

# Impact of Smartphone Addiction on Youth: A Critical Analysis

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## **Abstract:**

The services and applications provided by smartphones are increasingly causing addiction among youth. The vast content available on smart phones-entertainment options, various apps, social media platforms like Face book, Instagram, YouTube, gaming, OTT platforms, internet surfing, audio-video calling, exciting messaging platforms such as whatsapp and Telegram, net banking, digital transactions, camera, selfies, audio-video recording, shopping platforms like Amazon, Flipkart, Meesho, Olx, educational apps, ticket booking apps, AI applications, and countless others—are now necessities for people of all age groups, from children to the elderly. Among these, the youth are the most active users. For many young people, smart phones have become a status symbol and a tool for personal security. Today's smartphones replaced many items such as the clock, calculator, camera, torch, paper, radio, VCR, record player, postcard, inland letters, handwritten letters, and diaries. After consuming all these objects, the smartphones now begun consuming human beings-specifically their time, eyesight, hearing abilities, mental peace, mutual love, social relationships, physical and mental health, sleep, and even their relationships. In extreme cases, smart phones have been linked to road accidents, suicides, and conditions like virtual autism. Smart phones are now so "smart" that people, especially youth, are unable to live without them. They are becoming addicted and falling victim to a kind of "sweet poison." Findings from psychological and medical research point toward serious dangers. While smart phones are making aspects of life easier, their excessive use is giving rise to numerous physical, mental, and social problems, with consequences that can be extremely harmful. This research paper aims to identify the symptoms of Smartphone addiction based on facts obtained from various studies and sources, analyze the causes of addiction and its harmful consequences, and raise awareness among youth about Smartphone addiction. The paper also seeks to educate them on smart and balanced usage so that they can use smart phones effectively for personal growth, avoid the negative impact on their physical, mental, emotional, and social well-being, and eventually overcome the addiction.

**Key words:** Youth, Smartphone, Smartphone Addiction.

## 1. Introduction

The journey from ancient times to the present has been filled with numerous inventions. In other words, many discoveries and innovations have taken place from the past to the present. These inventions have not only made human life simpler and more convenient but have also made many tasks easier. One such invention is the smart phone. A smartphone is a device or rather, a medium without which imagining human life today is nearly impossible. Everyone from children to youth uses smart phones. It is a powerful medium of communication. Through it, individuals can talk to their friends, neighbors, and relatives and can also send emails. Nowadays, most tasks in colleges and universities are also conducted via mobile phones, allowing students to access everything from home and even attend classes through their phones. The mobile phone has become such a technological device that a large number of young people have become dependent on it. They have little to no time; they are so engrossed in their mobile phones that they become unaware of the activities happening around them, leading to an increase in Smartphone addiction among youth. In ancient times, although facilities were limited, people had time. They would participate in each other's joys and sorrows, support one another, and visit their relatives. But as conveniences increased, people started living in isolation. This has led to various problems and diseases such as stress, high blood pressure, memory loss, sleep disorders, weakened eyesight, irritability, and loneliness.

In today's time, the Smartphone is a multifunctional device capable of fulfilling almost any task. For example-shopping, paying bills, sending messages, entertainment, and more. With every new feature or activity associated with smart phones, their usage has increased. Though we can see many positive effects, the negative impacts are often more noticeable. The blue light emitted by smart phones is so harmful to the eyes that it not only affects sleep but can also weaken eyesight. It also damages the human brain. Excessive use of mobile phones invites diseases such as insomnia, irritability, sadness, loneliness, and forgetfulness. Nowadays, almost everyone is glued to their mobile screens. Mobile addiction has become a serious problem and a matter of concern. It affects not only physical health but also mental health, traditions, and daily activities. Youth addicted to mobile phones may suffer from a condition known as nomo phobia, a fear of being without their mobile phone. Psychologists compare smart phones to slot machines. Dopamine is a chemical in the brain that stimulates feelings of happiness. It is released every time a person receives a message, alert, or notification on their smart phone. The growing addiction among youth can be controlled if parents monitor their children's activities, teach them the right way to use smart phones, and keep them engaged in other activities. This addiction can be reduced by setting a time limit for phone use, keeping the phone away while studying, practicing yoga, doing exercise, showing interest in sports, walking, or participating in other physical activities. Collectively, these studies highlight the multi-dimensional impact of smartphones on physical health. While these technologies offer connectivity and convenience, their overuse without ergonomic awareness and digital hygiene can lead to significant health issues. Therefore, further longitudinal studies and public health interventions are essential to mitigate these effects, especially in vulnerable populations like adolescents.

