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Smartphone and Internet Addiction digital toxins



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Introduction

Mobile phones have become an integral part of life and it seems that majority of population on the planet possesses one. It will not come as a surprise when I say mobile phones emit radiation. And now we have been endangered by smartphones too. The health risks of smartphones are many. They actually increase the already existing threat from the radiations of wireless devices.

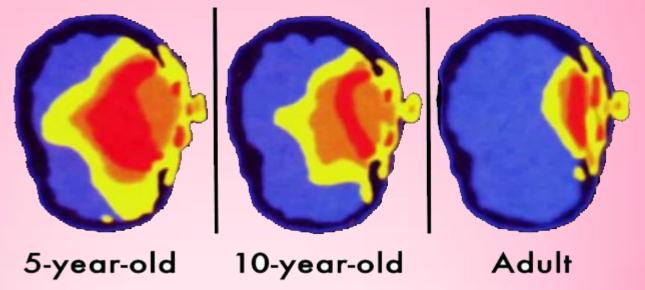


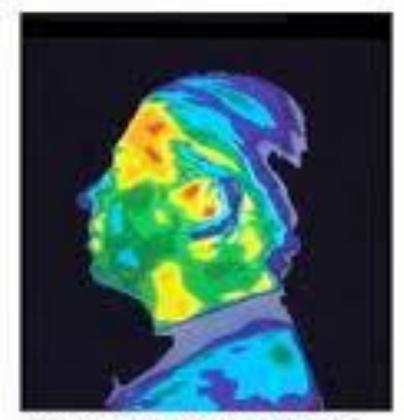
Technically speaking, the radiation emitted by cellphones is similar to that which is emitted by microwaves and is better known as RF or low level radio frequency.

Many researches have been carried out and it was just last year that the WHO made a declaration that the cell phone radiation can be carcinogenic.

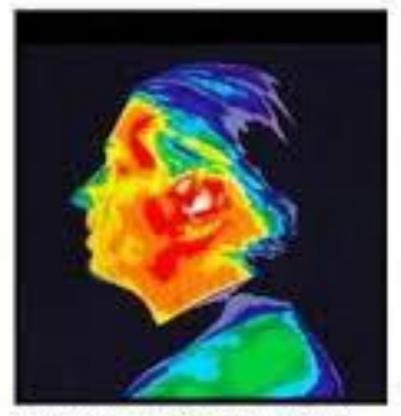
A carcinogen is a substance, radionuclide, or a radiation that directly

causes cancer.





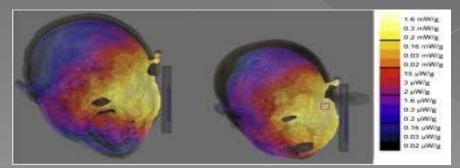
Thermographic Image of the head with no exposure to harmful cell phone radiation.



Thermographic Image of the head after a 15-minute phone call. Yellow and red areas indicate thermal (heating) effects that can cause negative health effects.

Children have smaller heads than adults. Cell phones and wireless radiation can go deeper into their brains because children have a shorter distance from their skull to their brain center. Government regulations were based on a 220-pound man's head, not a child's head.

Our skulls actually slow down wireless as it moves into our brain. The thicker the skull, the more roadblocks to the wireless radiation moving forward. Since children have much thinner skulls than adults, they have less protection. Research shows that children can absorb up to ten times the radiation in the bone marrow of their skulls than adults.



The following steps to reduce the health risks from mobile phones.

Reduce Health Risks Of CELL PHONE USAGE

- 1. Use landlines whenever possible
- 2. Keep your calls short
- 3. Text more, call less
- 4. Use speaker mode and headphone
- 5. Check SAR level
- 6. Don't carry it next to body
- 7. Don't use in lift, basement, parked cars
- 8. Don't sleep with cellphone switched on
- 9. Keep kids away from mobile phones
- 10. Keep the keypad facing your body

healthisright.com

An Egyptian study-showed a prevalence of neurological symptoms, such as headache, memory changes, dizziness, tremors, depressive symptoms and sleep disturbances among participants directly exposed to GSM signals from BSs.

