

## THE GROWING PROBLEM OF MOBILE PHONE ADDICTION IN ADOLESCENTS: ITS IMPACT ON OVERALL PERSONALITY

Vaishali Dayora

*Lecturer and Counseling Psychologist, department of Psychology, DAV college for Girls, Yamuna Nagar, Haryana, India*

### Abstract

The smartphone has many attractive attributes and characteristics that could make it highly addictive, particularly in adolescents. The adolescents used mobile messengers for the longest, followed by Internet surfing, gaming, and social networking service use. It is becoming a serious issue of mobile addiction among adolescents and its consequent impact on their health and personality not only in a global context, but also specifically in the Indian population; considering that Smartphone's, globally occupy more than 50% of mobile phones market and more precise quantification of the associated problems is important to facilitate understanding in this field. Smartphone addiction among Indian teens can not only damage interpersonal skills, but also it can lead to significant negative health risks and harmful psychological effects on Indian adolescents.

**Key Words:** Mobile phone addiction, Mobile phone abuse, Adolescents, Health.

### Introduction:

Adolescents are defined as young people between the ages of 10 and 19 years as per WHO (2014) criteria. Technology plays an important role in communication and information transmission in the world. The mobile phone technology is one of the most important and widely-used tools among numerous social groups, especially among young people. The mobile phone has earned a strong position in modern life and the human society and is considered as an indicator of communication technology. Mobile phones are utilized by a vast majority of the population, especially by young people in developing countries. Mobile phones provide services and features such as calls, sending and receiving text, audio and/or video messages as well as accessing the Internet and social networks. These facilities could be used anywhere anytime and have become so attractive to people that they have become as an integral part of people's life; therefore, they cannot be considered only as a technical tool. Despite all the benefits of the mobile phone technology, which help people to use it for managing and regulating their daily needs of life, these devices have also many disadvantages and side-effects that cannot be ignored or easily neglected, especially when it deteriorates the individuals and/or the society rules. Dependency or addiction to the mobile phone, in a way that people lose their ability to control themselves to avoid the mobile phone due to the psychological aspects, is an example of this regard. Addiction to the mobile phone can cause problems in social life of individuals and interpersonal behaviors. Chaos driving, increasing accidents and confusion in the schools' classrooms are some examples of disorders caused by overusing of mobile phones.

Addiction is considered by WHO as dependence, as the continuous use of something for the sake of relief, comfort, or stimulation, which often causes cravings when it is absent. The two major categories of addiction involve either substance addiction, e.g. "drugs or alcohol addiction" or "behavioral addiction such as mobile phone addiction." Mobile phone addiction/abuse/misuse is one of the forms of compulsive use of "a mobile phone" by adolescents across the world. A new kind of health disorder in this category among adolescents, "Smartphone's addiction/abuse/misuse" is now challenging health policy makers globally to think on this rapidly emerging issue.

Smartphone abuse is increasing in the 21<sup>st</sup> century as more and more adolescents enjoy exploring their Smartphone's in their free hours. Smartphone overuse can be a sign of Smartphone addiction as per many studies of Kim and Flanagan. New research in US suggests that excessive use of Smartphone's, increases the risk for severe psychopathologies in adolescents and there is growing evidence of problematic use of Smartphone's that impacts both social and health aspects of users' lives.

There are many reports of people exhibiting problematic patterns of Smartphone abuse with potentially negative consequences on their familial, vocational and social lives after getting addicted to Smartphone's in developed countries such as US and UK. A University of Southern California study found that the unprotected adolescent sexual activity was more common amongst owners of Smartphone's due to easy access to porn websites. A study conducted by the Rensselaer Polytechnic Institute's Lighting Research Center also concluded that smartphones, can seriously affect sleep cycles.

