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# IS MOBILE PHONE NECESSITY OR AN ADDICTION IN CHILDREN'S LIFE?

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**Abstract:** With the advancement of science and the blessings of technology we know about various unknown things and made it possible to impossible one of the rare inventions in technology is the mobile phone. With the advancement of technology, we can easily gather various information regarding our daily news updates, and educational purposes, when mobile phones have become a part of our daily lives, and we have an applicable vast variety of applications that make our daily life easier. Now in the last two decades, it is an integral part of every people from little ones to old age person. But the mobile phone has turned from a technological tool to a social tool it creates lots of changes in our society and children are increasingly influenced by this new device. As a result, excessive use carries various health issues, social disruption, communication gaps, etc. In this paper, we discuss the necessity and addiction of mobile phones in our children's lives and we try to evaluate some harmful factors that are responsible for decreasing child health.

IndexTerms - Mobile Phone, Children, Society, Health, Internet.

## I. INTRODUCTION

Communication is an essential part of our daily lives. Almost any work would become impossible to achieve in this society without the use of the mobile communication process. But with the blessings of technology mobile phone is considered an important communication tool and become an integral part of society. Two decades mobile phones were used by few people across the globe and people were using them only in case of emergency and not 24 hours a day but in this present era, there is a tremendous advancement in network technologies, internet facilities and nowadays mobile phones are considered as a lifeline in many of them. It is estimated that around 4.5 bilion of people use mobile phones worldwide. In this present era, the mobile phone is also considered a social accessory. These small devices are equipped with the capabilities to display photos, play games, watch videos, navigation, have built-in a camera, send emails and build applications for social websites, and much more. Due to the same reason, the mobile phone has become a common choice for consumers the use in business as it was initially intended for business users only. But when their use is limited, it is good but is the devil when they are overused and misused which has addicted a large number of people, especially children and it plays as an easy way to distract them in their daily life. As a result, they are suffering from various health hazards because mobile phones emit radio-frequency radiation or microwave radiation. There is concern that microwaves might induce or promote concern and the symptoms associated with sleep disturbance, memory problems, headaches, nausea, etc. changes in the permeability of the blood-brain barrier and blood pressure have also been reported. So many psychological changes are also reflected. So, we can see it as a coin that has two faces when its use is limited it is good and useful in our daily lives and when its use is excessive it is harmful to health. In this paper, we discuss the necessity and addiction of mobile phones in our children's lives and also evaluate some social impacts of mobile phones.

## **II. HISTORY**

At the beginning of the story, mobile phones were considered 'car phones' because it is too big and not to carry easily. However, in the year 1973, Martin Cooper invented the world's first transportable mobile that's called the Motorola DynaTAC 8000X and the price is 4000\$. The first mobile phone call to launch in the United Kings two years later was made by Sir Ernest Harrison then chairman of Vodafone. Following the DynaTAC with Motorola 9800X in 1989 that had a fold-down keyboard cover. DynaTac's later models were small in size but flawed but Nokia Mobira Talkman and Motorola 2900 mobile phones were Havier with longer battery life and talk time facilities are also available.

## **III. LITERATURE REVIEW**

Communication is an essential aspect of our society, almost any work would become nearly impossible to achieve in this society without the use of communication (Gascoigne, 2019). In the year of 1973, Sir Martin Cooper makes this way easier after the invention of a small and portable device. That is called a mobile phone (wikipedia). However, in this present era, mobile phones are almost an integral part of our daily life (Gladden, 2016). Mobile phones not only maintain our social relationships they also can record videos, capture photos, play video games (Toppr, 2019), exchanging information and data to show images to transfer applications from emitting radio waves (Aqeel Abbas Noaman, 2019). A smartphone can be smart if the vendor, society, and technology understand the use of this device in order to get more benefits in business, education, and social life (Mahammad Sawar, et.al., 2013).