CELL PHONE RADIATION SYMPTOMS: HEADACHES NAUSEA DIZZINESS FATIGUE WEAKNESS MUSCLE PAIN CONCENTRATION DIFFICULTIES IMPAIRED COGNITIVE FUNCTION

Nomophobia

(no-mobile-phobia or Disconnection Syndrome) is the fear of not being able to consult your mobile phone or not being connected or traceable.

This fear consequently evokes reactions of anxiety with specific physiological related (breathlessness, sweating, tremor, heart acceleration, sweating)



People with nomophobia search the smartphone constantly, check it every time that they can do it (in the bathroom, during the shower, etc.) and they have feelings of helplessness when are separated from it.

We know that the mobile phone is an integral part of our life that is useful to communicate, to socialize but also to organize our lives (calendar, alarn, clock, mobile banck

etc.)





During lockdown for Covid-19 people made excessive use of the mobile phone as it proved to be a tool capable of replacing, at least in part, perceived shortcomings, especially at the relational level.

Therefore, in emergency circumstances, being unable to access smartphone functions may have generated feelings of irritability and anxiety resulting in attitudes of dependence on such devices



Symptoms of internet addiction

Recognising the symptoms of internet addiction is essential for early intervention and treatment.

- Psychological symptoms
- Increasing obsessions with internet use: This is where individuals spend the majority of their time online, usually more than intended. It leads to a neglect of real-life relationships and responsibilities.
- Mood changes: Irritability, restlessness, or moodiness when they attempt to stop or reduce internet use.
- Preoccupation with the internet: Ongoing thoughts about online activities dominate your mind.

- Behavioural symptoms
- Failed attempts to control internet use: A lack of self-regulation in regards to internet activities.
- Lying to others about the extent of their internet use: Avoiding confrontation about usage.
- Staying online longer than planned: Can lead to serious disruptions in work, academia or daily routines.

- Social symptoms
- Neglect relationships: Especially with family and friends, due to excessive time spent on the internet.
- Conflicts with loved ones: Especially conflicts about internet use and tendency to use the internet to escape.
- Physical symptoms
- Changes in sleep patterns
- Decline in physical health
- Eye strain
- Back problems
- Carpal tunnel syndrome



• Causes/who is at risk for internet addiction?

There are several key risk factors linked to an increased likelihood of becoming addicted to the internet. There are 5 key determining factors:

- Age
- Young people, mainly children, teenagers and young adults, are at a higher risk of developing internet addiction. This is because this demographic is more likely to engage in online gaming, social media, and other digital activities that can become compulsive.
- Adolescents and teens, in a crucial stage of developing social and interpersonal skills, may turn to the internet as a primary means of interaction, which can escalate into addictive behaviour.

- Mental health and personality traits Individuals with particular mental health issues like depression, anxiety and ADHD are more likely to develop dependence issues.
- Certain personality traits are also likely to lead to a higher risk of developing an internet addiction. These include:
- Social anxiety
- Introversion
- Emotional instability
- Shyness

- Individuals with these traits may find the online environment a more comfortable space for interaction.
- Environmental and social factors

Environmental factors also play a serious

Excessive internet use contributes to heighbened anxiety and stress levels by overwhelming individuals with information,

triggering the fear of missing out (FDMO), exposing users to online harassment, encouraging escapism, and disrupting

sleep patterns.

influence. Examples are:

- Negative family dynamics
- Peer influence
- Lack of parental supervision
- Poor family relationships
- High levels of internet access

- Stressful life events and coping mechanisms
- Individuals experiencing stressful life events or those with ineffective coping mechanisms may be at risk for internet addiction. The internet can provide a temporary escape from real-life problems, leading to excessive use as a form of coping or avoidance.
- This reliance on digital spaces for emotional support can become compulsive and interfere with the ability to manage stress healthily.

