Too Much of a Good Thing: The Down Side of Technology

No one can argue that advances in technology have increased our access to the world, provided us with many positive opportunities, and increased our overall efficiency. Email has revolutionized long distance communication not to mention how we function in the workplace. Skype allows us to not only talk to someone in another location or even another country, but also see the person we are talking to at the same time! High definition television makes it feel like your favorite sports team is practically in your living room with you, and video gaming provides hours of entertainment without ever leaving the comfort of your home. Although many of these advances are welcomed, there is also a down side to this technology that unfortunately has potentially devastating consequences for our children.

In its 2004 policy statement, the American Academy of Pediatrics stated that children under the age of 2 years should not watch any television and that those older than 2 watch no more than 1-2 hours per day of quality programming. They further recommend that children with learning problems should not watch/play more than 1 hour of television/video games per day. In spite of this recommendation, research shows that 68% of children 2 years of age (and even younger) use screen media on a typical day and 25% of these children have a television set in their bedroom. For children over the age of 2 years, 50% reportedly have a television in their room. An empirical study of 914 children living in Southern California found that pre-teens and teens spend on average 6 hours per day watching television or playing video games and an additional 1.5 hours on the internet or emailing for a total of 7.5 hours of screen time on average each day!

Many experts agree that it is no coincidence that as screen time increases, the incidence of attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD) is increasing as well. For every hour of television viewing/video gaming use per day, a child’s risk of attention problems increases by 10% by the age of 7 years. Due to the “plasticity” of the brain, it is designed to “prune away” the areas we do not stimulate and facilitate continued “dendritic sprouting” and laying down neural pathways in those areas we do stimulate. Essentially, the brain continually rewires itself based on what activities and information we choose to feed it. When children’s brains become “hard wired” for high speed stimulation that is typical of so many of today’s video games, listening to a teacher give a lecture, reading from a text book, or participating in paper/pencil tasks in school doesn’t stand a chance at maintaining the child’s attention. Researchers have noted this increase in classroom inattentiveness and have coined the term “disengaging” to describe this behavior. A child will disengage by literally seeking out a different, more enticing environment than the classroom. For many children, this more enticing environment is in their mind where they can “play out” a familiar video sequence. For other children, they seek out more stimulation through fidgeting or body movement in an attempt to stay alert and attentive in the classroom.

If the inattentiveness and potential for decreased academic performance that is linked to television viewing/video gaming is not enough to alarm you, consider this. Research indicates that physical and mental health problems associated with excessive television
viewing and gaming are increasing at alarming rates. For every hour of television watched per day, there is a 6% increase in obesity and an astounding 31% increase if the child has a television in their bedroom! Now factor in that 30% of obese children get diabetes and 60% end up with cardiovascular disease. Additional conditions found to be associated with increased television viewing/video gaming include sleep disturbances, peer socialization difficulties, carpal tunnel syndrome, repetitive strain injuries, headaches, backaches, eating irregularities, and even addiction. Several countries including Korea, Norway, Japan, and Canada now have inpatient addiction centers for teens addicted to gaming and television. Research is also now under way to look at the connection between anxiety disorders and screen time. Anxiety disorders are currently the fastest growing mental illness in children.

So what can we as parents do? Most importantly, take back the control over how much screen time your children are allowed. You control the time (should be no more than 2 hours) and give them control over what type of screen activity they select (television vs. video games, vs. computer games, etc). Also, make sure to monitor the games they are playing and the television shows they are viewing. Many young children are playing video games intended for teen and even mature players. Other tips include encouraging viewing of educational programs, keep televisions out of your children’s rooms, make a no television during homework rule, turn the television off for all meals, and do not allow any screen time before school. Consider implementing an “unplugged” day one time per week where no screen time is allowed. Lastly, suggest fun alternative activities such as sports, bike riding, family game night, or crafts and hobbies, and whenever possible, get involved in these activities with your children! You might just find that you need to unplug in order to really connect!

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