

# A Study of Impact of Smart Phones on Children

*Dr. Charu Wadhwa, Assistant Professor*

*Department of Commerce & Management, Arka Jain University, Jamshedpur, Jharkhand, India*

*Email Id- dr.charu@arkajainuniversity.ac.in*

**ABSTRACT:** For the present generation, smart phones have become a need. There is rarely anybody who does not have access to a smartphone. People's life have been totally transformed by smart phones. Individuals that utilize them benefit from a variety of advantages and disadvantages. Many activities have become simpler because of smart phones, like video chatting with family or friends, e-learning, social networking, and so on. However, there are a number of drawbacks to using smart phones in a bad or inappropriate manner. There are a number of individuals who are addicted to their phones. They grow so reliant on their smartphones that they are unable to function without them. Instead of studying, students get sidetracked by social media applications and other activities, resulting in time waste and a lack of knowledge. In this paper, we've covered all of these points. Because it is so popular for people to possess a smart phone, these advantages and disadvantages go hand in hand, and more study into this field is needed to address these problems.

**KEYWORDS:** Addiction, Health, Mobile Applications, Smartphone, Social Impact.

## 1. INTRODUCTION

The convergence of communication and computers is on its way to delivering interoperability and utilizing services and capabilities from every industry to mobile consumer devices. Smartphones are the most important devices in this convergence process, since they serve as the front end and universal mobile terminal. The name "Smartphone" was created as a marketing tactic to refer to a new class of mobile phones that provide integrated services from the communication, computer, and mobility sectors, such as voice communication, messaging, PIM applications, and wireless communication capabilities. A Smartphone, in fact, is a mobile phone with advanced features and capabilities that go beyond basic tasks like making phone calls and sending text messages. On Smartphones, you may find photos, games, movies, navigation, a built-in camera, audio/video playback and recording, send/receive e-mail, built-in apps for social web sites and browsing the Web, wireless Internet, and much more. Smartphones, although being intended specifically for business users, have become a popular option among consumers as well as for business use for the same reasons.

For a variety of reasons, including simple electronic commerce, fast information sharing, cultural interchange, emotional support, and entertainment, the Internet is very helpful. A smartphone is a gadget that combines phone and Internet functionality. Smartphones provide genuinely new services in addition to the benefits of the Internet. Young individuals use smartphones to view videos, express themselves, connect with friends, and get information, while elderly people use them to make video calls to their children who live far away and play games. Because of its portability and accessibility, a smartphone can be utilized virtually everywhere[1]–[4].

### *History of Smart Phones:*

Smartphones have been around since Apple introduced them to the general public six years ago, but the Smartphone has really been around since 1993. Early Smartphones were mainly intended for corporate clients and used as enterprise devices, and they were also prohibitively costly for most consumers. The Smartphone era is divided into three different phases: The initial phase was restricted to companies only. During this period, all Smartphones were designed with companies in mind, and their features and functions were customized to suit their requirements. In 1993, IBM's 'The Simon,' the first Smartphone, was launched, and a new era started. Because it had many features such as email, internet, fax, online browsing, and camera, the Blackberry was considered as the most inventive device of its time. This phase was only dedicated to business-oriented Smartphones. The second phase of the Smartphone era started in

2007 with the launch of the iPhone, the major breakthrough Smartphone market. Apple released their first smart phone in 2007. This was the first time the Smartphone was made available to the general public. With the aim of breaking into the consumer smartphone market, Google released its Android operating system towards the end of 2007. The emphasis at this time was on providing features that the typical customer desires while keeping the price low enough to attract more users. These phones featured email, social website integration, audio/video, internet access, messaging, and conventional phone features. The third phase of Smartphones aimed to bridge the gap between enterprise-centric and general consumer-centric Smartphones by improving display quality and technology, as well as stabilizing the mobile operating system, introducing more powerful batteries, and improving the user interface, among other things. This phase theoretically started in 2008 with mobile operating system upgrades, and Apple iOS, Android, and Blackberry OS have all improved significantly over the past five years[5], [6].