Genetic and biological factors

Genetic predispositions and abnormalities in brain processes may contribute to the risk of developing internet addiction. Individuals with a personal or family history of addiction are potentially more vulnerable to developing compulsive internet use behaviours.

Treatment for internet addiction

The treatment of internet addiction involves psychological therapy, behavioural interventions, and sometimes medication, depending on the individual's specific needs and the severity of their condition.

- Here are a few examples of <u>psychotherapeutic</u> approaches:
- Cognitive behavioural therapy (CBT)

CBT is an extremely effective treatment for this kind of addiction. It helps individuals identify and modify unhealthy behaviours. It aims to develop time management skills, reduce problematic use, and enhance social interactions offline. It also addresses underlying issues such as depression or anxiety.

Family therapy

Family therapy can play a crucial role, especially for teens with internet addiction. This approach involves family members in the treatment process to improve communication and resolve conflicts. It helps the family understand the nature of addiction and how to support the affected member in reducing internet use and engaging in more healthy activities.

Group therapy

Participating in group therapy provides individuals with a supportive environment to share experiences and coping strategies. It helps reduce feelings of isolation and creates a sense of community among those struggling with similar issues. Group sessions can offer practical advice for managing internet use and encourage positive behavioural changes.

Medication

Although there's no specific medication for treating internet addiction, medications may be prescribed to address co-occurring conditions such as depression or anxiety. For instance, antidepressants or anti-anxiety medications can help alleviate symptoms that may drive compulsive use of the internet.

Detox and lifestyle changes

Implementing a digital detox, which involves taking a break from all digital devices for a certain period, can be beneficial. This approach encourages individuals to engage in offline activities, creating healthier habits and reducing dependency on the internet. Lifestyle changes, including regular exercise, healthy eating, and engaging in hobbies, can also support recovery by improving overall well-being.

- Self-help strategies
- Self-help strategies include setting clear boundaries for internet use, such as limiting the time spent online, avoiding specific triggers that lead to excessive use, and using apps that monitor or restrict internet access. Developing a routine that includes offline activities and purposefully using the internet can help individuals gain control over their internet use.

Break internet addiction and fill your time with these activities

- 1) Move your body.
- this is the single most important thing you can do to improve your quality of life, clear your mind, and reduce chronic pain.
- Think about this: unless you're in a physical job like construction, plumbing, farming, etc. you probably spend 8-12+ hours looking at screens of various sizes. Any movements you do in a day are probably the SAME movements over and over.
- Sit. Stand. Walk a couple steps. Sit. Stand. Walk a few more steps.

You can easily fill your evenings with stretching and exercise of varying intensities. Remember your body doesn't need you to HAMMER IT EVERY SINGLE DAY AS HARD AS POSSIBLE. It needs a variety of stimulus.

- ② 2) Read a book.
- "How is this different from watching TV or reading articles on the internet?" you might ask.
- If you asked that question, then it's been too long since you read a book. Reading a book is a generally calmer experience than binging sixteen episodes on Netflix, and it trains your attention better than bounces from article to article on the internet.
- It entertains and informs but at a manageable pace. The internet is like turning on a fire hose of information. A book is more like sipping a milkshake through a straw. Can it be addicting? Sure. But even if your brain gets tired reading a book, it doesn't turn into the mush ball that two hours on the internet

READ BOOKS?