## Significance and Need of the Research

According to data from the Global System for Mobile Communications (GSMA), at the beginning of 2024, there were 1.2 billion cellular mobile connections in India. These statistics reveal that in January

2024, the number of mobile connections in India was equivalent to 78.8% of the total population. Thus, the Smartphone has become a widely popular mobile device-most people own one, it is commonly used, offers a large number of applications, and is more affordable compared to tablets. Its most notable feature is its portability, allowing individuals to carry and use it anytime, anywhere, with ease. In the present time, the youth are using smart phones extensively. People are being encouraged to read through smart phones. As India moves toward becoming a Digital India, how can the youth remain untouched by smart phones? Wherever they are or go, they are constantly connected to their mobile phones in one way or another. Gradually, the youth become addicted to it, without even realizing when a mere hobby turns into a habit. This addiction negatively impacts their educational achievement, physical health, and mental well-being. To overcome these problems and maintain good health, it is essential to break free from Smartphone addiction. But the question is: how can we overcome this? How can smart phones be used wisely? To answer these questions, it is necessary to conduct a study on this subject. The future of any country lies in the hands of its youth. This is an age full of enthusiasm and energy. However, today's youth are becoming increasingly lazy, stressed, and victims of loneliness. One of the main reasons is the excessive use of smart phones. Undergraduate and postgraduate colleges have promoted learning through smart phones, causing youth to remain constantly glued to them. Due to the widespread availability and accessibility of smart phones, they have now become an essential tool. Therefore, their usage must be approached with wisdom and care. Excessive use of anything is always harmful.

### **Statement of the Problem**

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### **Objectives of the Study:**

1. To study the symptoms and causes of Smartphone addiction among youth.
2. To study the negative impacts resulting from Smartphone addiction among youth.
3. To study the preventive measures to avoid Smartphone addiction among youth.

### **Review of studies:**

The rapid proliferation of smart phones has sparked considerable research interest concerning their impact on human well-being. The literature identifies several domains- physical, mental, social, psychological, emotional, and economic-where Smartphone use can yield both positive and negative outcomes. Several studies have highlighted the adverse physical health outcomes associated with excessive Smartphone usage. **Wacks and Weinstein (2021)** reported that prolonged Smartphone use among adolescents and young adults is linked with musculoskeletal disorders, including neck shoulder and hand pain due to poor posture and repetitive movements. **Silva et al.(2017)** indicated that excessive mobile phone use contributes to a sedentary lifestyle and reduced physical activity, increasing the risk of obesity and other health complications. **Zagalaz-Sánchez et al.(2019)** examines the relationship between smartphone use and reduced physical activity (PA). Analyzing 14 studies, the authors found that 9 reported a negative association between smartphone usage and PA, particularly among individuals aged 13–25. The review highlights that excessive smartphone use can lead to decreased motivation for physical activity and increased sedentary behavior. Digital eye strain is another notable concern. A study

by **Tegtmeier (2018)** emphasized that continuous screen exposure causes visual fatigue, dryness and blurred vision. Moreover, Smartphone overuse has been correlated with sleep disturbance. According to **Alhazmi et al. (2021)**, the exposure to blue light emitted from screens suppresses melatonin production, disrupting circadian rhythms and leading to poor sleep quality. Excessive Smartphone use has been closely linked with various mental health concerns, particularly among adolescents and young adults. Depression, anxiety, and attention difficulties are among the most commonly reported outcomes. A large-scale longitudinal study by **Twenge et al. (2018)** observed a significant increase in depressive symptoms and suicidal ideation among adolescents who used digital media excessively. The study concluded that the constant comparison on social media platforms and the disruption of real-world social interactions contribute heavily to deteriorating mental well-being. Furthermore, Smartphone addiction has been associated with reduced academic performance, lack of emotional regulation, and increased perceived stress. **Elhai et al., (2017)**, Smartphones have reshaped the nature of human interaction, often resulting in reduced face-to-face communication and weakened social bonds. While they offer tools for staying connected virtually, overreliance on mobile devices has been found to impair the development of deeper interpersonal relationships. A study by **Misra et al. (2016)** revealed that the mere presence of a smartphone during conversations reduces the perceived quality and empathy of the interaction. This phenomenon, often referred to as "phubbing" (phone snubbing), can lead to feelings of social isolation and interpersonal dissatisfaction. From a psychological perspective, smartphone overuse can lead to cognitive overload, impulsivity, and addictive behaviors. According to **Montag and Walla (2016)**, smartphone use triggers the dopaminergic reward system, similar to other behavioral addictions. This reinforces compulsive checking behaviors and decreases the user's ability to delay gratification. Over time, these patterns may lead to psychological dependence and decreased self-regulation, especially in young adults who are more susceptible to novelty-seeking behavior. Smartphones influence emotional regulation by promoting instant gratification, emotional reactivity, and social comparison. According to a study by **Kuss and Griffiths (2015)**, frequent use of social media apps on smartphone enhances exposure to curated content, leading users to experience feelings of inadequacy, envy, and low self-esteem. This continuous emotional fluctuation, driven by likes, comments, and notifications, creates a fragile self-concept, especially in adolescents. Smartphone usage has economic implications both at the individual and societal levels. On a personal level, excessive smartphone spending (on apps, data, subscriptions) can lead to financial stress, particularly among youth with limited income. Additionally, smartphone addiction can reduce productivity in the workplace. **Duke and Montag (2017)**, highlighted that distractions from smartphones cause time loss and lower cognitive efficiency, directly affecting job performance and economic output. Moreover, industries also face increased health insurance claims due to health issues linked to prolonged smartphone use.