### What are the Causes ?

**Dopamine is often referred to as the 'feel good chemical' that released by our brain to make us feel good, happy, and a surge of 'high'.**

When you exercise, when you accomplished your work, you will feel good, satisfied and fulfilled. This is the phenomenon where dopamine is at work. Dopamine plays a critical role in both our mental and physical functions in forming our reward seeking behavior. Dopamine is there to drive and motivate you to take action and to seek pleasure such as food, sex, alcohol and some cases, the internet. Whenever you first experience something new, you will anticipate the rise of dopamine level inside your brain. Just like whenever you think about going to travel to a country that you have never been before, you will instantly feel the excitement and joy. Actually, dopamine is good because it gives us the drive to accomplish and to take action on what we desire. Without dopamine, perhaps, you will just feel lazy and lie on your sofa and do nothing. So what does this has to do with cell phone addiction? Everything.

According to Nir & Far, smartphones able to give us three types of rewards that will increase our dopamine level.

#### **1. The first type of reward is called reward of the hunt.**

This is where we are expecting new experiences and information whenever we check our phones. Ever wonder why people are so addicted to their phone? This is simply because they are expecting to see something new through their phones. Status updates from their friends, new Apps, fresh messages, and everything that is fresh can spark our dopamine level.

#### **2. The second type of reward is known as the reward of self.**

This is where people are looking to get validation and agreement from other people. We want others to agree with us and like. Thus, whenever you posted a photo to your social media account, you will want to check it constantly to see if people comment or like your photo. Every time someone likes your photo or whatever you share in the social media, it makes you feel good, hence, the increase of dopamine level. Eventually, your brain will accept the act of consistently checking your phone and it becomes habitual. Just like if you are a blogger and you posted an article on your blog. People praise your work and it gets a lot of shares and likes. This will make you feel pleasurable and wanted to write more.

#### **3. The third type of reward is the reward of the tribe.**

As human beings, we resist being alone and we wanted to be part of a bigger family. Guess what, social media and our phone give us this connection with other people that we crave. We wanted to feel like we belong to a larger group and always being accepted. This is why social media has skyrocketed and used by millions. Whenever you are accepted into a group, you feel excited for what's coming. Whenever other people like your status, comment and agree with what you have to say in social media, you feel great and **want** more.

### **Emerging health risks of mobile phone addiction on adolescents**

Smartphone usage behaviors' e.g. duration of usage and use of mobile phones for accessing Internet are found to be the main risks which can increase likelihood of hazards resulting from mobile phone use. Excessive smartphone use by Indian teens may even damage interpersonal skills of adolescents. Smartphone dependence can cause:

- (a) Stress
- (b) Anxiety
- (c) Insomnia
- (d) Depression
- (e) Delinquency
- (f) Aggressiveness.

Studies found that the laboratory exposure to 884 MHz wireless signals, components of sleep believed to be important for recovery from daily wear and tear were adversely affected as found in Chicago so Indian adolescents also have similar kind of risk. Another comparison study showed that high daily use count as a strong correlation with risk scores. Studies by Kapdi *et al.* and Khurana *et al.* has also stressed on health hazards of electromagnetic radiation exposure in terms of thermal and nonthermal effects from mobile phones addiction as well as from their mobile base stations.

Research has revealed that there are a few **adolescent personality traits associated with Internet addiction**, which is closely related to smartphone addiction. These traits include:

- **High harm-avoidance.**

These individuals tend to be worrisome, fearful, pessimistic, and shy.

- **Altered reward dependence.**

- The teen becomes dependent on rewards associated with the internet or cell phone as opposed to natural rewards such as spending time with friends and family, getting good grades, or partaking in hobbies.

- **Low self-esteem.**

- **Low cooperation.**

### Effects of Mobile Phone Addiction

Smartphone addiction is closely related to Internet addiction, which is considered an impulse-control addiction. Teens who are addicted to the Internet tend to experience the following:

- **Decreased brain connectivity** in parts of the brain that regulate emotions, decision-making, and impulse-control.

- **An increased likelihood to consume alcohol and use tobacco.**

- **An increased likelihood to have poor dietary habits.**

- **Increased levels of social loneliness.**

- **Neck Pain**

- Neck pain associated with looking down at a cell phone for too long.

- **Digital eye strain**

- Burning and itching of eyes and blurred vision associated with looking at a screen for at least 2 hours.

- **Car accidents**

- Research has revealed that texting and driving is just as dangerous as drunk driving.