In this present era, we have become more dependent on this new technology that we are gradually losing interest in traditional human interaction (Tanseen Islam, 2020). However mobile phones not only affected face-to-face communication they also hampered our social behavior (Groarke et.al., 2014) and also increased various types of physical discomfort and mental disorder (Sumaiya, et.al., 2020). Besides a survey was done on 20 participants in the 18-25 age group to observe they spent more time on social sites and they do not know how much smartphone hinder their social abilities in minor ways (D' Juan Gladden, 2016). Nevertheless, smartphones' effect on normal people, also impact pregnant women with heavy use of cell phone found DNA brokerage, genetic disorder, cancer and reduce life span of the newborn (Ashok Nath, 2018). On the other hand, excessive use of this modern device has created various health problems like ear problems, reduce physical fitness, unhealthy eating habits, pain, migraines, and changes in grey matter volume (Shammin Haque, et.al., 2020) (Yehuda Wacks, et.al., 2011). As well as high frequency of mobile phone use at baseline was a risk factor for mental health symptoms as follows as sleep disturbance, anxiety, OCD, ADHD, alcoholic disorder, etc. (Yehuda Wacks, et.al., 2011).

#### **IV. OBJECTIVES**

- 1. To explore the societal impact of mobile phones in this modern era.
- 2. To examine the necessity and addiction of using mobile phones in children's life.
- 3. To highlight the harmful effect of mobile phones on the young generation.

#### V. RESEARCH METHODOLOGY

The article reviewed in this conceptual review paper have been downloaded from google, google scholar, emerald data base, International Journal of Scientific Research and various other journals and sources. In total 22 articles published in between 2008-2022 have been chosen for review. This paper planned to focus on societal impact of mobile phone and then its impact of our young generation experienced by their parents and teachers both globally and specifically in India, various contributory factors leading to physical as well as mental issues among the adolescents, coping strategies recommended by various studies and conclusion.

#### 1. The Societal impact of mobile phone in this modern era-

In this present age mobile phone has become an integral part of our society because it is not only used to bring together family and friends it also helps society as a whole to organize meetings and professionals with the help of this gadget. Mobile phone help in bringing various information about society to the public. So, we can say that mobile phones are not less important for the betterment of our society.

- a) Mobile phone & Communication: In this modern era, communication become easier with the development of technology and it influences the style of communication between individuals. But technology changing rapidly to fulfill the human necessity. In that case, the mobile phone plays an important role in our society, especially in the way we can communicate with the rest of the world. When mobile phones are also turned into smartphones it provides a huge application that increases the ability to interact with social mates easily and freely. Then society is moving towards the smartphone world, therefore obviously it can be seen that individuals can use screen chatting, create groups of friends, and communicates on various platforms at anytime and anywhere but oral communication is seen to be lacking.
- b) Mobile Phone & Education: Mobile phone not only helps in communication it also helps in educational purpose that incorporate course content, inspiring, sharing, and discussion season activities between teachers and students. Retrieving information regarding students' performance. On the other hand, teaching and learning in higher education over the past few decades have incorporated information and communication technology as it is seen as a crucial component to be adopted in the development of the social environment. Another benefit in this area is students can use the mobile phone as a digital library that effectively prepares them for greater knowledge for future development.
- c) Mobile Phone & Business: The mobile phone has created a new dimension of business. There has been a drastic growth in broadband and internet service providers' business in the past few decades and one of the main reasons is the everincreasing use of various mobile applications. In a very small duration, a huge number of mobile phones have been sold that provided an opportunity for businesses to invest in mobile application development and allowed to introduce new business dimensions in market space. The mobile application market is another business sector that was introduced by smartphones. Different mobile operating system vendor has their mobile application technology that has a different market for mobile applications. On the other hand, advertising is an old concept but features of smartphones have made it more effective and it also provides some positive impact of a mobile business application. Mobile application publishers, distributors, and service providers are getting large revenue by providing ads as a part of the mobile application. Now many exciting developments in the field of information technology are appearing in the consumer market space first and only then make their way into other fields.

The global use of mobile phone affects people and societies in various forms as it is used in a context such as paying bills, and booking cabs, and ticket, for navigation purposes we can use map, to capture our memorable moments with the built-in camera, to store all the documents and notes, send emails and easily keep to track to everything. Other basic tools like calendars and stopwatches are found in all mobile phones.