In 2015, 54 percent of individuals in 21 emerging and developing countries, including Malaysia, Brazil, and China, stated they accessed the Internet or possessed a smartphone on a regular basis. In contrast, a median of 87 percent of people in 11 advanced economies said the same thing, including the United States and Canada, major Western European countries, developed Pacific nations (Australia, Japan, and South Korea), and Israel. South Korea has the greatest proportion of smartphone owners (88%) followed by Australia (77%) and the United States (77%) according to the findings of a survey conducted in 40 nations. A 2016 survey on smartphone usage in Korea found that 83.6 percent of Koreans aged 3 and up possess a smartphone. A smartphone was reported by 86.7 percent of men and 80.6 percent of females, with 95.9% of teenagers having one. Smartphone use is increasing all around the globe.

Smartphones provide many advantages in our lives, but we must be aware of the drawbacks of their use, the most concerning of which is smartphone addiction. The inability to control one's smartphone use is referred to as smartphone addiction. This disorder causes social, psychological, and physical problems in those who suffer from it.

#### *Impacts of Smartphone's:*

Smartphones have had a profound impact on almost every area of human existence. Smartphones have an impact in a variety of areas, including business, education, health, and social life. Mobile technology has had a significant impact on people's cultural norms and behavior. There are both positive and negative effects. On the one hand, Smartphones allow individuals to create their own micro-cultures and engage in activities that society considers dangerous, but on the other hand, Smartphones allow people to remain connected at all times. Following sub-sections of the research provide a comprehensive overview of the positive and negative impacts of cellphones on society[7].

#### *Positive Impacts of smart phones:*

Smartphones, when used properly, may help kids do better in school. Students can access the same (internet-based) services as a PC almost anywhere and at any time thanks to the mobility of cellphones. These features are easily accessible to students, enabling them to search for study materials at any moment. In addition, social networking sites and communication applications may help with the fast distribution of important information. Students may learn and cooperate more effectively if they can communicate more quickly with one another and with faculty members. Every student's usage of the Internet has evolved into a way of life and a means of obtaining information as and when required.

Mobile phone use for online reasons has become more widespread, and the number of mobile Internet users has exceeded that of fixed line internet users. The increasing popularity of smartphones, as well as the availability of the Internet and high-speed mobile browsing, has opened up a new channel for providing educational services. Users will be able to utilize their Smartphones in their free time to get educational benefits, regardless of their location. Distance education is a form of learning that seeks to liberate students from time and location limitations while still providing them with a diverse range of educational choices. Distance learning enables students to make better use of their time while still working and raising a family, allowing them to finish their education while working and raising a family.

The Smartphone's ability to remain connected at all times makes it much simpler for students to benefit from this kind of education, making it an excellent device for distance learning. Students and teachers can interact more easily both inside and outside the classroom thanks to smartphones. Students on sick leave or who miss school for other reasons may use their Smartphone to attend class and keep up with their work, rather of falling behind due to unexpected situations. Mobile technology may undoubtedly help the education system in impoverished countries the most. Smartphones aren't only useful extras in impoverished nations; they may also play a key part in their educational systems. Smartphones provide contemporary society with access to a wide range of educational and learning resources. Smartphones may easily fill in for impoverished countries' lack of internet and data connection, helping infrastructure and education development.

#### *Negative impact of Smart Phones:*

Adolescents, in particular, are at a higher risk of being addicted to their smartphones. Adolescents have a strong bond with their cellphones, which they see as a second self for many. Many smartphone users have expressed their inability to live without their gadgets. Adolescents go through a lot of physical and mental changes as they grow up. While children are reliant on their parents for their lives and identities, they are also trying to be self-sufficient, to form their own identities, and to carve out a niche for themselves. As a consequence of these advancements, adolescents are becoming more dependent on cellphones. They are enthralled by new technology and adapt to its operation faster than adults. As digital natives, adolescents express themselves online, try to keep up with fashion, use a range of programs (apps), and seek emotional support and relationships. They are multitasking masters who need quick answers and feedback. When these characteristics, such as novelty seeking, are combined with their undeveloped control competence, adolescents are at a higher risk of smartphone addiction.

