

## Media Questions

### 1) Who is Cris Rowan?

A pediatric occupational therapist, author and motivational speaker with Zone'in Programs Inc., a corporation that will change the way children use technology, **forever**.

Zone'in provides an extensive **System of Solutions** to the problem of technology overuse by children by offering **products, workshops, training** and **consultation services**. Zone'in advocates for managing *balance* between activities children need to grow and succeed and technology use.

Cris has 30 years experience working as a pediatric OT and sensory specialist in home, clinic and school settings. Cris observed increased incidence of diagnosis of child behaviour in children with high technology use, and subsequently developed Zone'in Programs.

### 2) What are problems associated with technology overuse?

#### Technology Usage Statistics

- 0-2 year olds watch 2.5 hours per day of TV, and 25% have a TV in their bedrooms
- 3-7 year olds use 4.5 hours per day of technology and 50% have a device in their bedroom
- 8 – 18 year olds watch 7.5 hours per day and 75% have a device in their bedrooms

#### Technology Use Recommendations

American Academy of Pediatrics and the Canadian Pediatric Society, recommend:

- NO technology exposure for children under two, even passive TV
- 1-2 hours per day for preschool and elementary aged children
- Removal of all technology from bedrooms
- 2-3 hours per day rough and tumble play

#### Impact of Technology on Children

Every minute spent in front of technology is detrimental to child health and academic performance. Four areas of concern are as follows:

- I. **Physical – technology is a form of restraint, and is replacing play!**
  - 30% of children entering the school system are **developmentally delayed**
  - 25% of children are **obese**

- 75% of children have TV's in their bedrooms causing **sleep deprivation**

## II. **Mental – we are medicating child technology addictions!**

- 14.3% of children have a **diagnosed mental illness**; anxiety, depression, obsessive compulsive, bipolar, addictions to name a few – MANY on poorly researched psychotropic medication
- 8% have **ADHD** and 1 in 45 children have **Autism**
- **Stress related disorders** on the rise due to chronic **high adrenalin** states
- **Addictions on the rise (now 1 in 11)** - criteria is need to meet 3 or more of the following indicators (DSM IV)
  1. **Tolerance** – use same amount, but it's not as much fun anymore
  2. **Withdrawal** – can't go without
  3. **Unintended Use** – use more than intended
  4. **Persistent Desire** – tried to stop but can't; think about all the time
  5. **Time Spent** – technology use takes up most of free time
  6. **Displacement of Other Activities** – limited participation in other activities
  7. **Continued Use** – keep using even though know it isn't healthy

## III. **Social – all shooters are gamers!**

- US has categorized media violence as a Public Health Risk due to causal relationship to **child aggression**
- **Parental fears** regarding safe outdoor play, have contributed to **isolation** causing depression and poor social skill development

## IV. **Cognitive – technology is entertainment, it's rarely educational!**

- Literacy and academic performance are declining due to the following MYTHS:
  - teachers no longer need to teach children to print (90% of graded output is written!)
  - screen reading is the same as book reading; screen reading results in poorer memory, comprehension and ability to think critically
  - children can sit still and learn; sedentary lifestyle and obesity prevents learning

Wired for high speed, the new age brain is being reprogrammed to **not access frontal lobe**, known for executive function, seeing the “big picture”, and impulse control. How can we **teach children** when they can't process information, are unable to envision goals, and have no self regulation or control?

### **3. What are the FOUR BASIC FACTORS for ensuring optimal child development?**

**“Growing” children** is like building a house, **it’s all about the foundation**. If the foundation isn’t constructed properly, the house will have life-long problems, it might even fall down. If children don’t engage in critical activities during development, their growth and success at school will be impaired.

#### **Moving to Learn – Playground most essential component for learning!**

- Improved cognition: exercise enhances memory and learning through improved neurogenesis in hippocampus and frontal cortex.
- Decreases ADHD: increases dopamine transmitter, which improves focus and attention.
- Increases attention: releases nerve growth factor to inhibit impulsivity, promoting focus.

