



Screen Sense-Setting the Record Straight

Research-Based Guidelines for Screen Use for Children Under 3 Years Old

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Poll Question #1

ZERO TO THREE

ZERO TO THREE is a national, nonprofit organization that provides parents, professionals and policymakers the knowledge and know-how to nurture early development...

In order to give all babies and toddlers a strong start to life.



New Variable in Children's Development: Screens

Screens are ubiquitous. Children are born into a world of digital devices.



The Facts About Usage

On average, children from birth to 23 months old are watching 55 minutes of TV a day, and 2- to 4-year-olds are watching 90 to 120 minutes a day.



The Facts About Usage

Use of mobile media starts young:

- More than a third (38%) of all children less than 2 years old have now used a mobile device compared to 10% 2 years ago.
- Among 2- to 4-year-olds, the rate has grown from 39% to 80%.



The Facts About Usage

Smartphones are the most frequently used device among children 8 years old and younger

- 51% have used smartphones for a media activity, although tablets are close behind at 44%.⁷



Goal: To Set the Record Straight

- Advice for parents is conflicting and often based on ideology.
- Commitment to providing parents and professionals solid, research-based guidance to make informed, mindful decisions.



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What We Know Helps Children Learn

Positive parent–child relationships



Quality early learning experiences that promote:

- ✓ language
- ✓ exploration
- ✓ experimentation
- ✓ problem solving
- ✓ creative thinking
- ✓ social skills



Opportunities to transfer learning: Ability to apply information from a past experience to a new situation

Poll Questions #2 and #3

What We Know Matters:

The 3C's

*The importance of child, content,
and context*

Transfer of Learning

(Barr, 2013, Barnett & Ceci, 2002; Hayne, 2006)

Young children consistently learn **less** from TV and touchscreens than from a live demonstration because it is difficult to understand how information from the screen relates to the real world= the transfer deficit. (For review see Anderson & Pempek, 2005; Barr, 2010,2013)

Transfer deficit can be overcome by considering the 3C's (Guernsey, 2012), how the child learns and the content and the context of that learning.

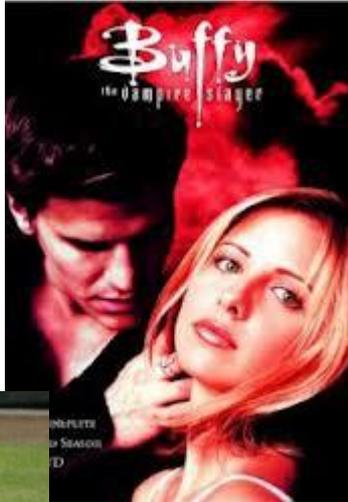
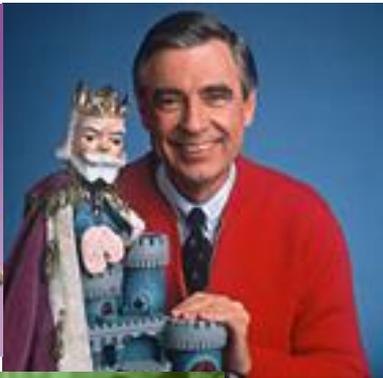
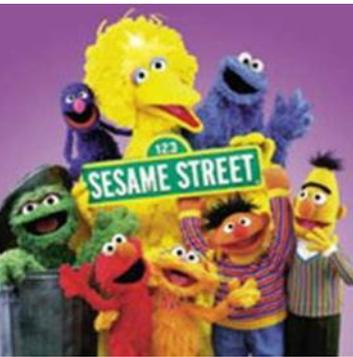


Amount of TV Exposure

- Associated with language and cognitive outcomes, and capacity to pay attention.
- However, recent studies show that other factors, especially the **content and context** of media exposure, contribute to these outcomes.



Content Matters



Background TV is Not Benign

Background TV is typically not child-directed and is mostly incomprehensible to young children.



Background TV Interferes in Children's Play and Learning

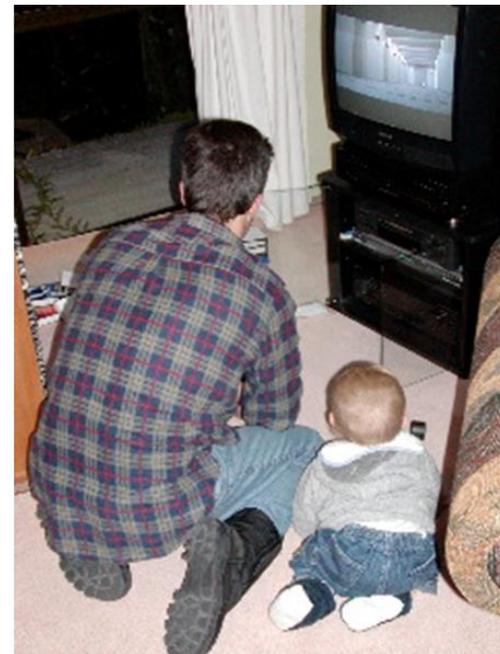
Background TV Is Associated With Poorer Parent-Child Interaction

Poll Question #4

Quality of Content Is Critical

- Quality of program's content associated with language outcomes
- Pace and content of program is associated with an impact on executive functioning skills
- **Both content and context matter!** For children at risk, positive parental involvement was associated with better executive functioning outcomes (Linebarger et al., 2014).
- In toddlers mindful parenting practices around television were associated with higher quality program selection and better language outcomes .