Smartphone addiction is defined as an unwillingness to limit smartphone usage despite negative effects. Smartphone use not only gives pleasure and reduces pain and stress, but it also leads to a failure to control the amount of time spent on the device, despite severe financial, physical, psychological, and social consequences. The signs of media addiction have been characterized as excessive or poorly controlled preoccupations, as well as compulsive desires or behaviors. Media addicts, according to studies, are unable to handle real-life duties. People who spent more time on the Internet had less social support and were more lonely. Children who used a cellphone had more behavioural problems, such as anxiety, temperament, mental distraction, and indolence, and these problems were worsened if they began using a cellphone at a young age.

#### *Gender based analysis on smart phone addiction:*

Being a man, in particular, increases the likelihood of pathological Internet use. According to multivariate logistic regression research, men had a 50% greater probability of becoming addicted to the Internet than females (odds ratio (OR) = 1.5, 95 percent confidence interval (CI) = 1.1, 2.2). Males use the Internet to download programs, get information, and browse pornographic websites, whereas females mainly utilize it for social reasons. Females were shown to be more dependent on their phones than men in research on smartphone addiction, unlike Internet addiction. Females are more likely than men to be engaged with mobile phones because to inequalities in the reasons for which they are used. Males are more likely to use their phones for practical purposes, such as work, while females are more likely to use their phones to communicate with significant people. As a consequence, men and females seem to use cellphones in different ways.

Because they have not yet acquired self-control in their smartphone usage, adolescents are more susceptible to smartphone addiction than adults. Adolescents with working parents may be more prone to smartphone addiction, owing to the fact that they are unable to be cared for by their parents after school and therefore use mobile phones without limitation or guidance.

When it comes to the earnings of smartphone users, different study results were discovered. Kids from higher-income families spent more time and money on their phones, according to one study, while students from lower-income families used their phones more often, according to another. According to a

2016 Pew Research Center survey, those with higher education and money were more likely to use the Internet or possess a smartphone than people with less education and wealth.

#### *Psychological and physical health problem:*

Both physical and emotional health are harmed by smartphone addiction. People who suffer from melancholy or anxiety may develop a technology addiction, in which they utilize their smartphone as a coping strategy for sad and unpleasant emotions. Smartphone addicts are always looking at their phones and responding to notifications. This is a sign of sorrow as well as anxiousness. Heavy computer, social media, and mobile phone users were shown to have greater levels of long-term stress, depression, and sleep issues, according to a study.

Excessive smartphone use at night may keep you up till late, disturbing sleep and leading to feelings of stress and depression. Screen time and Internet use were shown to influence sleep, with SNS addicts having worse sleep quality than non-SNS addicts. Some of the negative effects of smartphone usage on physical health include cancer, brain tumors, neurological system disruptions, immune system weakening, eardrum problems, wrist, neck, and joint pain, fatigue, and sleep irregularities.

## **2. LITERATURE REVIEW**

In Korea, Seong-Soo Cha et al. looked at smartphone usage and addiction among middle school pupils. They highlighted how smartphone addiction is believed to be founded on Internet addiction owing to the similarity in symptoms and negative effects on users. Internet addiction is a kind of impulse control disorder characterized by pathological Internet usage. Smartphone addiction is a behavior addiction, comparable to Internet addiction. Seven basic signs of behavioural and pharmaceutical addictions are salience, tolerance, mood modulation, conflict, withdrawal, problems, and relapse. Although each symptom has been found in research on smartphone addiction these common aspects have not been fully investigated[8].

Muhammad Sarwar spoke on the impact of smartphones on society, including how they are influencing society and how they would change culture, social life, the technical environment, and other aspects of modern civilization. Their aim is to learn about all of the positive and negative impacts of cellphones on society. They focused on how cellphones affect business, education, health, psychology, and social life. Finally, they assess the impact and make conclusions based on the wide range of social implications that Smartphones have[9].

Lee Yu Ren et al. presented a study in which he revealed that 21.49 percent of university students in Shahrekord, Iran, were addicted to their phones, 17.30 percent were depressed, 14.20 percent had obsessive-compulsive disorder, and 13.80 percent showed interpersonal sensitivity. Nearly 72% of 11–12-year-olds in South Korea spend 5.4 hours each day on their phones, with 25% of those children classed as smartphone addicts. He analyzed data from 4156 individuals aged 20 to 24 and found no relationship between availability demands or being awakened up at night and mental health outcomes[10].