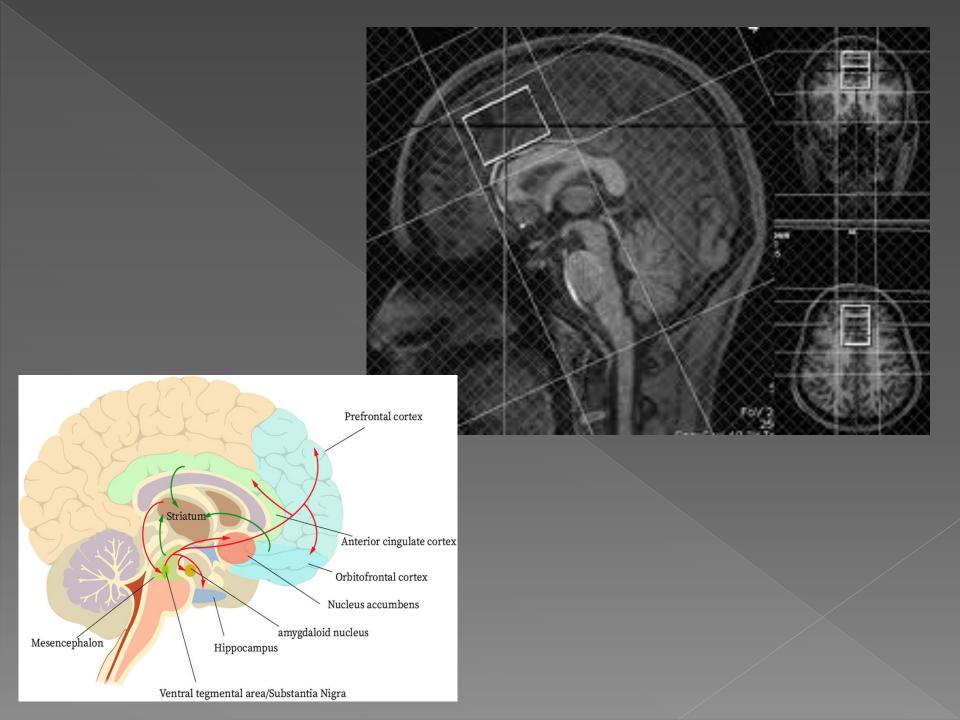
does.

- Write down your ideas and to-do lists on pieces of paper! Journal. Start writing your great novel.
- For the uber productive, this may sound like an idiotic recommendation. "But I can sync EVERYTHING to the cloud if I use my task manager software!"
- If you don't like it, you don't have to keep doing it, but I've found that writing things down on paper is a lot more efficient than opening a device, navigating to a screen, then starting to type on a keyboard.
- It's also apparently better for learning. The act of writing directly to paper seems to keep my thoughts clearer, and I don't lose thoughts the way I do when I am busy trying to navigate to the right screen on my phone.

Changes of Neurotransmitters in Youth with Internet and Smartphone Addiction

Neurotransmitter changes in youth addicted to the Internet and smartphone were compared with normal controls and in subjects after cognitive behavioral therapy. In addition, the correlations between neurotransmitters and affective factors were investigated.

Brain parenchymal and gray matter volume-adjusted γ-aminobutyric acid-to-creatine ratios were higher in subjects with Internet and smartphone addiction (P =.028 and .016). After therapy, brain parenchymal- and gray matter volume-adjusted y-aminobutyric acid-tocreatine ratios were decreased (P = .034 and .026). The Glx level was not statistically significant in subjects with Internet and smartphone addiction compared with controls and posttherapy status. Brain parenchymal- and gray matter volume-adjusted γaminobutyric acid-to-creatine ratios correlated with clinical scales of Internet and smartphone addictions, depression, and anxiety. Glx/Cr was negatively correlated with insomnia and sleep quality scales.



CONCLUSION

- While a smartphone, tablet, or computer can be a hugely productive tool, compulsive use of these devices can interfere with work, school, and relationships. When you spend more time on social media or playing games than you do interacting with real people, or you can't stop yourself from repeatedly checking texts, emails, or apps—even when it has negative consequences in your life—it may be time to reassess your technology use.
- Phone addiction, sometimes colloquially known as "nomophobia" (fear of being without a mobile phone), is often fueled by an internet overuse problem or internet addiction disorder. After all, it's rarely the phone or tablet itself that creates the compulsion, but rather the games, apps, and online worlds it connects us to.

