iKEEPSAFE

WHY ENCOURAGE CYBERBALANCE?

Public Health Research Summary

Kids' bodies, minds, and relationships are influenced by their digital habits.

FOSTERING A HEALTHY TECHNOLOGY ENVIRONMENT

Device use impacts sleep, focus, and physical wellness. Developing bodies and minds are particularly vulnerable to health risks. The following reports from academic research, public health, and popular news track the prominence of Cyberbalance challenges and demonstrate the need for awareness, education, and behavior change to address them.

PARENTAL GUIDANCE

Kids rely on parents and leaders to help them manage their time and establish healthy tech habits.[1, 2] Although many parents monitor and limit their children's digital presence in some way, either manually (social media profiles, web history), or with technology-based tools (filtering, blocking), most parents still report concern about the amount of time their child spends using digital devices and are looking for guidance.[3] In families with teenage children, connecting on social media platforms can enhance parent-child relationships.[4] To reduce risk of negative health effects, parents and leaders must consider variables of device use such as frequency and duration, the use of multiple devices simultaneously, and the proximity of the screen.[5]

BODY

Bending our necks to lean over phones increases the volume of strain on the neck to about 60 pounds, and over time can lead to the development of a 'dowagers hump' even in teenagers.[6] Good posture, and resisting the "text neck" (where we hang our heads and slump over devices), helps us maintain high self-esteem, increase positive mood, and build resistance to stress – in addition to simply avoiding muscle strain.[7] Changes like more sedentary playtime at home and shorter more physically limited in-school breaks for movement are reducing the opportunities children have to increase blood flow to the brain.[8] Free play where kids roll, flip, and jump sideways, upside down, and right side up is necessary to developing core strength, balance, and a strong sensory system.[9]

VISION

Blurred or damaged vision and dry eyes are common consequences of the near constant exposure to the blue light (high-energy visible light, HEV) that computer and device screens emit.[10, 11] Young eyes are more vulnerable to blue light, because these light rays beeline to the back of a child's eye – where lack of pigmentation means less protection.[12] In extreme cases, symptoms may include words and images moving or shaking on the screen (usually due to eye alignment issues), or even early macular degeneration (leading to blindness).[13, 14]

Sleep

Charging phones in the bedroom or using devices right up until bedtime reduces our capability to relax and sleep soundly.[15] While the blue light from digital screens can boost attention and mood in the daytime, it interferes with melatonin – the sleep inducing hormone – and the body's circadian rhythm, leading to patterned sleep disruption.[16, 17] In addition, sleep deprivation interferes with the development of key leadership skills, such as creative problem solving and emotional stability.[18]

Mind

Multitasking reduces productivity and efficiency, and it shrinks attention span.[19] Although kids may claim it's possible to watch TV and do homework simultaneously, the brain can only truly concentrate on one thing at a time.[20] When trying to multitask with multiple screens, the rapid shifting of your gaze – at least 4 times per minute – precludes effective learning by limiting focus to a few seconds per screen at a time.[21]

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