

This is Your Child's Brain on TV

Mar 22, 2016 by [Kristina Birdsong](#)

Limiting exposure to television may be one of the best ways to help kids succeed in school.

Despite the number of educational programming geared towards toddlers, it's unknown if kids under age 2 can actually learn from TV.

The negative effects of watching television have a long term impact on academic success. Watching television interrupts activities that promote cognitive and social development.



What are the risks of watching too much television from a young age?

For children and students who have trouble finding creative ways to solve problems, difficulty reading and seem delayed in understanding socially acceptable behavior, television could be to blame.

We've worried for decades about the effects of television on kids. But volumes of research on the issue are often inconclusive and contradictory and that may be one reason that Americans – instead of watching less television – are watching more and more.

The facts: America's favorite pastime

Today, Americans have more televisions in their homes than people who reside in them and children, even toddlers, spend more time than ever in front of their TV sets. Televisions are on nearly seven hours a day in most American homes and television plays each day in 70 percent of our day cares. We download more television programs than we check out books from libraries. And, we own more televisions than ever – 2.24 TVs per household with 66 percent of us owning three sets or more.

It's likely that your students watch 1,680 minutes a week, probably a lot more time than they spend studying. On average, American youth spend 900 hours a year in school and 1,500 hours watching television.

Seventy-five years after television was first introduced to American homes, we still don't know all the answers about how TV affects child development. But research is clear on one general idea: Television causes problems because kids who watch excessively are NOT doing other things that we know will help them become academically successful.

TV viewing replaces reading, doing homework, pursuing hobbies and getting enough sleep. It displaces creative activities, discourages exercise, creates demand for material goods and increases aggressive behavior in some children.

Watching television is a passive activity, a one-way street, points out an expert on child brain development and television viewing. Television displaces other important activities that promote cognitive and social development, Dr. David Perlmutter wrote.

“When a child is watching television, he or she is not involved in play, not socializing with other individuals and most importantly, not receiving feedback as to the actions or consequences of his or her behavior,” Perlmutter, a neurologist and author, wrote in [“Brain Development: How much TV Should Children Watch?”](#) (Huffington Post, December, 2010).

Children who watch too much television are likely to:

- **Forego fantasy play**, which is critical to brain development because it helps kids understand symbolism, the foundation of reading.
- **Fail to question** and develop alternative understanding and explanations which leads to creative problem-solving.
- **Develop weaker language skills** because television offers no feedback that helps them modify their understanding of words.
- **Have a diminished “EQ,”** or emotional quotient, which is critical to the development of social skills and understanding that actions have consequences. Children with compromised EQ fail to learn how to vary their responses to social experiences.

Of particular concern are the results of one study that show the negative effects of television viewing are long term, according to the University of Michigan’s medical website. “The study found that watching TV as a child affected education achievement at age 26,” the site says. “Watching more TV in childhood increases the chances of dropping out of school and decreased chances of getting a college degree, even after controlling for confounding factors.”

The risk of television delaying learning in infants is so great that the American Academy of Pediatrics recommends that babies under the age of 2 be banned from watching altogether. Parents, however, are increasingly asking for toddler-friendly shows and television producers are happy to comply. Television shows aimed at educating toddlers are on the rise and nearly three-quarters of all infants and toddlers have watched television before age 2. By their second birthdays, 43 percent of all 2-year-olds watch television every day. Programming aimed at babies claims to promote early language and it’s tempting to believe it can. But experts say it’s too early to know if kids under age 2 can actually learn from TV.

One leading researcher on the topic, Dr. Patricia Kuhl dismisses the idea that babies can learn language from television, even though children as young as 18 weeks can listen to vowel sounds and then look at the correct corresponding lip shape on a video monitor. Kuhl, co-author of the 1982 seminal study “Bimodal Perception of Speech in Infancy,” published in *Science*, elaborated on her results in a 2010 TED talk.

Children require face-to-face contact from caretakers who provide verbal and non-verbal clues to kids that television – no matter how kid-friendly – cannot, Kuhl concluded. In analyzing Kuhl’s work, author and early intervention speech-language pathologist Saran Andrews Roehrich explained that caretaker interaction is critical to a baby’s ability to talk and later on, to read. “Over time, by listening to and engaging with the speakers around them, babies build sound maps which set the stage for them to be able to say words and learn to read later on. In fact, based on years of research, Kuhl has discovered that a baby’s ability to discriminate phonemes at 7 months-old is a predictor of future reading skills for that child at age 5 to 7.”

The early interaction from caretakers is also important to long-term development, Roehrich wrote. “Since brain circuits organize and reorganize themselves in response to an infant’s interactions with his or her environment, exposing babies to a variety of positive experiences (such as talking, cuddling, reading, singing, and playing in different environments) not only helps tune babies in to the language of their culture, but it also builds a foundation for developing the attention, cognition, memory, social-emotional, language and literacy, and sensory and motor skills that will help them reach their potential later on.”

Babies familiar with their caretakers' voices learn sound patterns and speech sounds that allow them to understand the "edges" of sound, one missing link for children with dyslexia and auditory processing problems. Eventually, the research on babies and speech could have important implications for special needs kids.

What can we do?

For now, limiting exposure to television may be one of the best ways to help kids succeed in school. Otherwise, we're likely to see more kids struggle to learn, according to Dr. Bob Sornson, founder of the Early Learning Foundation.

"If we allow children to have poor quality language experiences, substituting entertainment devices for real human language experiences, there will be casualties," Sornson wrote. "If we allow our children to become socially isolated and distracted by a constant barrage of video entertainment options, there will be casualties."

References:

[Kuhl Constructs: How Babies Form Foundations for Language](#)

[Kuhl, P. \(April 3, 2012.\) Talk on "Babies' Language Skills." Mind, Brain, and Behavior Annual Distinguished Lecture Series, Harvard University.](#)

[TV and Kids Under Age 3](#)

[More than Half the Homes in U.S. Have Three or More TVs](#)

[Brain Development: How Much TV Should Children Watch?](#)

[Television and Children](#)

[Who's Looking Out for the Children?](#)