

Television and Children:
Developmentally Harmful or Educationally Beneficial?

by

Jamie A. Dalbesio-Johnholtz

A Research Paper
Submitted in Partial Fulfillment of the
Requirements for the
Master of Science Degree
in
Education

Approved: 2 Semester Credits



Dr. Amy Schlieve
Research Advisor

The Graduate School
University of Wisconsin-Stout

August, 2007

**The Graduate School
University of Wisconsin-Stout
Menomonie, WI**

Author: Dalbesio-Johnholtz, Jamie A.

Title: *Television and Children: Developmentally Harmful or Educationally Beneficial?*

Graduate Degree/Major: MS Education

Research Advisor: Amy Schlieve, Ed. D.

Month/Year: August, 2007

Number of Pages: 24

Style Manual Used: American Psychological Association, 5th Edition

ABSTRACT

This resource guide examines the research available, including peer-reviewed and opinion papers, on the effects of screen time (computers and television) and the impact it has on children 2 years of age and under. The research available strongly encourages parents and child-care providers to prohibit screen time during these developmentally-formative years. The American Academy of Pediatrics (AAP) has recently endorsed the idea of not allowing children 2 years of age and under to watch television or use computers. Longitudinal research suggests that significant amounts of early screen time potentially leads to attention issues for children, which most typically manifests as Attention Deficit Hyperactivity Disorder (AD/HD). There are certain bodies of literature that suggest this may travel further down the continuum and eventually manifest as Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). This is a crucial issue in contemporary American society, especially in our age of technological accessibility and awareness. Parents and child-care providers need to be aware of the benefits,

risks, and consequences that screen time provides children and make informed choices of how to best serve maturing children's developmental needs.

The Graduate School
University of Wisconsin-Stout
Menomonie, WI
Acknowledgments

I would like to thank my husband, Josh, for believing in me and supporting me through my graduate program. I could have not been successful without his unconditional love, support, and guidance through this process. Thank you, Josh, for giving me our wonderful, happy children, Cameron and Isabelle. I hope they will be proud someday that their mother earned her Master's degree and that their father was a huge part of it.

I would like to thank my mother, Dianne, and my father, James, for providing financial support through my undergraduate and graduate studies programs at UW-Eau Claire and UW-Stout. Your love, patience, and support is always greatly appreciated.

I would also like to thank the wonderful staff at UW-Stout for making me feel like a true part of the educational community. Everyone has been so wonderful to me and I am so thankful to everyone I have met. All of the instructors in the School of Education have taught me so much and for that, I am forever grateful.

Finally, I would like to thank Dr. Amy Schlieve for her CONTINUED support through this lengthy thesis process. Amy, you have been so kind and accommodating through everything, including my difficult pregnancy. I could not have gotten through this process without you. Please let me know if I can ever return the favor.

TABLE OF CONTENTS

.....	Page
ABSTRACT.....	ii
Chapter I: Introduction.....	1
<i>Statement of the Problem</i>	1
<i>Purpose of the Project/Grant Proposal</i>	1
<i>Definitions of Terms</i>	5
<i>Methodology</i>	6
Chapter II: Literature Review.....	6
<i>Introduction of Research Supported Problem/Need</i>	6
<i>Television and Obesity</i>	6
<i>Television and Violence</i>	7
<i>Television and Attention Issues</i>	8
<i>Media Companies</i>	9
<i>Problems with (Pseudo) Developmental Products</i>	12
<i>Statistics</i>	13
<i>Alternatives to Television</i>	17
<i>Educational Issues</i>	18
<i>Summary</i>	18
Chapter III: Project Goals and Objectives.....	20
<i>Goal/objective</i>	20
References.....	23

Chapter I: Introduction

Television has been a popular staple of many American households since the 1950s. It has provided entertainment and information to millions of individuals; however, recently, it has been at the center of controversy. With the incidence of both childhood obesity and Attention Deficit Hyperactivity Disorder (AD/HD) increasing, experts are taking a step back and examining what the potential causes/triggers for these trends are. Since the 1970s, the incidence of childhood obesity has nearly doubled (Hassink, 2005) and the diagnosis of children with AD/HD has increased significantly. Current research shows a variety of proposed causes for these increases.