### **Symptoms to Identify Smartphone Addiction:**

There are several signs that can help identify Smartphone addiction in a person. If you or your child is addicted to smart phones, the following symptoms may be observed:

1. Repeatedly reaching out for the phone.
2. Spending most of the free time on the phone.

3. Checking notifications while staying awake late at night.
4. Talking on the phone or texting while driving, eating, or even during bedtime.
5. Getting angry or anxious when the phone is not available.
6. Feeling restless if a message is not replied to.
7. Difficulty falling asleep; preferring to spend time alone.
8. Getting irritated or angry over trivial matters.
9. Feeling uneasy when the network is weak or the battery is low.
10. Experiencing neck pain and cervical issues.
11. Checking the phone repeatedly without any reason.
12. Staying engaged on the phone instead of spending time with family and friends.
13. Inability to focus on studies, work, or other activities.
14. Playing games on the phone continuously while ignoring other important matters.
15. Threatening to commit suicide or run away from home if prevented from using the phone.

## **2. Causes of Smartphone Addiction**

In the present time, our lives have become heavily dependent on technology developed by humans. These technological tools have transformed the way we communicate, travel, think, and learn. With the constant progress in technology, many aspects of our learning and lifestyle have changed. Recently, smartphone addiction has emerged as a significant issue among users. It is important to understand the causes behind this addiction, which are as follows:

**Compact Size:** The size, screen, and camera features of smartphones attract youth. Their portable design allows people to use them anytime and anywhere. As they function like computers, people become dependent on them.

**Functionality:** Smartphones are technical devices that can perform tasks quickly—whether it's sending a message, transferring money or data, attending classes, or paying bills. These features make users rely on smartphones.

**Gaming:** Modern smartphones come with various games, which especially attract children and youth, compelling them to use phones more frequently.

**Impact of Social Media:** Social media platforms like Instagram, Facebook, and WhatsApp connect people with friends and family, and also allow them to instantly share activities, achievements, and updates. Likes and comments on these platforms become addictive, leading to constant checking and increased dependency.

**Digital Payment Facility:** During the COVID-19 pandemic, payment habits shifted, and digital payments replaced cash transactions. This saved time spent on visiting banks and ATMs and made tasks like paying electricity bills or buying groceries much easier, thereby increasing smartphone usage.

**Status Symbol Perception:** Among youth, there's a misconception that having an expensive and feature-rich Smartphone is a symbol of higher status. This leads to emotional attachment and overuse of high-end smart phones.

**Easy and Fast Source of Information:** The internet provides instant access to all types of information, causing people to frequently use their phones to search for answers.

**Online Shopping and Services:** Regular use of smart phones for shopping, food delivery, and other services eventually becomes a habit.

**Affordable Source of Entertainment:** Smart phones offer various entertainment apps such as music, TV, reels, movies, games, and sports channels that keep youth away from outdoor games and physically inactive, offering solitary excitement.

**Monetary Benefits from YouTube:** YouTube is a social media platform that pays users based on likes, subscribers, and watch time for uploaded videos. Many young individuals get attracted by this and spend a lot of time creating and uploading content.

**Issue of Nuclear Families:** In today's society, nuclear families are increasing. In such environments, youth often deal with loneliness by immersing themselves in Smartphone use.

**Working Parents :** When families are nuclear and both parents are working, children do not receive enough attention. As a result, they turn to smart phones to fill that emotional gap and eventually become addicted.

**Convenience in Physical and Mental Tasks :** Smart phones have simplified many physical and mental tasks, such as paying bills without standing in lines, online shopping that reduces physical effort, taking notes, doing assignments, solving math problems, writing articles, and gathering information. This growing reliance makes it harder for youth to stay away from smart phones.

