of energy consumed to power the Internet is rapidly increasing as the number of connected devices, the quantity and types of services, and the quantities of data transmission, processing, and storage increase. Simultaneously, the services it delivers are becoming more integrated into every day and organizational life. In many economically developed nations, the proportion of Internet users has consistently climbed to more than 90%. The other online activities included checking emails, news, weather and social media, banking, and searching for information on products, travel arrangements, and personal interests. [23] Mornings were the busy period for using these services, as traffic numbers at exchange locations are substantially lower than in the evening. This is consistent with findings showing general web surfing and other online services, such as social media apps, are going to consume more battery usage. The operating system is responsible for controlling all of the smartphone's hardware and software, as well as system-level power management. While using the application Instagram the processes running in the main memory, when the read-write operations increase the degree of multiprogramming is also increasing, due to this RAM (Random Access Memory) of mobile phone consumes more power as the more page fault occurs.

**III. RESEARCH METHOD**

Now a day social media is one of the ways to communicate between people which is the best feature of Online Social Networks (OSN). Day by day as technology is upgrading OSNs are also upgrading. There are various features in OSN which are freely available but the bitter truth is nothing is free.OSN is free do not need to purchase but for that, we have to pay for our time i.e social media consumes time. while using OSNs people don't remember the time and they waste their important time on OSNs. The solution for this problem is timeremainder, Yes this is only the solution to remind the user how much time the user has to spend while using OSN. there will be a remainder which will be set at a particular time and when the time will be completed it will give an alert message like "You're using this OSN from 10 min". By using this method users will get to know how much amount of their important time they had spent on OSN. This will limit on-screen time, aswell as health risks associated with on-screen time, such as headaches and eye disorders.

**IV. FINDING AND ANALYSIS**

In findings, found that during the COVID-19 epidemic, there is a growing amount of study on the rising patterns in screen usage and its accompanying health impacts. In a study[24], A survey of 254 Canadian families with young children found that 74%, 61%, and 87% of mothers, fathers, and children increased their screen usage during COVID-19, respectively. The study[24] employed a quantitative approach. The researchers utilized Google Forms to collect data in the form of a questionnaire. And according to 101 respondents who completed the poll, women account for 79.2 percent of active social media users. According to the survey findings, the majority of respondents identified Instagram as the most often frequented social media network, followed by YouTube (30.9 %) and Twitter (23.5%). According to Hootsuite 2021 Q4 report, 5.29 Billion unique mobile users are there out of that 4.55 Billion active social media users are there Average amount of time spent by the age group 16 to 64 on various media and devices is 2 hours 27min. [1] The analysis for an overview of social media use, according to the Hootsuite report Jan 2022 is shown in fig 4.1.



**Fig.4.1: Overview of Social Media Use Jan 2022**

**V. RESULTS**

The methodologies and types of research used in the studies were heterogeneous. Excessive use of social media is a serious problem that has an impact on the physical and mental health of human beings, Experiences consequences like digital eye strain, and screen time affects sleep quantity and quality. By implementing the time limitation feature in this module we can remind the user that from how much time he is using social sites/applications it makes an alert for the user to stop using for a while

**VI. DISCUSSION**

It is unavoidable to recognize the necessity to be socially linked with one another, which has also resulted in a significant rise in screen time during the COVID-19 induced lockdown. The literature says on-screen time reflects both the beneficial

and negative effects of screen time on mental health. Attention is drawn to digital literacy and parental monitoring of children's digital behaviors. The increased usage of video games among young people is worrying. The potential way to create a counseling session for students and employees in the organization aims to raise awareness.

## VII. CONCLUSION

The high frequency of mobile phone usage at the start of the study was a risk factor for poor mental health outcomes. The probability of reporting mental health symptoms at follow-up was highest among individuals who perceived mobile phone accessibility to be stressful. Attitude-based public health preventive measures should include information and assistance to encourage young adults in setting a limit for their own and others' accessibility.

The majority of data points to the harmful impacts of extended screen usage on health, especially mental health. Although digital technology allows people to engage socially, excessive usage of digital gadgets might be hazardous in the long run. Promoting good digital habits and beneficial usage of digital technology is unavoidable if the negative impacts of excessive screen time are to be avoided. To reduce these negative impacts, individuals must be empowered to make scientifically informed decisions. Building and absorbing healthy digital habits is a possible health-promoting preventative approach in the face of global digitalization.

## VIII. LIMITATIONS

The most effective strategies for minimizing technology harm are not technical at all, but behavioral, such as self-imposed limitations on the use of digital platforms, as this paper, discuss the module of time limitation feature, and as a human tendency after closing the application people also attempting to re-access it.

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