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## Examine the effect of mobile phone addiction among Adolescents

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### Abstract

Examining the connections between teenage mobile phone addiction and variables including happiness, self-esteem, and school achievement was the driving force for this study. Mobile phone addiction, mental health, life satisfaction, and academic success were the four factors chosen for this research. Results show that teenage pupils' mental health declines with increasing mobile phone addiction. Furthermore, it was shown that among both male and female teenagers, mobile addiction was associated with poor mental health, low life satisfaction, and poor academic achievement. The current research found a connection between the four factors that were chosen for investigation: mobile phone addiction, mental health, life satisfaction, and academic success.

**Keywords:** Mobile phone, addiction, adolescents, mental health and students

### Introduction

The term "phone use," "mobile phone dependence," "compulsive mobile phone use," and "mobile phone overuse" all refer to the same thing: people who are so absorbed in their Smartphones that they fail to pay attention to other parts of their lives. In recent years, "Smartphone addiction" and "mobile phone addiction" have emerged as the most popular words to characterize this kind of dependency. It is unclear whether kinds of mobile phone addiction exist, in contrast to Internet addiction, which has been categorised into many well-established forms (e.g., cyber-relationship addiction, Internet information addiction, and Internet shopping addiction). As a result, there is a dearth of instruments that can quantify various forms of cell phone addiction. For this reason, we created the Mobile Phone Addiction Type Scale (MPATS) by conducting interviews and questionnaire surveys to identify the various forms of mobile phone addiction among young people and adolescents

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forms of mobile phone addiction among young people and adolescents. For the purpose of evaluating various forms of mobile phone addiction in young adults and adolescents, our research developed an MPATS that has strong reliability and validity. The prevalence of claims of mobile phone addiction has mirrored the sharp rise in mobile phone usage over the last few years.

Additionally, two other variables-mobile addiction and attitude towards mobile phones-also showed a statistically significant difference between the sexes. In sum, this study's results contribute significantly to our knowledge of the causes and consequences of mobile phone addiction among college students. Institutions should think about implementing programs to educate students about the dangers of mobile phone addiction and how to use their phones responsibly, according to this finding's implications. There are a few that may be used with people of all ages; for example, the Mobile Phone Addiction Index Scale, the Problematic Mobile Phone Use Scale, and the Mobile Phone Problem Usage Scale. Scoring on a single dimension is one way that certain measures assess mobile phone addiction. On the other hand, there are versions that take into account various aspects of mobile phone addiction, with sub-dimension scores representing particular symptoms and overall situational scores reflecting the sum of individual dimensional scores. However, there is a dearth of validated

instruments that can quantify various forms of cell phone addiction.

Research on mobile phone addiction may be made more thorough and persuasive if distinct forms of addiction are distinguished. This is because different types of addiction might have different deep-seated influences and repercussions. The practical benefit of differentiating various mobile phone addiction types is that it allows for more focused intervention, which in turn increases the efficacy of the intervention. Addiction to mobile phones is described by Han Dengliang and Qi Zhifei (2005) [2] as a condition in which people experience physical or psychological pain due to their excessive usage of mobile phones. There is a lot of overlap between mobile phone networks and Internet addiction, according to Sun Guoqing and others.

### Literature Review

Attri, Arti *et al.* (2021) [1]. Through adolescence, one progresses from the childlike innocence of infancy to the self-reliant adult. A new pandemic has emerged this century, mostly due to technological advancements, notably the cell phone. There was a statistically significant link between the prevalence of mobile phone addiction among adolescents and selected demographic characteristics ( $p = 0.003$ ), but no such association was seen with other demographic variables. Research suggests that 65% of teenagers are very likely to get addicted to smartphones, 26% are somewhat addicted, and 9% are severely addicted. Methods In Jiangxi Province, 493 teenagers (ranging in age from 17 to 22) filled out questionnaires for this research. With the goal of investigating the processes and variations in the impacts of mobile phone addiction on negative emotions across various adolescent groups, the data were analyzed using statistical methods such as structural equation modelling (SEM), restricted cubic spline (RCS), and Pearson correlation analysis. Lastly, the unpleasant feelings linked to cell phone addiction may be greatly reduced by teenagers' psychological resiliency. Reducing the negative emotional impact of mobile phone addiction may be achieved via increased psychological resilience and the positive effects of physical activity and family considerations. In order to better understand the effects of mobile phone addiction on the mental health of adolescents and to lay the groundwork for scientifically sound interventions, this study takes advantage of the correlation between teenage mobile phone addiction and negative emotions.