Statement of the Problem

With childhood obesity and cases of AD/HD on the rise, there has been research completed that links early television watching with these conditions. Media outlets are capitalizing on how television is appealing to families and young children; some examples of this include the *BabyEinstein* Series (Walt Disney Corp.) and *BabyFirst TV*, DirecTV's channel of 24-hour programming for infants 6 months and older. How will this programming affect infants and toddlers (through age 2), and how will affect special education programs in the next 10 to 15 years?

Purpose of the Project

The purpose of this resource guide is to review the current research that is available regarding television and infants/toddlers and the potential long-term effects screen time (television and computers) will have on them. Because there is such a divided set of research available between individuals who are pro-television for birth through age 2 (including the

developers and producers of BabyFirst TV and the Baby Einstein DVD series) and those who are anti-television for this particular age group (American Academy of Pediatrics; AAP).

The outcome of this resource guide will provide educators and parents a more comprehensive understanding of how television affects infant-toddler development and the potential long-term affects of too much screen time during the early years. I will also attempt to establish a link between attention problems and childhood obesity with early television viewing.

I became interested in this topic for both personal and professional reasons. I am an educator who teaches elementary (kindergarten through fifth grade), multi-categorical special education. I am also a new mother to 8-month-old boy-girl twins, Cameron and Isabelle. Even before my husband and I became parents, we talked about the various schools of thought regarding raising children and what type of parents we would be. We tend to base a lot of what we do on evidence-based methods and research. This is when the topic of early screen time came up. The research on early screen time is overwhelming. There are two types of research available on this topic: Peer-reviewed literature and opinion papers. Peer-reviewed literature is research articles that have gone through the rigors of being read and discussed by a panel of experts to endorse the information provided. Opinion papers are just that: a one-sided focus of a particular argument. Both types of information can be valid, but peer-reviewed sources are generally accepted throughout educational disciplines.

Keith Stanovich, author of *How to think straight about psychology*, articulates the importance of validity and reliability. He explains how operational definitions – instances that force us to think carefully and empirically – can be useful, but they need to display both reliability and validity (2007). Reliability refers to the consistency of a measuring instrument, and whether you would arrive at the same measurement if you assessed the same concept several

times (Stanovich, 2007). Validity means that an instrument is measuring what it is supposed to measure. Reliability and validity are two concepts that are very important components of peer-reviewed research. Without these components, research would not achieve “peer-reviewed” status.

Although there is abundance of peer-reviewed research regarding early screen time, both supporting and against it, it really didn't appeal to me until I gave birth. It's amazing how the moment when mothers sees her, in my case, children, and the overwhelming amount of emotions and love that overcomes. A mother wants to do what's best for her children, and, if there was any connection between early screen time and attention issues later in life, I wanted to explore the research.

I think it's interesting to also explore the differences in perspectives between people who are Western-medicine-based versus people who are Eastern-medicine-based. Because my husband is a paramedic, he is very Western-medicine-based. Everything he believes and practices rely heavily on science and what the medical field says has been successful in the past. While I respect and use Western medicine, I engage in a variety of Eastern-medicine practices including chiropractic, acupuncture, massage, and aromatherapy. My husband often thinks that some of the practices I believe are very far-fetched, and, before the AAP endorsed their no-television policy, was very apprehensive of my decision to have a no-television policy with our children. This type of decision-making is the trend within our family, and it's something we work with daily. I expect that a variety of individuals, parents, and families have to compromise between different theories of medicine and that this may have an impact on what type of information they implement within their own households.

Because of the decision that my husband and I have made regarding our no-television policy for our children, we have received mixed reviews from friends and family. I only have one close friend who is in the education field who fully supports our decision and plans to have the same no-television policy in her own home when her baby arrives in January 2008. I have a few other close friends who are intrigued by my decision. However, I have one close friend who is adamant that television and screen time has absolutely no impact on cognitive development in infants. While I respect her and love her because she is a close friend, I have felt compelled to bring up the research regarding screen time and attention issues later in life. Her opinion may be because she is not a parent yet, and I have hopes that when she does become a parent, her perspective may change.

