

Dear TCA Parents,

My name is Tammy Wehrman and I am a TCA mom of 3 and serve as Room Parent Liaison at TCA East Elementary. I have an MA in counseling and PhD in Psychology. I have taught both counseling and psychology for 15 years. If you're like me, raising kids today presents challenges absent from the days I grew up, specifically related to technology, screen, time, social media and the like! In teaching child development, I have become aware of the growing amount of research related to these topics and our children's development. I wanted to share some researched understandings that have helped me as a mom and that I hope you will find helpful as well. Please don't hesitate to reach out if you have questions, twehrman@hotmail.com. Thank you in advance for reading!

Social Media & Screen Time – Impacts on Our Children RESEARCHED UNDERSTANDINGS IN CHILD DEVELOPMENT

For the sake of definitions, **screen time and media** are terms used to refer to the period of time spent viewing digital devices (e.g., smartphones, cell phones, television, video games, computers, iPads, iPods).

SLEEP AND SCREEN TIME

Sleep is crucial to a child's development – during sleep, children grow physically, develop cognitively, process the days' events and even learn and retain information. It is vital to memory and learning as it allows kids to be rested and fully engaged in the learning process. When looking at teen development specifically, lack of sleep in adolescence has been shown, through research, to contribute to anxiety, depression and low self-esteem (Alfano et al., 2009). **For optimal health, children ages 6 to 12 need 9-12 hours of sleep for while children ages 12 to 18 need 8-10 hours of sleep.**

These guidelines come from the American Academy of Sleep Medicine and are endorsed by the American Academy of Pediatrics (AAP) which also found through its research that children who get the required amount of needed sleep on a regular basis have better attention, behavior, learning, memory, emotional regulation, quality of life, and mental and physical health (AAP is an organization of 64,000 primary care pediatricians, pediatric medical subspecialists and pediatric surgical specialists dedicated to the health, safety and well-being of infants, children, adolescents and young adults, more information about these guidelines and the organizations can be found at: www.aap.org). While this may be surprising, study after study shows the importance of both sufficient and quality sleep for children for health, wellness, and development.

Knowing this information, how does screen time impact sleep? Research demonstrates that looking at a screen within hours of bedtime can reduce the production of melatonin (our sleep hormone) and interfere with our sleep-wake cycles (Licht, Hull & Ballantyne, 2018). Studies also link the increased use of the Internet to increased daytime tiredness in kids (Garmy et al., 2012). While the National Sleep Foundation (2016) suggests removing electronics from the bedroom at least one hour before sleep, as many as 90% of Americans report using devices within an hour of bedtime (Bedrosian et al., 2016). It is also important to remove electronic devices from bedrooms at night (place in common areas, for example) and silence or turn them off. Kids who have devices on at night get one to two hours less sleep and are more likely to fall asleep at school than those with devices off (National Sleep Foundation's 2014 Sleep in American Poll). You might ask, why not just have the device in the bedroom and set limits on its use? This seems simple enough but our response to the noises our phones make is called an event schema. When our phone makes a noise, we reach for it. It is an automatic brain response and is very hard to avoid so it is best to remove devices from bedrooms during sleep hours.

MEMORY, LEARNING & SCREEN TIME

Did you know that if we learn something (do homework, study, etc) while being distracted by our phone or a screen that we don't learn the material as well as without the distraction? Students are surprised when I have them participate in an activity that demonstrates this concept as they are sure they can do both effectively – monitor their phone and study! Studies have linked media multitasking to reduced academic performance and a recent review of the literature on this topic finds **media multitasking interferes with attention and working memory negatively affecting recall, comprehension, academic performance and overall grades** (May & Elder, 2018). While this applies to our kids, the good news is we can assist them in this! Completing homework or studying *without* devices nearby or the television on, for example, will allow them to learn the material more effectively and perform better academically. Memory is improved through taking these steps!