## 2. The Necessity and Addiction of Using Mobile Phones in Children's Life -

In today's world, the mobile phone plays a vital role in every human being. The global use of mobile phone effect people and societies in various forms as it is used in various context such as learning, working, and communication. The mobile phone has made life more convenient with multiple features that can help users to manage their daily work with just a click. Mobile phone is very useful for every parent also because when they are not properly spending time with their children because of their busy schedule. Some of the requirements of mobile phones in children's life can be detailed as,

- a) **Self-Sufficient:** Through early guidance and support, parents can help them learn how to self-regulate the time they spend on their phones. This lesson will help them to create and practice healthy self-awareness and self-reflection practices that will better prepare them for adolescence.
- *b)* Access to Emergency Service: In the unfortunate event of an emergency, students with smartphone access can find help more easily. As far as the effect of mobile phones on child development, this constant ability to reach emergency services can give both children and parents a sense of security that enables growth.
- c) **Provide Various Information:** One of the most significant advantages of technology is the ability to look up information in a matter of seconds. In their free time, they will be more engaged in interesting debates and exchanges of opinions because everyone has something to say.
- d) **Digital literacy:** When children use their mobile phones, they are effectively preparing for future technology engagement because they can be to develop an understanding of how to use their mobile phones to navigate online resources.
- e) **Flexibility and convenience:** Mobile phones eliminate the need to carry around heavy assignment textbooks, notes, and other items in a backpack. All these things can easily be accessed at any time and from any location using this small device.

But as a coin has two faces mobile phones do too. We all know excess of everything is bad that apply to mobile phone. Mobile phone is a drug when their use is limited it is good but is the devil when they are overused or misused which has addicted a large number of people especially children and mobile phone may be an easy way to distract them or keep them occupied. Some of the negative effects of the regular use of mobile phones include:

- a) Academic performance: Many children carry phones along with them to their schools. Playing games during school breaks is increasing day-by-day, missing out lesion and being clueless about studies and examination.
- b) Academic malpractice: Mobile phones not only distract children from studies but may also be their tool of may also be tool of malpractices to score well in exam. Using the in-build calculator in exams where it isn't allowed, use of reference information and also exchanging answers with other students over the chat during exam. This type of behaviour not only affects the exam but also impact on personality development.
- c) **Inappropriate media:** Mobile phone is also a tool and can be used for wrong purposes. Kids could come across inappropriate massages, image and text shared by various groups. They can find various wrong ways at an early age and changing their perception and thought process can create a failure that impacts their lives for a long time.
- d) **Sleep disruption:** Mobile phone is also a tool and can be used for the wrong purposes. Kids could come across inappropriate messages, images, and text shared by various groups. They can find various wrong ways at an early age and changing their perception and thought process can create a failure that impacts their lives for a long time.
- e) **Social isolation:** We all know excessive use of mobile phones causes a lot of mental disorders and mostly it is affected by children who are always trying to use mobiles all time and didn't want to go outside and meet with their family members. They get isolated and suffer from different kinds of mental disorders.
- f) **Lack of focus:** Students find it fascinating and spend hours lost in it. It is not only misleading but confusing too. It also distracts students from their studies and sports as they wish to spend more time with their phones than their books. They tend to lose focus and their academic performance suffers badly.
- g) **Cyberbullying:** Students lack the maturity and the presence of mind to deal with cyberbullying. They fall prey to the negative elements present in the virtual world and suffer from anxiety and depression; besides low self-esteem due to the psychological bullying they might suffer at the hands of cyberbullying.

# 3. Some Harmful Effects of Mobile Phones on Children's Health -

Mobile phones are universally popular due to their convenience. It becomes an intrinsic part of our daily lives that connects us around the world. It solves problems such as interacting with people, and transfer of data by offering new channels of communication by using a device. On the other hand, mobile phones may be harmful to the environment, and health and waste disposal issues may be associated with this kind of smart device. We can be discussed some health problems that are associated excessive use of mobile phones.