Reactions from our family have been drastically different. The overwhelming response has been skeptical. Most family members say, "Well, we turned out okay, so television must be fine." I find it very disturbing that this phrase has been used to justify and rationalize poor decisions made by parents because it was "okay" for them. I have heard of women smoking or drinking during pregnancy because, "their mom did it and they turned out okay." I just can't imagine engaging in risky behavior that has an impact on someone you're responsible for just because it was okay for you. What is an appropriate measure of "okay"? If only going to school through 11th grade and spending food stamps on liquor is okay, we need to take a serious look at our standards.

Because of the abundant research available on this topic, I find it pertinent to mention that choosing a no-television policy for children is a relatively easy and free thing to implement in your home. It doesn't take any effort on the part of a parent or child-care provider, and, according to the research, can have lifelong benefits and can impact child development for years.

From a professional perspective, I encounter children with attention issues and difficulties on a daily basis. Most of my students, although having a primary diagnosis of a mental retardation, have some type of attention issues in the classroom. It's critical to mention that my students do have an attention span, but they lack a filtering mechanism. It's also important to establish the crucial difference between children with no attention span versus children who are distractible. Children with no attention span pay attention to nothing, which children who are distractible pay attention to everything (LaVoie, 2007). These differences are noticeable in the classroom, but all types of attention issues impact the learner, his/her peers, the educational atmosphere, and the instructor.

From a personal perspective, anything a parent can do that may increase the chance of success, vitality, or happiness for his/her children is worth it, no matter what. This remains a constant from an educational perspective as well. The current research supports the idea that large amounts of screen time, whether its television or computer, can have significant effects on the hard-wiring of the brain. Children's brains are very plastic-like and the synaptic connections are not fully developed. Because of this, a young individual's brain has better chance of developing "bad" habits, depending what the learner has been exposed to.

Definition of Terms

Throughout this research paper, the following terms will be used:

AD/HD (Attention Deficit Hyperactivity Disorder), a condition that becomes apparent in some children in the preschool and early school years. It is hard for these children to control their behavior and/or pay attention (National Institutes of Mental Health (NIMH), 2006).

BabyFirst TV, a 24-hour channel with programming specifically targeted at children 6 months through 3 years (BabyFirst TV, 2006).

Screen time, which refers to visual time in front of a television or computer screen).

Methodology

With the research analyzed, I will attempt to create a comprehensive resource guide for parents in regards to screen time and their child(ren). Because I am in the special education field, I feel as though it's crucial for all parents to understand the issues surrounding early television and what long-term impacts it may have, such as attention issues and obesity.

Chapter II: Literature Review

Television and Obesity

The incidence of childhood obesity is rapidly rising throughout the world. The obesity epidemic is especially evident in industrialized nations where many people live sedentary lives and eat more convenience foods, which are typically higher in calories (Mayo Clinic, 2006). In just two decades, the incidence of childhood obesity for American children from 6 to 11 years old has doubled, and the incidence has tripled for teenagers (Mayo Clinic, 2006). According to the Centers for Disease Control and Prevention, one in three children in the U.S. is overweight, which totals 25 million overweight children and adolescents in the U.S.

According to the American Academy of Pediatrics (AAP), school-age children watch an average of 4 hours of television per day (2006). Although this is an “average”, it is medically-considered to be in excess. Children who watch too much television daily tend to be overweight, primarily because lack of activity (running, jumping, playing) and the abundance of advertising geared specifically to children. These ads include candy, snack foods, sugary cereals, and sugary drinks (AAP, 2006). No one denies the persuasive impact that television advertising has on kids, especially by powerhouses such as McDonalds and Kraft Foods (Television Week, 2007). Experts agree, however, that the majority of the programming a child views is at the hand of the parents. In some cases, especially with infant/toddler children, it’s a way for a mother or father to get something done or have some time to his or herself. In my experience, early television viewing acts much like an electronic babysitter. However, the purpose of this resource guide is not to judge parents who choose television as a temporary distraction for their children. In some instances, these individuals have not been educated or do not understand the ramifications of this seemingly simple choice. Perhaps their parents used television as a distraction when they needed

to get something done, and the cycle continues. As a society, are we not offering enough accessible choices for these parents?

