



The Family Place Parent Child Center

319 US Route 5 South • Norwich, VT 05055 • 802-649-3269 • 800-639-0039 • info@the-family-place.org • www.the-family-place.org

Big Screens, Little Minds

As adults, many of us choose to watch television at the end of the day. It helps us relax. Research tells us that 30 minutes a week of laughing at our favorite television show is a way to reduce stress and improve our mood. We even bond as a social group over American Idol and Survivor.

Television, with its clever use of constantly changing short sequences, holds our attention with a visual bombardment. We are constantly drawn back to process each new sequence of information. And, since our brains are capable of processing 8 frames of information a minutes and programs run at 30 frames per minute, our brains become stimulated. The stimulation takes place in the back area of our brain where we also process the need for food and sex. Television produces a stimulus/response sequence in us. In other words, we become addicted. Is it any wonder that television shows are called programming?

But what stimulates us, makes us laugh, helps us to connect with our social group, has very different implications for a child. Television is a demanding medium that creates stress for a child, and this stress has an adverse effect on the healthy development of the child's brain.

What We Know About Brain Development

The time from birth to age five is a critical developmental stage for the brain, one of massive synaptic growth. What we know about television and it's effects on brain development offers some compelling arguments to limit viewing for young children.

First, brain are shaped by environment. Brains are so malleable that the way a child uses his hands in the first years of life up to age 8 subtly forms certain dominance in the brain. The task of the childhood brain is to prune away cells that are not needed (drinking from a bottle) and to strengthen ones that are (keeping balance while walking). With too much computer or TV time, children are deprived of opportunities to grow mentally in some very important ways. In today's culture of watching TV, computers, mp3 players, video games, and even instant messaging, brains are being permanently shaped to watch.

The impressionable nature of the developing brain also means that the fast pace of television programming impacts a child's growing ability to pay attention. Programs are relentless, requiring children to attend on five to seven second pieces of rapidly changing information. The child's attention is being jerked around, with ten-minute intervals of commercials discouraging a child from developing the ability to pay attention for very long. In addition, advertisers use "cradle to grave" marketing methods designed to encourage children to learn brands when they are first learning to talk. Any astonished parent who has had a child point at a big yellow M while asking for a hamburger knows how insidious this marketing can be.



Second, very strong evidence indicates that chronic stress has an adverse effect on brain development. An overload of information and stimulation, like that produced by rapid fire images too fast for the brain to understand, is stressing and may tax to the developing neurological system. It is, at the very least, mentally and physically draining. The resulting stress hormone (cortisol) floods the brain, which inhibits the creation of neural pathways, especially in the memory center (hippocampus). This memory center is responsible for the kind of memory we use to know facts like our address or the name of a friend, and for knowing that this information is known. This is the place where brain cells are damaged by stress.

Third, the brain develops from the back to the front. The back of the brain processes primitive emotions and needs, it is where “fight or flight” lives as well as the need to eat, sleep, and procreate. Reasoning is located in the front of the brain. Young children will respond to stimulus from the emotional center years before they can think from their reasoning center. If you ask a child *why* a cartoon character shot at another one, he may likely respond by jumping up and down and making shooting motions, saying, “They shoot!, They shoot!” There is no reason to the question, only a very emotional response. The reasoning center of the brain begins to develop around age eight. It is at this time that a child may begin to thoughtfully consider such a question with, “Well, maybe he shot at him because he was mad.”

Where Do We Go Next?

Visual media is not going to go away. Keeping a child “media-free” may not be the most realistic approach to addressing the situation. Once a child reaches school-age, it is unlikely that he will remain media-free. It will become increasingly difficult to shield him from programming. He will be exposed to media eventually, and helping him develop skills and tools to handle it should happen before he ever gets a taste of it. Early in a child’s life, parents need to consider how much and what kind of programming their child is exposed to, and how to help him process what has been viewed.

Following some guidelines early in a child’s life may be the best way to balance healthy brain development with our culture.

- **It is not recommended that children watch any visual media before age 2.** This can be a challenge when the two-year old is a younger sibling, but try to encourage the younger child to leave the room and play with other toys. Most very young children, if given the choice between watching television and playing with, for example, play dough, will happily choose play dough.
- **Young children who are watching should view in no more than two 30 minute segments at two different times.** This may mean 30 minutes in the morning and 30 minutes in the afternoon, or breaking a 60 minute show into 2 parts. Spreading out the viewing lessens the impact of viewing.