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### Teens and Social Media Use

Teenagers utilize many different forms of social media—such as Facebook, Instagram, Snapchat, and Twitter—which allow them to connect with their peers. While these applications provide the user with the ability to connect with others all around the world and access news and information, they also can lead to **compulsive and problematic cell phone use, cyberbullying, sexting, and Facebook depression**, a term coined by researchers to define the depression associated with excessive social media use. Research has revealed:

- 92% of teens say that they go online daily, while 24% consider themselves to be online “almost constantly.”

- Over half of teenagers go online many times a day.

- 94% of teenagers access the Internet via their smartphones at least once a day, if not more.

- Facebook is the most-commonly visited social media site for teens (71%), followed by Instagram (52%), then Snapchat (44%).

### Dangerous online Games

#### 1)Blue Whale

This social media game dares its players to also participate in a series of tasks which are detrimental to their health and can also cause them great harm. As each “level” progresses, it gets increasingly dangerous. Examples of the various “tasks” assigned include:

- Waking up at 4.20am
- Watching horror movies all day long

- Cutting yourself with knives or razors
- Carving words or symbols (such as a blue whale) onto your own body

At the highest and final level of the game, your child will be instructed to commit suicide. Some teen deaths have already been linked to this disturbing online game when youths in Russia jumped to their deaths either from high-rise buildings or in front of oncoming trains.

## 2) The Salt and Ice Challenge

Teenagers first put salt on their skin and then place ice over it under this challenge. The salt drastically reduces the temperature of the ice to as low as -26 degrees Celcius, causing horrific burns, similar frostbites, to the player. The youngsters who participated often filmed themselves to see how they performed and if they outdid their peers.

## 3) The Cutting Challenge

Directly playing with vulnerable kids, this game makes teenagers cut themselves on purpose, click pictures of the injuries, and upload these online. Deliberate mutilation of one's body suddenly becomes a thing glorious – youngsters think they are part of a popular group after participating in this challenge. It gives them a sense of identity, however misplaced it is.

## 4) Fire Fairy

This online prank targets younger children and is modelled after the animated series, *Winx Club*.

It gives dangerous instructions to unsuspecting kids on how they can become a magical "fire fairy. Your little one will be encouraged to secretly turn on the gas on the stove at midnight when no one else is awake, and then go back to sleep. Some of the instructions say, "The magic gas will come to you, you will breathe it while sleeping and in the morning, when you wake up, say 'Thank you Alfeya, I've become a fairy'. And you will become a real fairy of fire." A five-year-old girl has already fallen victim to this horrific game and suffered severe burns to her body when she thought she could be turned into a "fire fairy" as promised online.

## 5) The Letter

The latest trend on the online app, *Snapchat*, is called "The Letter X", where users will target someone by coming up with hurtful insults about their physical appearance, weight or personality. This cruel game is a form of cyberbullying and can even lead youths to commit suicide. When Rachael Hambleton's 12-year-old daughter confided in her about this horrible new game, she wrote a personal message on social media and shared it with other parents: "I just want to raise awareness because so many mums wouldn't know about this sort of thing. There's so much peer pressure out there. Bullying is just endless now because of mobile phones", she says.

## 6) Go Pokémon

In this game children has to catch the Pokémon by looking in the phone and as the phone direct the location of the Pokémon child has to catch that Pokémon. This includes various dangerous incidents such as catching the Pokémon on busy road, near train etc. Researches have revealed that this game the cause of many deaths and serious accidents.

### Prevention

#### 1) The first 30 minutes of your day

The first 30 minutes upon awakening should be dedicated to creating a good start to your day. This means getting out of bed, freshening up, taking 5 minutes to meditate and stretch and preparing a healthy breakfast. Start your day doing healthy, positive things to build your inner fortitude to take on the day ahead.

#### 2. Create No-Phone Time Zones

This means that for at least 2 hours of your day (when you're most productive work happens) you close off your phone and stay completely dedicated to the work in front of you.

#### 3) Turn your Phone Off When You Get Into The Car

When driving – close off your phone so that you are not even tempted to look at it. Your life and other people's lives are at stake. By doing this we can avoid accidents and can focus on driving.