The majority of parents who choose television programming for their infant/toddler and even school-age children choose age-appropriate viewing material, but are only getting a bias-portion of the research that is currently available. What is deemed an “educational” activity is not always the best choice.

Television and Violence

In regards to specific programming, the average child sees in excess of 20,000 commercials per year (AAP, 2006). These commercials tend to use bright colors, are loud, and are visually over-stimulating. According to the AAP, it’s important to teach children that just because they see a certain food or toy on television, it doesn’t necessarily mean that they “need” the item. Many individuals, not just parents, have a very difficult time distinguishing the differences between *wants* and *needs*. As humans, our basic needs include shelter, clothing, food, and water. These very basic needs do not include huge, extravagant homes, designer-label clothing, restaurant-quality food, or imported water; however, many people view these items as needs. These types of lifestyles often lead to providing our children too much and being “yes” people. Yes, a brand new toy or a new iPod is nice, but certainly not vital to the well-being and healthy adjustment of our children. Love —something which is very powerful and without cost—means more to children than material possessions and has a much longer emotional impact.

Children also see an overwhelming number of violent and sexual acts portrayed as “okay” and “normal” in the television world. Alcohol and tobacco use are also prevalent on television. While television/radio ads for cigarettes ceased on January 2, 1971 (smokeless

tobacco was banned in 1986), television advertisements for alcohol are still in full-force (Wikipedia, 2007). People on television who smoke and drink are usually portrayed as popular and classy. Sexual activity is portrayed in a similar way; usually as fun and exciting and without risks.

According to Robert Kesten, the director for the *Center for Screen Time Awareness*, television is a great enabler—it enables us to be sedentary, make unhealthy food choices, and make poor life choices (2006). However, according to the AAP, there is a flip side to this controversy. Television affects how a child learns, but in some cases, it can be a positive effect. In cases of non-violent, educational programming, television has been shown to have a positive impact on learning, both at home and in the classroom. Longitudinal studies conducted by the American Academy of Pediatrics show that school-age children who watch educational television programs receive higher scores on reading and math tests than children who don't watch educational programming (AAP, 2006). With school-age children and when used responsibly, television can be a learning tool with a favorable outcome.

Television and Attention Issues

Attention-Deficit/Hyperactivity Disorder is defined on the basis of developmentally inappropriate inattention, motor activity, and impulsive behaviors that cause impairment in academic and social functioning (Chronis, et al., 2007). AD/HD emerges early in development, prior to the age of 7 (Diagnostic and Statistical Manual of Mental Disorders, 4th ed, 1994). According to a 2003 study by the *Centers for Disease Control and Prevention*, the approximate number of children and adolescents ranging from 4 years to 17 years is 4.4 million. Even though AD/HD is listed in the DSM-IV as being identifiable at age 7, many clinicians are diagnosing this condition as early as age 4. There are many factors, however, that play into specific AD/HD

diagnoses. A family history of attention problems may lead to earlier identification, diagnosis, and treatment, as problems with attention tend to run in families.

From a media perspective, programming centered at infants and toddlers from birth to age 2 is increasing. A 2004 Kaiser Family Foundation study found that more than half of all parents surveyed said that educational videos/DVDs and toys are “very important” to a child’s intellectual development (Paul, 2006). The visual media market for infants and toddlers has exploded in recent years. Vicky Rideout, the vice president of the Kaiser Family Foundation, said that in 2003, there were 140 videos/DVDs for sale at Amazon.com. Now there are 750 (Paul, 2006).

Media Companies

The majority of these visual media products present substantial claims in marketing. Baby Einstein™, for example, markets itself as Baby Einstein™— helping by using music, language, nature and art in playful ways to entertain and engage little ones from birth and up (Baby Einstein™, 2007). In January, 2007, during President Bush’s State of the Union Address, he honored the individual, Julie Aigner-Clark, who invented Baby Einstein™ in her basement. She ended up selling the series to Walt Disney Corp. for 200 million dollars. Bush stated that Aigner-Clark “represents the great enterprising spirit of America.” However, it’s pertinent to mention that although Einstein was considered an exceptional person, he possibly dealt with dyslexia, Asperger’s Syndrome, and schizophrenia. The name—Baby Einstein™—is undoubtedly marketed at a select demographic of parents, a demographic who only knows Einstein as a genius and not as a possibly socially- and emotionally-troubled individual.