Context Matters



Poll Question # 5

Parent Involvement: The Facts

- Learning from TV and touchscreens can be enhanced when parents participate with their children to create a social, interactive experience.

However...

- Parents watch TV with their children only about *half the time* the child is watching.
- Parents use other media (mobile devices, video games, and computers) with their child *about a quarter of the time* the child is using.
- Parents talk with and interact with their children during *less than half* of the child-directed programs their children view.

Parent Involvement is A Critical Factor

- The more parents engage their young children in verbal interaction while watching educational programming together, the more infants attend and respond to the media (Barr et al., 2008; Fidler et al., 2010)



- When parents actively engage their children while using a touchscreen, the toddlers are *significantly more likely* to transfer learning from the device to a real object. (Zack, 2010)

Inherent Interactivity of the Screen Medium

- The more active children are as they engage with screen media, the greater their learning.
- Interactive media help children to understand that the symbolic events on a screen represent real-life experiences



- Beware of Too Much Interactivity—interactive experience must be linked to the what the child is trying to master
- E-stories—take care to focus on the story-line and avoid too much time on extra features

The Impact on Sleep and Obesity



Link Between TV and Sleep Problems

Greater amount of TV watched per day

Having a TV in the bedroom

The amount of time spent viewing media in the evening before bedtime

Exposure to violent content on TV



Link Between Use of Screen Media and Obesity

Association between TV viewing and:

- increase in food intake
- reduction in physical activity
- exposure to poor quality food

TV and computer use have also been associated with an increase in body mass index (BMI)

A TV in a child's bedroom is also a risk factor for obesity

Impact of Parental Screen Use

- Observational study in fast-food restaurants
- Suggests missed opportunities for valuable social interaction with their children
- Can result in an increase in negative child behaviors and angry, punitive responses from parents.



Implications: BE MINDFUL

What to limit:

- **Set limits** on screen time to be sure that children have plenty of time exploring the real, 3-D world with family and friends.
- Turn off the **TV in the background** and when no one is watching.
- **Screens in children's bedrooms** or using them as part of the bedtime routine
- **Your own screen media use** when with children

BE MINDFUL

What to do:

- Be sure that **content is age-appropriate and reflects children's everyday experiences**, so it has meaning to them.
- **Participate** and make screen use an interactive, language-rich experience.
- **Help children bridge the gap** between content they are exposed to on screens—new words and concepts—and their real-life experiences.

Frequently Asked Questions



What time limits do you recommend?



How do you choose content?



Is there a good age to start allowing your children to use mobile devices?



I see a lot of caregivers using these new mobile devices to pacify children. What would you say to a caregiver about this phenomenon?



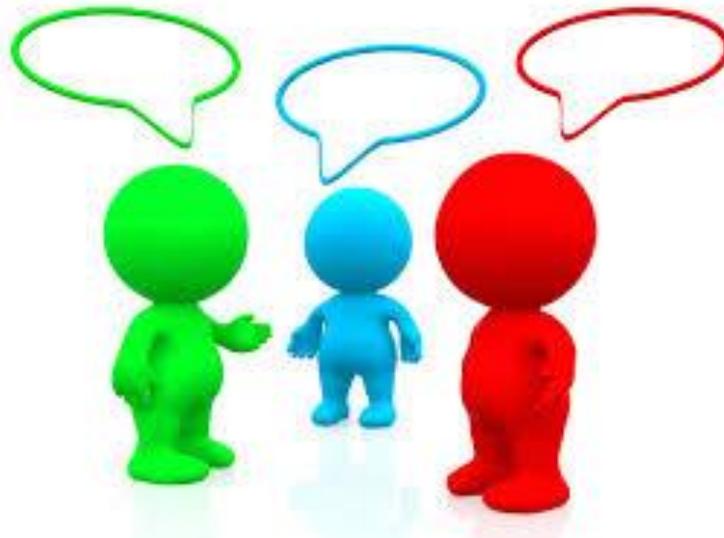
Does the transfer deficit apply to books, too? They are 2-D.



What advice would you give to caretakers who have multiple children with large disparities between their ages? If someone were to care for a 2-year-old and a 5-year-old, is it damaging to the toddler to watch more mature content?



Because background TV can interrupt play, what about everyday interruptions and background noise, such as conversations and traffic?



Is there any difference between what a child learns from an e-book and a traditional storybook?



Is there a difference in children's engagement between standard screen use and touch screen use?





SCREEN SENSE: SETTING THE RECORD STRAIGHT

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Available for download: The white paper, key findings document, and tips for using screen media with young children.

www.zerotothree.org/parentingresources/screensense

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