

MENTAL HEALTH CORNER

Understanding The Effects of Screen Time on the Brain

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The digital world has diffused dramatically over the past decade. We have seen it in technological advances and in the emergence of social media, which were created to bring people closer.

Why is the overuse of screens so dangerous? Because they have an addictive effect. We realized, says the founder of Facebook, how important it is for human beings to feel loved, appreciated, cared for, and recognized. The addictive potential was seen through the *likes* that a spark of dopamine generates.

According to Dr. Victoria Dunkley, author of *Reset Your Child's Brain* says, "Research suggests that all screen activities provide unnatural stimulation to the nervous system and can cause adverse effects" (2015, P. 19). Dr. Dunkley, along with other experts, believes exposure to screens stimulates the brain's pleasure center, increasing dopamine levels.

Dopamine is the hormone of addiction. This hormone kicks in when one is around something potentially addictive. (alcohol, cocaine, heroin, marijuana, pornography, video games) all this generates pleasure. That pleasure is regulated by a hormone that peaks the moment you consume it and then causes a great void when it goes away, and that is why you need more.

Nobody goes to Instagram or Facebook to see just one photo; they are designed to hook you. When children want to get into social media, it is not only something that they enjoy or that they like, but it is an engaging, addictive force. However, there is a struggle with their willpower, and often the screen is more powerful than their willpower.

There is a part of the brain called the prefrontal cortex. The prefrontal cortex is the front area of the brain that has four fundamental functions: Attention, Concentration, Problem Solving, and Impulse Control. It is an area of the brain that makes us superior beings. It makes us beings with willpower. When a baby is born, that prefrontal cortex is deeply immature. And this prefrontal cortex is activated by three things: Light, Sound, and Movement.

A baby's prefrontal cortex, or its attention, is activated by light, sound, and movement. So, what happens if you put a tablet in front of that baby when he or she is one year old, two years old? You are handing that child the tablet, and you are activating his prefrontal cortex with the three most primitive mechanisms that exist. And we want our children as they grow to have the ability to pay attention, to know how to manage impulses, and to have the ability to be still for a few moments, to be able to read a book and to behave while in a waiting room.

The screens activate the prefrontal cortex, and therefore as the months and years go by, the prefrontal cortex functions worsen. As a result, we have less attention, less ability to concentrate, less ability to plan and manage emotions, and less ability to control emotions and impulses. As a

result, we can become much more impulsive people, much more inattentive. Therefore, the screens promote a significant number of children have more and more problems concentrating.

There is no doubt that screens are wonderful in many aspects, but do not forget that has effects on a cognitive level. For example, it makes us less attentive; it makes us more impulsive. It makes us depend on it emotionally because we use it when we are bored and stressed and to escape from our everyday lives.

How do we make intelligent use of screens?

We start by managing the topic of Internet use in the family.

What To do?

1. Make a diagnosis of the use of devices at home (this applies to both parents and children)
2. How do parents use a device? How long, and why do you use it, and what device you use?
3. What effect does it have on you when you use it?

And when you already know how it affects you, then ask yourself. Does my use of a device affect my children?

As a family, establish a set of general rules, but understand each of your children separately.

References

Dunckley, V.L., MD. (2015). Reset your child's brain: A four-week plan to end meltdowns, raise grades, and boost social skills by reversing the effects of electronic screen-time. Novato, CA: New World Library.