**Lack of Competition and Mutual Love :** Modern lifestyle promotes competition, leading to a lack of love and empathy in relationships. Everyone is in a race to surpass others, and human qualities like cooperation, sacrifice, kindness, and contentment are diminishing. As a result, emotional connections



are weakening, people are experiencing loneliness, and they are turning to smart phones for comfort—thereby increasing dependency.

### 3. Adverse consequences of Excessive Smartphone Use

When you use your mobile phone excessively, you may face various problems or negative effects that can harm your body. These issues include:

- **Neck-related problems:** Excessive Smartphone use can lead to neck disorders, commonly known as "Text Neck", which refers to the pain in the neck. Nowadays, conditions like cervical pain are often the result of too much phone use.
- **Eye-related issues:** Smartphone use can cause digital eye strain. Staring at a screen for long periods puts pressure on the eyes, resulting in fatigue, swelling, headaches, redness, and vision problems.
- **Auditory hallucinations:** Overuse of smart phones for listening to music or watching short videos can lead to hearing-related illusions or problems.
- **Impact on academic performance:** When students use smart phones more for non-academic purposes than studying, their academic performance suffers, often leading to poor grades that affect their future.
- **Increase in road accidents:** Smart phones contribute to road accidents, as people often talk or text while driving, increasing the chances of collisions.
- **Disrupted sleep quality:** Excessive Smartphone use can disturb your sleep. The blue light emitted by phones affects the melatonin hormone, leading to insomnia, which can result in diabetes, heart issues, and depression.
- **Impact on relationships:** Spending too much time on the phone means neglecting real-life relationships. Constant phone checking leads to missing out on meaningful moments with loved ones, fostering feelings of rejection and harming mental well-being.
- **Health concerns:** Studies show smart phones negatively affect health. Mobile radiation has been classified as possibly carcinogenic by the International Agency for Research on Cancer. It can cause skin issues like acne, wrinkles, and dark spots, and long-term use may lead to heart problems.
- **Stress:** Rising stress levels in youth are often due to Smartphone over use. Continuous work-related phone use blurs the boundary between home and work life, increasing stress and pressure.
- **Effect on social life:** Smartphone use affects both personal and social life. People often prefer texting over face-to-face communication, becoming absorbed in their virtual world and facing social isolation.
- **Reduced creative thinking:** Constant Smartphone reliance makes people lazy and weakens their ability to think creatively or solve problems independently.
- **Reduced efficiency:** Smart phones reduce a person's efficiency by limiting practical tasks and interpersonal interactions, hampering problem-solving skills.
- **Inability to complete tasks on time:** When engrossed in phones, people lose track of time, making it hard to complete other tasks punctually.

- **Increased financial burden:** Using smart phones for internet and calls frequently can strain finances, especially when multiple family members need regular recharges.
- **Loneliness and depression:** Smartphone addiction can lead to loneliness and depression. Though phones may temporarily distract from loneliness, they eventually worsen it. A 2014 study found a link between high social media use and increased depression and anxiety.
- **Attention disorders:** The constant stream of notifications and information from smart phones strains the brain and reduces the ability to concentrate on one thing for extended periods.
- **Obesity:** Excessive use limits physical activity, contributing to weight gain and related health issues.
- **FOMO (Fear of Missing Out):** The fear of missing something important on social media can lead to mental instability.
- **Disconnection from reality:** People become so immersed in the virtual world that they disconnect from their surroundings.
- **Dissatisfaction:** Comparing one's life to others on social media can cause feelings of dissatisfaction.
- **Encouraging narcissism:** A UK study found that people who spend excessive time on social media are more likely to display narcissistic traits, such as constantly posting selfies or life updates, which can damage real-life relationships and increase stress.

### Ways to Overcome Smartphone Addiction

Treating Smartphone addiction is not easy. Like other addictions, there is no approved medical treatment for it. However, there are some methods or strategies that can help you overcome this addiction:

- **Use only when necessary:** Use your Smartphone only when it is truly needed; otherwise, keep it in your bag or pocket. Avoid picking it up repeatedly.
- **Crime risks linked to smart phones:** Nowadays, criminals are using smart phones as a tool for crime due to their excessive use. This includes phishing, hacking, identity theft, online fraud, cyberbullying, ransomware attacks, spreading fake news and rumors, and digital arrests—these are also considered harmful effects of smart phones.
- **Set a time limit:** Whenever you use your smart phone, set a specific time limit for usage and stick to it.
- **Turn off notifications:** Turn off notifications from various apps. This will help prevent you from being constantly distracted by your smart phone. It may feel difficult at first, but it will help you break the addiction.
- **Self-control:** Try to consciously avoid using your phone. Do not take it with you while eating or using the bathroom. Keep your phone away from you while sleeping. Instead of focusing on your phone, direct your attention toward other activities. This will help you overcome the habit to a great extent.
- **Schedule time for talking to people:** To beat Smartphone addiction, set specific times to talk to people and follow that routine.