Sulaiman, Rubina & Shaji. (2021) [3]. Social, behavioral, and emotional issues may result from excessive, improper, or unchecked mobile phone usage. Addiction to mobile phones has recently surfaced as a serious problem in public health. Finding out how common mobile phone addiction is among kids (those between the ages of 5 and 12) and what variables contribute to it was the primary motivation for this research. Methods: The connection between exposure and outcome factors was determined using a chi-square test and binary logistic regression. Results showed that 42.3% of children ages 5 to 12 were addicted to mobile phones. The existence of eye issues, headaches, poor concentration, disrupted sleep, greater socio-economic level of the family, an educated father, children with normal weight for age, and

a higher risk of mobile phone addiction were all determined to be statistically significant. Higher socioeconomic position, youngsters with a normal weight for their age, sleep disturbances, and poor concentration were the predictor factors identified by regression

Zhao, Yue. (2023) [4]. An increasing number of teens are using cellphones, thanks to the widespread availability of mobile Internet gadgets. While cell phones have many positive uses, they can pose risks to young people's physical and mental health if used inappropriately and to an unhealthy degree. Addiction to cell phones is less common among those who have a strong sense of humor. From this, we may deduce that treatments focusing on positive psychology and group therapy can help reduce the prevalence of mobile phone addiction while simultaneously boosting self-control and a person's overall feeling of well-being.

There is a risk that people who use mobile phones may get too attached to them, according to psychologists. Adolescent kids are not immune to the effects of mobile addiction. The results showed that the majority of the pupils were somewhat addicted to their phones. They had a favourable impression of cell phones and said that accessing social media, making calls, and shooting photos and videos were the main reasons they used them. Additionally, two other variables—mobile addiction and attitude towards mobile phones—also showed a statistically significant difference between the sexes. In sum, this study's results contribute significantly to our knowledge of the causes and consequences of mobile phone addiction among college students. Institutions should think about implementing programs to educate students about the dangers of mobile phone addiction and how to use their phones responsibly, according to this finding's implications.

### Causes of mobile phone addiction

All sorts of individual requirements may be satisfied by cellphones due to their mobility, user-friendliness, versatility, and persuasibility. Smartphones have become troublesome due to their widespread usage and the ease and cheapness with which they satisfy demand in particular. Smartphones and other Internet-enabled gadgets in this theoretical route also provide a number of programs that are updated and alerted on a regular basis, which stimulate inspection habit. Addiction to information technology is often accompanied with a need for interpersonal engagement, in contrast to drug addiction, which seldom necessitates social involvement. Addiction, according to this hypothesis, develops when there are ongoing alterations in the brain system that foster a person's psychological drive for signals that lead to rewards.

One of the primary reasons people use the internet is to communicate with others, according to a number of studies. Furthermore, studies conducted in the field of socio-technical environments have shown that the fundamental reason people get addicted to technology is because it satisfies their social demands for belonging and interaction. This line of reasoning postulates that social anxiety, emotional instability, and poor self-esteem are risk factors for problematic mobile phone use, and that this pattern of use is prompted by the urge to receive comfort from others in social and emotional connections.

### Effects of mobile phone addiction

When they could have waited a few minutes to get a call or a call back while out shopping or dining, people who are too reliant on their mobile devices are regularly seen yelling into their phones in busy public places, annoying everyone around. Cancer, neurological problems, and negative reproductive consequences have been the primary foci of research into the physical and mental health impacts of mobile phone radiation. Similarly, excessive mobile phone usage may supplant other important activities in an addict's life, such as reading, having meaningful conversations, solving problems, or engaging in deep thought.

Down below, you'll find several major drawbacks of being addicted to your cell phone

- Financial issues (such as debt due to high mobile phone bills).
- Poor social skills.
- Relationship troubles (e.g. from using a mobile phone while on a date).
- Car accidents (e.g. from driving while talking or texting).
- Academic difficulties (e.g. from lack of sleep due to excessive phone usage).
- Job loss (e.g., texting at work, etc.).
- Low self-esteem.
- Feeling lost or anxious if you forget or lose your phone.

When we get a message, alert, notice, etc., our brain releases the feel-good chemical dopamine. Depression, anxiety, and BDI are some of the mental health issues that may result from an over reliance on smartphones. When it comes to managing the parameters, the biological impacts of radiofrequency and electromagnetic exposures are notoriously challenging. Cancer in children, damage to the nervous system, disruption of the immune system, and even heart problems are all possible side effects of radiofrequency radiation. One way to keep in touch with loved ones is to work on your communication and connection skills.

### Negative Effect of Mobile Phone on Adolescents

The state's board of education approved a resolution to that effect on Saturday, 2008. Overstimulation increases the risk of sleep disruption, irritability, tension, and exhaustion in teenagers. The majority of Asians (58%) have admitted to using their cell phones while flying, and that number includes Indians. The poll also revealed that Indians are the "most social" people in the world, with 79% of respondents using their phones at wedding ceremonies, 21% in houses of worship, and 69% in movie theatres. Regular usage of mobile phones has led to an increase in addiction, according to Cagan *et al.* (2014) <sup>[14]</sup>.