However, it’s critical to point out that the Baby Einstein™ products specially target a select demographic of individuals and parents. In my experience as a parent and consumer, I

have noticed that Wal-Mart carries more Baby Einstein™ products than its counterpart, Target. There is a very noticeable difference in consumer between the two chains. Wal-Mart prides itself on lower prices, and Target prides itself on higher-end products at a slightly higher price.

The line of baby items is drastically different from Wal-Mart to Target, but each line “works” because of the specific demographic that shops each store. I believe this to be the basis of Baby Einstein’s success – marketing to individuals who have not been educated on pro-active, developmentally-appropriate toys and educational materials for maturing infants and toddlers. When a typical parent hears the term Baby Einstein™, thoughts automatically go to, “Wow, what a great product for my child. I want my child to be smart like Einstein was.” Unfortunately, most of the products marketed by this company are not developmentally appropriate for the age group they are targeted at.

I have to admit—I received a few Baby Einstein™ toys as part of my baby shower before my twins arrived, and they’re not that bad. They’re not media or screen items; they consist of a set of blocks and some educational/sensory integration books. There is a book of farm animals that my daughter, Isabelle, just adores. I am not saying that the line of products by Baby Einstein™ as a whole are inappropriate, but I think that as parents, we need to be selective about the learning materials (or lack thereof) we provide for our children.

DirecTV has also launched its version of Baby Einstein: BabyFirst TV, which was developed in 2003 and first broadcast in 2006. According to DirecTV, the intended audience is ages 6 months through 3 years (2007). The following is the mission statement of BabyFirst TV: (a) There is nothing more meaningful for parents than their connection with their baby, (b) high-quality, safe and positive content developed by leading experts — pediatricians, psychologists and educators — is essential in providing valuable programming to enhance a baby’s

development and learning, (c) when supervised and educational-focused, electronic media can enrich the connection between parents and their baby and give them new opportunities for learning and playing together, (d) to give all babies a positive, meaningful and friendly head start in life, (e) to provide a unique, engaging and educational experience for baby during the first stages of early learning, (e) to supply parents with the best content for their babies when and where they want it, in the most convenient manner and means, (f) to enable parents to have maximum control over the type of content and amount of exposure when introducing their baby to electronic media, (g) to be a reliable, effective and trusted source of information for parents on topics related to the early stages of parenting, (h) putting baby first: Providing new opportunities for baby's learning and development are at the core of what we do. We are BabyFirstTV because your baby comes first, (i) seeking feedback: We highly value our viewers' feedback and will work with parents to constantly improve the quality of our content, (j) collaborating with top experts: All our content is created and supported by top child development experts who supervise the programming according to scientific research and what is the most beneficial for a baby's learning experience.

(k) delivering value: We know that parents want the best for their babies, and we strive to deliver the very best educational content for the best value on the market.

BabyFirst TV markets itself as "created by a group of individuals who are experts in the areas of infant and toddler development," (BabyFirst TV, 2006). This advisory board consists of 3 medical doctors (one who has a PhD as well) and an Early Childhood Education specialist. Each member of the advisory board claims to have more than 20 years of experience helping children achieve their highest potential (BabyFirst TV, 2006). Each "expert" brings something

else to the table of knowledge. One of the advisors, Dr. Edward McCabe, is the Chief Officer of Pediatrics at the University of California-Los Angeles.