The information in this article comes from the following:

[Touchpoints of Development](#), T. Brazelton, MD

[Television and the Quality of Life: How Viewing Shapes Everyday Experience](#), Kubey and Csikszentmihali

“Visual Media and Attention Span,” DeGaetano

“Turned on Toddlers,” *Journal of Communication*

[Tips for Parenting in a Commercial Culture](#), Center for the American Dream

American Association of Pediatrics

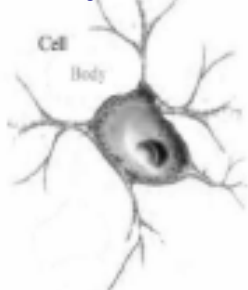
Dr. Jane Healy, speech at the National Education of Young Children conference

National Institute of Mental Health

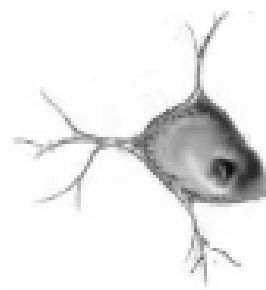
New Mexico Media Literacy Project

- **The information that has been viewed should be incorporate into some kind of play and discussion to help the child process the content.** This may not seem to be all that important when a child is watching fuzzy puppets being nice to one another, but the habit of processing and discussion will be *imperative* when the child is viewing questionable or explicit content.

A healthy enriched brain cell



A brain cell “on t.v.”



Staff:

Elaine Guenet, Executive Director
Christina Bagley
Hoyt Bingham
Shelly Blodgett
Sarah Canterbury
Kimberly Colson
Kelly Crawford
Debbie Cushman
Anne-Marie Darsney
Julia Dickenson
Prudence Fisher
Joanna Hamlin
Marla Ianello
Jeanne McMahan
Helene Meloche
Dianne Norton
Katie Ouelette
Linda Shilling-Burhans
Lori Stever
Kelly Wallace
Lisa Wills

Board of Directors:

Kathleen O. Snyder, Chair
Laurel Spielberg, Vice-Chair
Elizabeth Chabot, Secretary
Barbara Abbate, Treasurer
Mary Brown
Marie Colacchio
Michael Horvath
Arline S. Rotman
Peter Rutledge
Jack Wilson

- **Always consider a child’s behavior after viewing and monitor for signs of stress.** These signs may be subtle. He may have an uncontrollable urge to get up and run around the house, throw toys, or scream. He may also, conversely, become withdrawn and irritable.
- **Take back parental control.** If the children in the household have gotten into the TV habit, it’s time to set some very clear guidelines. Children as young as 4 and 5 can understand parameters if they are concrete. Determine how much television per day (for younger kids) or week (for older kids) will be allowed. Make tickets or use tokens that “buy” 30 minutes of viewing. For each program the child views, he must give the adult one ticket. When the tickets are gone, so is the television. Then buy a cord lock (\$15 at familysafemedia.com) and keep the TV locked off until the next time viewing is allowed.

Television viewing can hinder healthy brain development at a time when the brain is at its greatest stage of growth. The minds of young children are at an optimal stage when external factors can permanently change the way their minds work. And while taking kids “off” of TV is more difficult than not having them start, there is a huge body of compelling research indicating that too much television, and the wrong kind of television, can have permanent consequences for children. Taking control of their environment and making sure it is a healthy one is an obligation for all caregivers.

- The only activity that children engage in more than using media is sleeping.
 - The brain is more active during sleep than when watching television. Children average 1500 hours in front of televisions per year, viewing 20,000 commercials – making them the fastest growing consumer population, influencing the spending of billions of dollars per year.
 - Television and video games act as narcotics. They create a stimulus addiction. Children who are suddenly taken “off” of television experience real physical withdrawal including depression and anger.
- source: New Mexico Media Literacy Project*



The Family Place
Parent Child Center
319 US Route 5 South
Norwich VT 05055

Non-Profit Organization
U.S. Postage
PAID
White River Junction, VT
05001
Permit #75