SOCIAL MEDIA SCREEN TIME

Child and adolescent use of social media is on the rise and reading the research that is just now becoming available on the impacts, it is unfortunately not good news for health or development. **I feel this is a very difficult area to address as a mom since I use my devices, social media and the like and understanding how it impacts my children means little to no use of it for my kids.**

That said, **here is some of what we know to date regarding child and adolescent use of social media...** As kids approach the teen years and puberty, they see themselves in ways different than we do as adults and this is based on their cognitive development. Did you know that our brain takes more than two decades to fully mature? Our frontal lobes (the brain region that allows us to reason, plan, think through our actions, manage our emotions) do not begin the pruning process until about age 9 and are not fully developed (pruning still taking place) until into our early 20s. This allows us the amazing frontal lobe abilities we have as human beings, but it takes past childhood to get to our full abilities in these areas! It also means despite children becoming more like adults as they grow and develop, they do not have the cognitive abilities of adults which makes social media risky for them.

David Elkind developed the following concepts in the 70s which hold today through decades of research: young teens are incredibly sensitive to what others think, they first become aware of others' flaws and then become acutely aware of their own. **This is not a fault but a normal part of their cognitive development** which they do not have control over. They are **egocentric** (according to Elkind, young teens tend to feel that their actions are at the center of everyone else's consciousness) and an aspect of this is Elkind's **imaginary audience** (they feel everyone is watching their actions which evokes intense self-consciousness). Again, these are normal (and challenging at the same time) aspects of their cognitive development resulting in experiences during this stage of development that differ from that of adults. As puberty begins and as a result of what is happening with cognitive development, kids tend to seek immediate gratification over future rewards and are especially vulnerable to peer pressure in emotionally charged situations (Belsky, 2019). If you are thinking, wow, this is a lot for them to go through! It is a lot and while all normal in terms of a child's development, access to social media can exacerbate these already challenging developmental hurdles. As caregivers of children and as they develop, we always want to provide what is called the best **person-fit environment**. This is a term used in development that refers to the extent to which the environment is tailored to our biological tendencies and talents. This is crucial to promote our human potential and is a core goal of developmental science.

Studies find **social media use in adolescents linked to depression, regardless of the amount of time spent using it** (Benjamin et al., 2015). The same findings exist for adults. In other words, with use comes higher risk of depression and anxiety. You may ask, WHY? Kids at this age, due to how they are developing cognitively, are at higher risk for such challenges when social media is a consistent part of their lives. They are at an already heightened state of self-consciousness and the unique nature of social media with constant alerts **creates pressure for adolescents** to respond and not miss out and even more, **adolescents report feeling stress and guilt** when not responding to a message immediately (Woods & Scott, 2016). Again, this links to their cognitive development and how they view self and others at this time in their development. We can relate to this as adults as when we hear our phone, we reach for it. We usually want to respond as immediately as we can.

LACK OF OUTDOOR PLAY AND SCREEN TIME

One of the areas of child development that stands out most to me as a mom is the **lack of outdoor play that is occurring as a result of screen time**. This is a concept that has been talked about in child development for years, but only recently do we have research to back up the **unfortunate negative impacts of screen time as it relates to children's physical development** – their growth and motor skills. I remember growing up and spending hours each day outside with friends. While today is a different era and the concerns among parents are many regarding close supervision of their children, free play and especially **outdoor play is crucial to healthy child development**. In addition to the physical benefits of outdoor play, it allows children to be creative, problem solve, and learn. Recent research across many countries including the United States find that **today's elementary school children are less proficient physically than in the past** (multiple studies cited in Belsky, 2019). This is an area of burgeoning research and one in which I'm sure we will continue to hear more about! The message to take from what we know through research to date is: **allow kids time to play outside (or free play inside when weather does not allow) whenever possible**.

SCREEN TIME ALLOWANCES

While the American Academy of Pediatrics (AAP, 2016) recommends no screen time before age 18 months and one hour per day of high-quality programming for ages 2 to 5, for children ages 6 and older, it recommends consistent limits be placed on time spent using media. AAP further states, **screen time should not take the place of adequate sleep or physical activity** and recommends having media free times together such as family meals and to continually talk with kids about online citizenship and safety (for example, treating other with respect online and offline).

IN CLOSING, I know this is a lot of information and, as a parent, it is overwhelming! I am with you in that, but I also feel that with changes in society and screen time use on the rise, it is important to share these researched understandings to assist both us – as parents facing these challenges – and our children. Thank you so much for reading!