

Individual & Family Counseling

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Screen Time: Impact and Guidelines for All Ages



Once a child is over the age of two, allowing a limited amount of screen time is appropriate. Playing an hour max per day can help developing brains increase coordination, hone quick reactions, and even sharpen language skills. As with all the other toys and tools available to your developing child, smartphone use should stay in moderation, and never stand in for human interaction or real-world face time. Screen use is like eating smoking and eating, early intervention, parent modeling and setting limits, can prevent addiction.

The US Department of <u>Health</u> and Human Services estimates that American children spend a whopping seven hours a day in front of electronic media. Other statistics reveal that kids as young as two regularly play iPad games and have playroom toys that involve touch screens. Researchers have shown that the frontal lobe development is actually <u>being retarded</u> by extended use of screen time. This is the part of the brain which is responsible for the child's attention span, controlling emotions and empathic skills.

A child's brain is growing at an enormous rate and in the first year of life, it actually grows by 300%. This is the time when real world play is extremely important for development. Electronic play does not allow a child to experience real dimension, movement which encourages motor skills, tactile exploration. This type of play cannot be replaced with screen play.

Too much screen time too soon limits the development process of emerging skills such as focus, concentration, building vocabulary, building attention, reading other's emotions and attitudes...these are all abilities can that be harmed with too much video stimuli. While parents may feel that technology will give their child an educational edge, this type of play can actually be reducing these abilities.

Between birth and age three, for example, our brains develop quickly and are particularly sensitive to the environment around us. This is called *the critical period*, because the changes that happen in the brain during these first tender years become the permanent foundation upon which all later brain function is built. In order for the brain's neural networks to develop normally during the critical period, a child needs specific stimuli from the outside environment. When a young child spends too much time in front of a screen and not enough getting required stimuli from the real world, development becomes stunted.

30% of children who are still in diapers are now using electronics.

If the damage happens during these crucial early years, the results can have lasting effects. What makes tablets and iPhones so appealing is the dozens of stimuli at your fingertips, and the ability to process multiple actions simultaneously — this is exactly what young brains do *not* need.

Tablets are the ultimate shortcut tools: Unlike a mother reading a story to a child, for example, a smartphone-told story spoon-feeds images, words, and pictures all at once to a young reader. Rather than having to take the time to process a mother's voice into words, visualize complete pictures and exert a mental effort to follow a story line, kids who follow stories on their smartphones are doing the thinking for them and as a result, their own cognitive muscles remain weak.

The most crucial stage is in early childhood, during that same critical period, and it's dependent on authentic human interactions. If your young child is spending all of his time in front of an iPad instead of chatting and playing with teachers and other children, his empathetic abilities, social skills, emotional regulation development will be dulled, possibly for good.

In the on-screen world and *nowhere else*, every finger swipe brings about a response of colors and shapes and sounds, a child's brain responds gleefully with the neurotransmitter <u>dopamine</u>, the key component in our reward system that is associated with feelings of pleasure. Dopamine hits in the brain can feel almost addictive, and when a child gets too used to an immediate stimuli response, he will learn to always prefer smartphone-style interaction which immediately reacts to the reward pathway. This reinforces immediate gratification and responses—over real-world connections and experiences.

Excessive screen-time appears to impair brain structure and function. Much of the damage occurs in the brain's frontal lobe, which undergoes massive changes from puberty until the midtwenties. Frontal lobe development, in turn, largely determines success in every area of life—from sense of well-being to academic or <u>career</u> success to relationship skills. Use this research to strengthen your own parental position on screen <u>management</u>, and to convince others to do the same.

Screen time is creating subtle damage even in children with "regular" exposure, considering that the average child clocks in more than seven hours a day (<u>Rideout 2010</u>). Many children suffer from sensory overload, lack of restorative <u>sleep</u>, and a hyperarousal nervous system – this is being called ESS – Electronic Screen Syndrome. This is where children are impulsive, moody, and can't pay attention. Kids experience stress, disturbed sleep, cognitive dysfunction and poor sense of time management

Multiple studies have shown atrophy (shrinkage or loss of tissue volume) in gray matter areas (where "processing" occurs) in internet/gaming addiction (<u>Zhou 2011</u>, <u>Yuan 2011</u>, <u>Weng 2013</u>, and <u>Weng 2012</u>). Aspects affected include:

- Planning
- Prioritizing
- Organizing
- Impulse control
- Suppression on socially unaccepted impulses
- Development of empathy
- Compassion
- Overall negative impact on the quality of relationships.