#### **4) Get Real**

When you are with a real life person sharing a conversation, a meal, or a cup of coffee, they are a real life form. A real person right there in front of you to engage with. Are you telling me that your virtual friends and virtual text conversations are more important than the real life person in front of you? Come on people – it's time to get real. We can make more good connection by meeting people face to face rather than on facebook,instagram,etc.

#### **5)Take a cell phone holiday**

Cut cell phone use out of your life completely for a short period of time such as a weekend. Go on a trip or camping where there will be no cell service. This forces you to be off of your phone. You can notify your friends and loved ones that you are going off the grid for a short time. This can be easily accomplished on social media.

#### **6) Focus on the here-and-now**

Mindfulness, the art of being aware, can help you become centered and possibly reduce the impulse to engage in cell phone use. <sup>[1]</sup> Try to be in the present moment by focusing on what is currently going on, including your own thoughts and reactions. <sup>[10]</sup>

#### **7)Engage in other mood boosting activities**

Using your cell phone has been linked to increases in mood, which positively reinforces cell phone use. <sup>[12]</sup> Instead of using your phone to feel better, engage in alternative activities such as exercise/sports or creative activities such as writing or drawing.

#### **8) Redirect your attention by doing something constructive**

Try to do something constructive instead of using your phone the next time you feel the urge. Focus on your own personal goals and objectives for the day. Make a list of tasks that do not involve your phone and any time you have the impulse to check your phone, stop and gently redirect your attention to your responsibilities. <sup>[13]</sup>

#### **9) Keep busy!**

If you have a specific plan for each day and you are focusing on your responsibilities, you will have less time to spend on your phone. The bonus is that you will spend more time focusing on your goals and being productive.

- If you are not employed you can apply to jobs or volunteer at a local organization.
- Try taking up a new hobby like knitting, sewing or playing an instrument.
- Spend more time doing things that need to be finished, whether it's chores or parents wanting a family day or time together.

#### **10) Counseling**

While cell phone addiction is not yet a widely recognized diagnosis, this does not mean that you cannot get help. There are treatment centers and counselors that specialize in these types of issues. <sup>[17]</sup> If your cell phone problem is severe and disrupts your daily life and functioning, counseling or mental health treatment may be helpful.

- Some signs that you may need help are if you are unable to complete your responsibilities (work, school, home), or if your interpersonal relationships are significantly negatively affected by your cell phone use.
- Cognitive Behavioral Therapy (CBT) is a type of treatment that is used for a wide variety of conditions and addictions. It focuses on changing your thoughts in order to change your feelings and behaviors. CBT may be a helpful option if you choose to seek treatment.

#### **11)Turn off as many push notifications as possible**

You don't have to be interrupted by every "like" that your latest Instagram picture receives or with the message that your favorite podcast just released a new episode. An incredibly simple way to cut down on distractions is to turn off push notifications for as many apps as you can. Just head to Settings > Notifications to control your preferences. Personally, I only left notifications on for email, chat app messages, my calendars, and utility apps such as Lyft or GetAround, which only activate when I'm using them.

## **12)Take distracting apps off your home screen**

“A lot of [phone usage] is unconscious behavior,” according to Rosen. “You shift from Facebook to Instagram, to checking the weather, to texts.” But if you have to specifically seek out an app to use it, you’ll cut down on the “accidental” time-sucks that happen when you just start tapping around on your phone. Keep the apps that you want to encourage yourself to use — like those for reading or learning a new language — front and center, but banish anything that you want to limit your time with to folders on your second page of apps (or if you have an Android phone, off the screen entirely). To go a step further, you could even delete certain apps such as Facebook or Twitter entirely and relegate your usage to your smartphone’s web browser.

## **13)Kick your device out of bed**

Don’t let your phone be the last thing you see at night and the first thing you check in the morning. By using a regular alarm clock and charging your phone out of reach, you won’t be tempted to start your day by getting vortexes into an avalanche of messages and updates.

## **Conclusion**

**Mobile phone addiction is becoming an serious issue among adoloscents and its clear effects can be seen on their personality. By adopting the various methods we can conquer our this particular addiction and can lead a better , productive and healthy life.**

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