

Conference notes

## Screen time: emerging concerns

These observations and notes were taken at a Childhood Summit presentation by Dr Mari Swingle.

She is a Canadian Neurotherapist and author of *i-Minds: How Cell Phones, Computers, Gaming and Social Media are Changing Our Brains, Our Behavior, and the Evolution of Our Species*.

She presents a sobering account of research based evidence relating to the rewiring of the human brain in response to constant exposure to screen time.

She notes that ultimately the current generation is in the midst of a running experiment of which we do not yet know the outcome. However the current research is telling us that screen time is affecting our brain development and mental health and that it is important to find the time to switch off.

### Here are some key points from her presentation:

More than 10 years ago, screen addiction was noted as a national health issue in China and South Korea. At the same time nearly 9% of US school children had a pathological addiction to gaming. Imagine how those numbers would have increased over the last decade.

Studies systematically show that the brain pathways involved in gaming and screen time are the same as those involved in hard core addictions.

We get a mini “high” every time we engage with a screen and we keep looking for that “high”. The brain becomes wired to never be satisfied...to need and crave more and more.

Screen time gives us rewards just for playing, even the worst player succeeds and is rewarded with “dings and bings”. Other activities do not reward so systematically. In real life you don’t get the “re-do” because there are physical and mental limitations.

Real life can’t compare with the type of biologically based brain reward that we get from screen time.

We end up with children who are truly “bored” because screen addiction has raised the arousal template. They are used to the screen speed and fast paced experiences. Ultimately they then need more arousal, not only to engage in activities, but to simply be interested in them. They become unable to self entertain, agitated and dysregulated.

### How is childhood development being impacted?

Technology can hijack the developmental process and if you change the brain in development, you change the person. Permanent changes can occur in the visual processing system and vestibular system.

If technology is used repeatedly as a babysitter and a substitute (rather than a complement) for human interaction and exploration, then behavioural and emotional dysregulation manifests. Children attach to objects rather than caretakers and learn regulation with screens and not people. When the screens are removed, then their security is removed and children can become anxious and upset.

We are seeing an increase in children who are unable to read facial expressions and emotional cues due to a decrease in face to face interactions and touch.

Play on screens versus play outdoors; these develop completely different areas of the brain. Play is central to development. When play becomes screen based, then we end up with poor survival skills for the real world. Including impoverished emotional ability, physical abilities and cognitive abilities.

### Where to from here?

Consider how screen time is managed within your family. Ensure adults are setting a positive example and limit, decrease or remove screen time in exchange for face to face connections, play and outdoor experiences.