- a) **Brain Tumor:** The brain is the main target organ for radio frequency emissions from handheld phones. Children have smaller heads and thinner skull bones than adults. Their brain tissue has also higher conductivity and radiofrequency radiation than in adults. The developing brain is more sensitive to toxins and it is still developing until above 20 years of age. The greater absorption of RF energy per unit of time. The greater sensitivity of their brains and their longer lifetimes with the risk to develop brain tumors or level of children at a higher risk.
- b) **Ear Problem:** Increases in the temperature of ear lobes the approximately 10 degrees Celsius may cause auditory disturbance when using the phone for a 20minite continuously and may cause damage to the sensitive parts of the limner's ear, as well as children using a mobile phone for 2-3 hours a day and for a period of 2-5 years may be exposed to the occurrence of partial deafness and even may eventually be exposed to ear tumor or permanent hearing.
- c) **Eye Risk:** Repeated use of the mobile phone for longer periods of time herms the visual system of the eye in different ways where it can cause eye tumour due to the high temperature of the eye due to exposure to electromagnetic radiation and close this radiation from the lens of the eye increases the probability of eye exposure to cataract disease.
- d) **Cancer Risk:** Cancer risks for glioma and acoustic neuroma from mobile phone use are already epidemiologically visible and that should warn us that this looks to be a very effective carcinogen to act so quickly in terms of observable increases in cancer risk.
- e) **Neurological Effects:** Mobile phones may cause various health problems but one another health problem is dysesthesia which causes peripheral neurological effects of radio sequence radiation it describes mainly the disturbance of noxious sensations. Its basic symptoms are transitory but may be lasting in others. After very high-intensity exposures. Nerves may be grossly injured.
- f) **Skin Problem:** Mobile phones play a large part in our daily life but excessive use of mobile phones may cause various skin problems like burning sensation in facial skin and warming sensation behind and around the ear, skin rash, facial dermatitis, skin cancer, etc. because of the emit of radiofrequency radiation.
- g) **Psychological Problem:** Mobile phone usages badly affect the mental health of adolescents they look anxious, depressed, and angry or sometimes commit suicide. The suicide rate is increasing in this decade. In many cases, adolescents use mobile phones at night which leads to insomnia and it causes depression, anxiety
- h) **Text-Neck Syndrome:** Neck pain is a very complex and important health problem in our modern society. Several pathologists might be the cause of neck pain such as tumors, infection, and congenital disorders. But this clinical condition refers to the onset of cervical spinal degeneration that results from the repeated stress of frequent forward head flexion while we look down on the screens of mobile phones for a long period of time. This syndrome is called Text neck syndrome and it is more common in children and adolescents.

# VI. SUGGESTIONS

- a) Kids have a lot of energy and it should be invested properly. Make sure every kid does something frequently. Encourage them to be active and it's important to break up screen time and move around.
- b) The mobile phone has a huge potential to be of great educational value to children and moderation is the key here. Many parents leverage screen time to encourage children to study, do homework, etc. but this could lead to more harm than good. Beware of using the mobile phone as a distraction this can have ill effects on the children.
- c) Physical play stimulates the brain and activities that involve physical movement allow children to use their energy and give them the chance to develop gross and fine motor skills and learn new things. It is hugely beneficial for developing children's physical and mental health.
- d) In this present era, most parents lead busy lives and they spent very limited time with their kids. Therefore, it is important to take time out for bonding activities with children. Spend your weekends doing fun, family activities like swimming, playing games, watching movies, etc.
- e) Humans are visual creatures. The vibrant color and animations appearing on the mobile phone screen appeal greatly to children. So parents must make their children aware of the harmful effects of mobile phone use on health. Educate your child by showing various videos on the adverse effect of mobile phone use.
- f) With the use of smartphones becoming frequent, it is better to buy one with a low specific Absorption Rate (SAR) value. This value states the amount of radiation absorbed per kg of body tissue. SAR value can be checked by dialing 0.7. In India, the maximum SAR level allowed is 1.6.
- g) Excessive use of the mobile phone can distract us and hamper our personal life. So sometimes cut mobile phone use of your life completely for a short period of time such as a weekend and going on a trip where there will be no cell service.

h) Spending more time with mobile phone act as a risk factor for the development of various types of disease in the human body and hamper our social life. Thus, it is suggested excessive use of mobile phones should be avoided and social awareness should be increased through health programs.

# VII. CONCLUSION

Mobile phones have become an essential component in each human being and not many people would be able to live without them. The mobile phone has completely changed our world, especially it has created a great impact on the communication system. Because the mobile phone has the ability to connect people from all over the world, no matter where they may be. Not only the communication system it also impacts our daily work by clicking like paying bills, booking a cab, capturing memorable moments by using the camera, and it's very helpful for educational purposes and business also. But as a coin has two faces mobile phones do too. The excessive use of mobile phones negatively impacts social behavior and human relationships. The impact is usually found in children to adult age. As a result, people seem to give more importance to their social life than real life so the quality of face-to-face communication decreases due to the increased dependency on communication methods that don't require any means of interaction and emotions. The amount of unnecessary mobile phone usage hours is also very high. On the other hand, the emit radio-frequency radiation act as a risk factor for developing various disease in the human body like cancer, tumor, ear problem, disruption of eye health, damage nervous system, skin disease, genetic disorder and lastly reduce span of life. In this research, we try to bring attention to potential risks that mobile phones can cause to users and provide some solutions as to how to mitigate the side effects of mobile devices on the users by limiting its use.

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