Problems with (Pseudo) Developmental Products

The daunting part of this visual media explosion is the unreliability of the products. According to *A New Teacher in the Living Room*, a new study by the Kaiser Family Foundation, visual media companies do essentially no research to back up their claims (most notably, “stimulate baby’s cognitive development” and “increase baby’s brain capacity”). These companies can not even cite research done by others that relate specifically to their products (Paul, 2006). Marcia Grimsley, a senior producer for Brainy Baby, purveyors of such DVDs as Right Brain and Left Brain, has been quoted as saying, “We’re not neurolinguistic scientists. We went out and researched other people’s work scientists, neurologists, psychologists, and applied that knowledge to our products so they could be beneficial to parents and children.”

From a visual-media perspective, more stimulation is always better. Some experts agree that parents, especially American parents, where the infant media products are readily available, are overstimulating and in some cases, stimulating their babies in the wrong ways (Small, 2006). These companies frequently cite the Romanian orphan studies, which focused on children who received no stimulation went on to have emotional and learning problems later in life. However, Pat Levitt, director of the Vanderbilt Kennedy Center for Research on Human Development, states that although a “normal” environment is certainly better than a deprived one, that doesn’t necessarily mean a hyper-enriched environment is better still (Paul, 2006).

Dimitri Christakis states there is evidence to the contrary. Christakis, the codirector of the Child Health Institute at the University of Washington, says that the more television babies watch, the more likely they are to have attentional problems later in life (Paul, 2006). Christakis’

study tracked children from age 1 to age 7, and found that for each additional hour of daily television viewing (screen time) before age 3, a child's chances of a developing attention problems (primarily AD/HD) later in life increased by 10 percent.

Christakis alludes to the "parent testimonials" currently in place by BabyFirst TV and the Baby Einstein series. One testimonial from the BabyFirst TV website is the following: Lynne O., from Charlottesville, VA, said, "At first, I didn't think BabyFirst TV was going to be 'all that.' However, my grandson, J.J. sat in his swing and looked at BabyFirst TV for almost an hour. He really seemed to be responding to the TV. I know TV is no substitute for human interaction, but now along with lullabies, peek-a-boo, this gives me another selection for J.J. entertainment, (BabyFirst TV, 2006). Unfortunately, this is the demographic that these visual media companies cater to: parents/grandparents who want to do a great job with their kids, and don't have the resources, knowledge, or education to make well-informed and correct decisions about potential consequences.

Statistics

Christakis became interested in television and infants and toddlers when he noticed his own 3-month-old was mesmerized with television (Shute, 2004). He found, in existing data, kids who exhibited symptoms of AD/HD at age 7 had watched television frequently between ages 1 and 3 (Shute, 2004). Christakis notes that the study does not explicitly state that watching television causes AD/HD. However, television might be a manifestation of underlying AD/HD issues. These kids may watch TV to self-stimulate, and their parents may use television as a tool when they need time alone. The study also takes into effect the other question: Is all television harmful, or are there some types that are better than others? Christakis says the jury is still out on whether educational programming may be potentially harmful (2004). According to the AAP, all

screen time—regardless of educational quality or not—should be completely restricted in children ages birth to 2. Alarming, a recent study by the AAP concluded that 68 percent of children from birth to age 2 spend two hours per day in screen time with televisions and computers (Shute, 2004).

It's important to articulate, too, that the effects of AD/HD are life-long. While a child can learn how to manage his or her own behavior and may use medication as a complimentary therapy, significant issues may arise. Previous studies have found that childhood AD/HD predicts many adverse functional outcomes in adolescence and adulthood, including risky sexual behavior, delinquency, substance use and/or abuse, and driving risks, especially when a child develops a conduct problems (bullying, lying, fighting, and stealing) during childhood (Chronis, et al., 2007). Approximately 20% to 50% of children and 44% to 50% of adolescents with AD/HD have conduct problems. On the continuum, AD/HD often leads to Oppositional Defiant Disorder, (ODD) and in some cases, can lead to Conduct Disorder (CD). According to recent statistics, many individuals who are incarcerated at an early age have been diagnosed with some type of Conduct Disorder.

Overwhelmingly, the research available says that no type of media or toy can serve as a substitute for human interaction. Most experts agree that what matters most is not the toy the baby plays with but the ways in which parents interact with their child(ren). Under most circumstances, babies prefer humans over anything inanimate (Paul, 2006). Interpersonal exchanges encompass a multi-sensory approach: touch, taste, smell, sound, and sight. David Perimutter, author of *Raise a Smarter Child by Kindergarten*, says that babies need to mouth things and to smell to have rich sensory experiences (Paul, 2006).