Evidence suggests a negative association between cellular phone addiction and academic performance and a positive link between cellular phone addiction and depression levels. At teenage users' psychological behaviors and the degree to which they were addicted to their mobile phones in Bhopal, India. The government of Orissa declared the ban on mobile phone usage on college campuses on September 16, 2008. A major complaint levelled against cell phones on college campuses is that they distract students. Minister of Higher

Education Samir Dey said, "Therefore, we have banned it on campus." He went on to say that the decision will be enforced at all state institutions, whether they were run by the government or not. Also, for the first time in the nation, the government of Gujarat outlawed the use of mobile phones in educational institutions, citing concerns that they were interfering with class time.

### Mobile phone addiction symptoms among adolescents

High usage and problem use seem to be more common among young individuals, according to the research. They made extensive use of the phone's texting capabilities and others Respondents were asked by Park (2005) <sup>[5]</sup> to record the amount of time they spent using their mobile phones. The specific issue will not be formally acknowledged by the American Psychiatric Association. All the same, a lot of doctors and scientists throughout the world call it behavioral dependence. Several studies have shown that long-term, heavy mobile phone use may change and adversely affect the user, leading to behaviors like gambling here are seven established criteria for determining if someone is addicted to their mobile phone. Tolerance, withdrawal, accidental use, reduction, time spent, replaced other activities, and ongoing usage were among them. The findings demonstrated that mobile phone users developed a tolerance for their devices despite the fact that they might lead to issues like public displeasure and excessive phone costs. The consumers' anxiety and irritation levels skyrocketed if the cell phone was down for any length of time. Despite these concerning indicators of addiction, this conduct persisted.

Among the many additional unsavory outcomes associated with mobile phone addiction include customers' diminished literacy rates, financial difficulties, broken relationships, and mental stress. The consumers' anxiety and irritation levels skyrocketed if the cell phone was down for any length of time. The disturbing indicators of addiction persisted, yet this behavior persisted nonetheless. Consumers' involvement in addictive or compulsive behavior was also associated with certain variables found in the findings. Excessive usage may be influenced by several situational conditions, such as traumatic experiences, alcohol consumption, and depression

### Cell phone and phone addiction may cause

- Sleep deficit.
- Lower concentration.
- Creativity blocks.
- Aggravated ADD.
- Anxiety.
- Reduced cognition.
- Stress.
- Loneliness.
- Insecurity.
- Impaired relationships.
- Poor grades.
- Psychological disorders.

Under the age of 30, the prevalence of this type of abuse is highest; on average, 16% of teenagers are addicted. How can one tell the difference between "normal" and "addicted" phone usage, given the prevalence of chronic telephone use?

### Effect of mobile phone on adolescents mental and physical health

On a psychological level, those who are dependent on their phones might suffer significant harm. Because they don't exhibit any outward signs of their disease, both psychologically and physically, no one else seems to notice. One study that looked at the consequences of mobile phone use on college students' health was Acharya *et al.* (2013) <sup>[6]</sup>. Among the physical complaints, both sexes reported regular aches and pains, headaches, and digital thumb. Compared to those who don't use their phones as much, regular wireless phone users reported worse perceived health and had more health symptoms. On a psychological level, those who are dependent on their phones might suffer significant harm. Others are unaware that they have a condition since they exhibit no outward signs of it, either psychologically or physically. According to Ozturan *et al.* (2002) <sup>[9]</sup>, the ear is the first organ to come into contact with mobile phones. The ear experiences a higher amount of energy deposition compared to other organs, and the impact on hearing is a matter of controversy.

The consequences of excessive mobile phone usage on the mental health and quality of life of adolescents were studied by Srivastava and Tiwari (2013) <sup>[11]</sup>. Sleep latency, rapid eye movement (REM) frequency, and electroencephalogram spectral power in the 11.5 to 12.25 Hz frequency range were all found to be negatively impacted by exposure to electromagnetic fields emitted by digital mobile phone handsets before sleep, according to research by Loughran *et al.* (2005) <sup>[12]</sup>. The detrimental radiations emitted by mobile phones might diminish sperm quality in terms of quantity, viability, motility, and morphology, according to Agrawal *et al.* (2008) <sup>[13]</sup>. Additionally, these radiations can cause a small number of mutations in DNA, which can lead to significant alterations in sperm.

### Conclusion

Teens attending public schools are less likely to be exposed to the dangers of mobile phone addiction than those attending private schools. Adolescents from schools vary significantly with regard to their dependence on mobile phones. The prevalence of mobile phone addiction is higher among men than among women. High usage and problem use seem to be more common among young individuals, according to the research. Adolescents' mental health, life happiness, and academic achievement as a result of mobile phone addiction are the subject of potential future study.

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