#### **Exercise Decreases Impulsivity and Increases Attention!**

- Impulsivity control is located in the frontal lobes.
- Overuse of technology “short circuits” access to frontal lobes.
- Exercise increases blood flow to frontal lobes, thereby decreasing damage caused by technology overuse.

## **4. What is the Impact of Technology on Families?**

**Sedentary** aspects of technology use, combined with **inherent isolation** from other human beings, is resulting in a host of physical, mental, social and academic impairments that the health and education systems are just beginning to detect, much less understand.

Technology is the **single most destructive factor** to child health ever witnessed by humankind, and has gravely put the sustainability of our children’s future in peril.

Children who are high users of technology **may not outlive their parents**.

**Connection to technology is disconnecting human relationships.**

*Preferring devices over time spent in human connection*, reflects a society that has **lost the significance of the “pack”**. For hundreds of years humans hunted, gathered and farmed in groups. Work was highly physical, and isolation from the tribe meant certain death. Survival required members rely on each other, resulting in the formation of close relationships and attachments.

**Now - socialization is minimal.** The family dining room table has been replaced by the “big screen” with vibrating cell phones, classrooms are rapidly becoming “virtual” as playgrounds

disappear, and workplace cubicles become a haven to increasingly depressed, anxious and compulsive employees.

The **actual values** we used to build the foundations and structures for home, school and work systems are disappearing before our very eyes. **Communication, discipline, caring, playfulness, independence, and exploring nature** don't seem to be important constructs anymore – we simply just don't have time.

While technology may appear to be making life easy, **processing multiple incoming stimuli** is overloading the brain and actually reducing overall productivity. Have we evolved to accommodate this sedentary, yet chaotic existence? With **brains moving faster and faster**, and **bodies moving slower and slower**, the sustainability of the human species is truly in peril.

## Parents

**Technology usage patterns** of the **child** follow that of the **parent**. When treating child addictions, therapists need to start with the parents.

The underlying factor for addictions is **poor attachment formation** between parent and child.

Parents may need “generational” counselling to investigate their own relationship with their parents, in order to learn how to become emotionally available to their children.

## 5. What are the SOLUTIONS?

### Balanced Technology Management Initiatives

**Managing balance between activities children need for growth and success with technology use.**

To optimize development, children need stimulation to their **sensory, motor** and **attachment** systems. Children need to move...a lot, touch and be touched, and connect in meaningful ways with other human beings.

There are five BTM initiatives developed for each of the following target sectors to address technology overuse in children. Sectors need to team together to manage this "balance" between technology use, and participation in activities children need for growth and success.

:

1. **Parents** – teach alternate skills, read one book every day, create sacred time

2. **Teachers** – teach printing, restrict technology use at recess and lunch, build “sensational” playgrounds, don’t refer for behaviour diagnosis
3. **Health Professionals** – *Unplug – Don’t Drug*, provide families with accurate information
4. **Researchers** – determine correlations b/w technology use, behaviour and medication, investigate addictions, develop *Child Health Guidelines* for technology industry
5. **Government** – regulate product safety, legislate risk warnings, limit media violence
6. **Technology Production Corporations** – educate technology designers regarding health risks, fund movement and nature based activities in schools and communities, create online “Help” network for children

### **Ten Steps to Unplug Children from Technology** (on website zonein.ca)

1. Parents **unplug themselves first**
2. Families develop **realistic goals** and a **plan for reduction**
3. **Delineate sacred times** without technology use (meals, before bed, in car, holidays)
4. **Identify alternate activities** to technology (solitary, with friends, with family)
5. **Build performance skill** in alternate activities
6. Ensure **critical factors for child development** are met for movement, touch and human connection
7. **Create "family team nights"** for cooking, cleaning, board games, outdoor walks, community gym
8. Address **parental perceptions of safety**
9. **Assign daily individualized task** for building inner drive
10. **Schedule balance** between critical activities for development with technology use