- **Turn off mobile data when not needed:** If you're addicted to your Smartphone and want to get rid of it, keep your mobile data turned off and turn it on only when needed. This will gradually reduce your interest in using your phone.
- **Remove unnecessary apps:** Delete apps you rarely use. Many people keep similar apps on their phones that serve the same purpose (e.g., keeping both ShareIt and ShareMe, or Google Pay and Paytm). Keep only the most useful ones. Removing unnecessary apps can help reduce Smartphone usage.
- **Talk to family members:** Spend more time talking with your family and friends. This will not only reduce your stress but also help you get rid of phone addiction.
- **Monitor screen time:** Use features like “Digital Wellbeing” or “Screen Time” to track how much time you're spending on your phone. This can help you gain control over your phone usage.
- **Seek therapy:** If Smartphone addiction is severe, you may opt for therapy such as Cognitive Behavioral Therapy (CBT), which is effective in treating addictions. Other therapies like contingency management, motivational interviewing, and couple counseling can also help.
- **Take a digital break:** Take a break from your phone for a few hours or a day each week. This digital detox will help reduce your dependency on smart phones.
- **Increase physical activity:** To cut down on unnecessary phone use, spend time doing outdoor games, yoga, or exercise. This will benefit you physically and mentally and also keep you away from your phone.
- **Use 'Do Not Disturb' mode:** Enable this mode while working or sleeping so that you're not distracted and can stay focused on your tasks.
- **Develop positive habits:** Follow a fixed routine that limits your Smartphone use. Read books and use educational materials to expand knowledge. Increase physical activities and reduce digital dependence.
- **Seek professional help:** If Smartphone addiction becomes serious, consult a psychologist or counselor. Participate in digital detox programs. Since this addiction can have severe consequences, don't hesitate to take professional help to overcome it.

#### 4. Analysis and Conclusion

The Smartphone is a necessity of modern times and is useful in every field today. However, it is essential to understand that it is a tool, not a goal. Smart phones are meant to save time, not to waste it. Unfortunately, the reality, especially among the youth, is quite the opposite. Young people are becoming so addicted to smart phones that they cannot stay away from them, leading to Smartphone addiction. This addiction results in physical, mental, social, economic, and emotional harm as individuals spend all their time engrossed in their phones. Efforts by parents to curb Smartphone addiction often lead to extreme reactions among teenagers, with some cases resulting in suicide. Many road accidents are also caused due to Smartphone usage. Children, due to excessive Smartphone usage, are becoming victims of virtual autism—a condition where they fail to pay attention to their surroundings and do not respond when called. From children to youth, screen time is increasing, which hinders the development of neuronal channels, limiting their activities. It adversely affects mental development and leads to problems like hyperactivity, high blood pressure, insomnia, loneliness, avoidance of outdoor games, and

difficulty in adjustment. The blue light emitted by smart phones weakens brain nerves. Spending hours on the phone at night causes sleep deprivation, leading to stress and a disturbance in physical and mental balance. Severe diseases are on the rise, and blockages in arteries supplying blood to the brain are becoming more common. Professor Dheeraj Khurana of the Neurology Department at PGI shared these insights during the Neurosonology Conference. He stated that the physical problems caused by smart phones gradually affect other organs as well. Professor Khurana explained that the blue light from screens suppresses the hormone melatonin, which induces sleep, and insomnia, in turn, affects all bodily functions. Understanding the harmful effects of Smartphone addiction, it is essential to protect children and young people from it. Overcoming Smartphone addiction is possible only with strong willpower. If we are aware, this task is not difficult. Small efforts, such as maintaining a balanced routine, setting specific times for Smartphone usage, limiting unnecessary screen time, participating in physical activities, seeking help from family and friends, not keeping the phone constantly with you, developing hobbies, staying busy, learning to live in the real world, valuing your surroundings, and focusing on self-improvement rather than appearing better on social media, can help significantly. Remind yourself that excessive phone usage harms your health, relationships, and time. Proper usage of smart phones and avoiding addiction is crucial for mental and physical well-being. With disciplined and controlled behavior, one can avoid addiction.

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