## **3. DISCUSSION**

A smart phone is a high-tech mobile phone designed to solve common accessibility problems. Smartphones may do a variety of tasks in addition to making phone calls and sending text messages. Smartphones have grown in popularity as a result of their capacity to do both basic and sophisticated computer tasks. Any problem may now be solved with a simple touch. As a consequence, they've become a necessity in today's society, and people can't live without them. Smartphones offer high-quality performance and fast access to information and entertainment for a variety of people, including students, via features such as mobile audio and video conversations, mobile teleconferencing, sending and receiving emails, and easy internet access.

Entertainment and social media are two additional applications. It serves as a focal point for all forms of social interaction and entertainment. As a consequence, people, especially students, get addicted to it, negatively impacting their academic performance, moral values, and mental and physical health.

Smartphones have made students' lives easier by allowing them to access educational materials via electronic learning (e-learning) and mobile learning, as well as gain or get any kind of knowledge. Despite the many advantages and benefits of mobile phones for students, there are a slew of disadvantages and bad repercussions to consider. This paper has covered all of these topics.

#### 4. CONCLUSION

This article focuses exclusively on various features of smart phones. Information and communication technology (ICT) and internet services have had a significant effect on almost every area of human existence. It is increasingly seen in the way individuals teach and learn. Smartphones have now become an indispensable element of everyone's life. According to the study, "people all over the globe have embraced this unique and interesting technology as one of the most important required amenities in their everyday lives." The widespread use of smartphones and other mobile devices has changed teaching and learning in both developed and developing nations. The smartphone is gradually gaining popularity as a useful tool for improving remote education teaching and learning. Its usage enables learners' access to online learning platforms, course materials, and digital engagement, as well as flexible course delivery. Students and learners no longer depend only on paper-based materials to study as a result of the expansion of these facilities. With the advent of the internet, smartphones were developed, allowing for learning to take place independent of geographic location or time.

#### REFERENCES:

- [1] S. H. Cho, M. H. Choi, and B. O. Goo, "Effect of smart phone use on dynamic postural balance," *J. Phys. Ther. Sci.*, 2014.
- [2] Y. F. Chang, C. S. Chen, and H. Zhou, "Smart phone for mobile commerce," *Comput. Stand. Interfaces*, 2009.
- [3] K. Kim, G. R. Milne, and S. Bahl, "Smart phone addiction and mindfulness: an intergenerational comparison," *Int. J. Pharm. Healthc. Mark.*, 2018.
- [4] N. Chan, J. Charette, D. O. Dumestre, and F. O. G. Fraulin, "Should 'smart phones' be used for patient photography?," *Can. J. Plast. Surg.*, 2016.
- [5] S. L. Garner, T. Sudia, and S. Rachaprolu, "Smart phone accessibility and mHealth use in a limited resource setting," *Int. J. Nurs. Pract.*, 2018.
- [6] F. Jafarzadeh-Kenarsari and P. Pourghane, "College students' experiences on smart phone technology usage: A qualitative content analysis study," *Qual. Rep.*, 2017.
- [7] A. Jamal, R. Sedie, K. A. Haleem, and N. Hafiz, "Patterns of use of 'smart phones' among female medical students and self-reported effects," *J. Taibah Univ. Med. Sci.*, 2012.
- [8] S. S. Cha and B. K. Seo, "Smartphone use and smartphone addiction in middle school students in Korea: Prevalence, social networking service, and game use," *Heal. Psychol. Open*, vol. 5, no. 1, 2018.
- [9] M. Sarwar and T. R. Soomro, "Impact of Smartphone 's on Soci ety," *Eur. J. Sci. Res.*, vol. 98, no. 2, pp. 216–226, 2013.
- [10] S. Parasuraman, A. Sam, S. K. Yee, B. C. Chuon, and L. Ren, "Smartphone usage and increased risk of mobile phone addiction: A concurrent study," *Int. J. Pharm. Investig.*, 2017.