Research on video games have shown dopamine (implicated in reward processing and addiction) is released during gaming (Koepp 1998 and Kuhn 2011) and that craving or urges for gaming produces brain changes that are similar to drug cravings (Ko 2009, Han 2011). Other findings in internet addiction include reduced numbers of dopamine receptors and transporters (Kim 2011 and Hou 2012).

Children ages 8-18 spend an average of 8 hours a day in front of screens. Clinically, what we see is that electronic screen devices have the potential to irritate the brain and overstimulate the nervous system in some children/adolescents.

Children have become dysregulated meaning they have difficulty managing their emotions, and responses. Kids can become who are quick to react, experience meltdowns over minor situations, irritability, poor focus and rages quick to appear. As the term states, they are wired and tired. Too much screen times – blue light suppresses melatonin which promotes sleep. Not enough sleep impacts learning, memory, brain development that occurs within restorative sleep. This can happen just within 30 minutes of screen time for interactive usage of screen time.

Brain scans show that when heavy gamers are shown computer cues, the brain lights up in similar ways to how the brain responds in addicts.

Some research shows the gaming seems to exacerbate neurological and psychological symptoms in children with vulnerabilities by putting their systems in overdrive. But also, potentially this can happen with any children.

Electronics and social anxiety - These are also the kids who experience counterproductive aspects of social media and electronics. This enables them to avoid socially and hide behind a screen increasing social awkwardness and increasing avoidance. The ability to tolerate the stress of being in social situations never develops and further walls are built.

For teens, they are hardwired to socialize, and electronics makes it easier to connect with others and connect with others with similar interests and find support and friendships when struggling. The downside is cyberbullying, trolling, unreal/dangerous relationships, making comparisons to others of physical appearance, inclusions and mistakes or failures tend to be examined under the social media microscope.

These are issues not only pertaining to violent gaming, but any gaming even educational Screen time impacts our bodies on multiple levels with various mental health symptoms that are related to mood, anxiety, behaviors and cognition.

Diagnostically, there is an emerging diagnosis called Electronic Screen Syndrome. For some children screen use can be so stimulating that it shifts the nervous system leading to dysregulation. It becomes hyperarousal, hyperfocus followed by a crash.

AAP Guidelines for Screen Time for Kids

New guidelines

The AAP's new guidelines for media use by younger kids are as follows:

- For babies younger than 18 months. The AAP still says screens should be avoided when kids are this young, but FaceTiming with Grandma or video chatting with another familiar face is a-okay. There is research to suggest that children as young as six months old can gain certain cognitive insights from video chatting.
- Children 18 to 24 months old. When kids are 18 months old, parents can introduce high-quality digital media.
 The AAP says it's important, however, that children not watch programming alone. Adults should be present to help kids understand what they're seeing.
- Children ages 2 to 5 years. Screen time should be limited to one hour per day of high-quality programs, such as Sesame Workshop or educational media on PBS. Again, parents should be present to talk with kids about how to apply what they're seeing to the world around them.

For older kids

The AAP's guidelines for older kids, ages 6 to 18, don't include any strict limitations on screen time. Instead, the academy says parents should set consistent limits on the amount of daily screen time older kids are allowed.

Parents should also make sure screen time doesn't take the place of healthy activities such as sleep, social interaction, and physical activity. To help promote a healthy balance, AAP recommends designating "media-free times together, such as dinner or driving, as well as media-free locations at home, such as bedrooms."

Need help coming up with a media use plan that works for your family? Check out the AAP's interactive tool for creating a customized Family Media Plan.

Family Media Plan website:

https://www.healthychildren.org/English/media/Pages/default.aspx

Books for Further Reading:

<u>Glow Kids: How Screen Addiction is Hijacking Our Kids and How to Break the Trance.</u> Nicholas Kardaras

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.

Victoria L. Dunckley

<u>Disconnected: How to Reconnect Our Digital Distracted Kids.</u>
Thomas Kersting