Current research states that babies are remarkably attuned to emotions (Paul, 2006). Child psychology experts agree that spending, quality, relaxed time with children, when they can model what the parent is doing, is the most developmentally-beneficial. Ross Thompson, the founder of the *National Scientific Council on the Developing Child*, states that while the infant brain craves novel stimulation, the stimulation can be found in ordinary, non-structured, non-marketed things around the house. These things can include spending time in the kitchen, looking out the window and pointing out objects, and folding laundry.

Babies do best when they have a routine. Having rituals, like bedtime and mealtime routines, brings order to babies' lives, which helps them organize their thinking (Paul, 2006). Providing babies with constant actions and reactions helps them make sense of their world and the people in it.

Christakis agrees. He believes that our society is in the middle of a large, uncontrolled experiment on the next generation of children. Christakis believes that our science and research just hasn't kept pace with the developing technology. As noted earlier, some visual media tools claim to make babies smarter – Christakis does not agree with this. He says, "This research is unsubstantiated and has no grounding in scientific theory at all." He maintains his stance that while older children can benefit from watching educational programming, it can be harmful for babies.

According to the Brown University Child and Adolescent Behavior Letter (2005), results from a study by researchers Frederick Zimmerman and Dimitri Christakis (mentioned earlier) of the University of Washington Child and Health Institute in the School of Public Health and Community medicine suggest that television for very young children is not helpful for cognitive development and may, in fact, be harmful.

In this particular study by Zimmerman and Christakis, the children in this study watched a daily average of 2.2 hours of television prior to the age of 3 years. This amount went up with ages 3-5 years, with 3.3 hours of daily viewing. Each hour of average daily television viewing before the age of 3 years was associated with deleterious effects on the Peabody Individual Achievement Test Reading Recognition Scale of 0.31 points (95% confidence interval), on the Peabody Individual Achievement Test Reading Comprehension Scale of 0.58 points (95% confidence interval), and -0.10 points on the Memory for Digit Span assessment from the Wechsler Intelligence Scales for Children (95% confidence interval) (Brown University Child and Adolescent Behavior Letter, 2005).

This is significant not only because of developmental issues that occur with these assessment scores, but because many schools use these assessments for placement and special education screening. Zimmerman and Christakis concluded that there are modest adverse effects on television viewing before age 3 on the subsequent cognitive development of children. These results also suggest a greater adherence to the AAP guideline of children 2 years old and under not watch television is warranted (Brown University Child and Adolescent Behavior Letter, 2005).

Alternatives to Television

From this writer's perspective, it is very clear in today's society that media rules. With computers, cell phones, PDAs, iPods, and wireless capabilities reaching and connecting more individuals each day, there is an abundance of media available to many different demographics. No longer does the cell phone only belong to the more upper-crust individuals of society. While bridging the gap in technology can have benefits, there is a significant downfall as well. Some individuals, parents, and child-care providers do not know or do not understand that there are

many developmentally-appropriate alternatives to screen time of television viewing and computer use. In as short of a time span as 20 years ago, the media we know of and use in today's society was merely a thought. I remember spending every waking moment that I wasn't in school outside with my friends. I didn't grow up with a cell phone, an iPod, or even a computer! I was able to channel my energy into different avenues and I believe my creativity is a direct result of that. As both a parent and professional, it's necessary to know and understand how to provide alternatives to screen time. Even when a child reaches an age when television isn't considered a potentially dangerous activity, our society tends to get into television habits. This can be particularly harmful by today's standards, too, because of the high rates of obesity, especially in children.

Brent Bozell, president of the Parent's Television Council, favors not completely unplugging the TV but limiting and monitoring it instead. Bozell states, "It takes a Herculean effort, but if you involve your child(ren) in an activity with you or another person, instead of sitting passively in front of the TV, your child will develop better." He is a fan of board games, cards, and musical instruments (Brophy, 2006). Other alternatives to TV include after-school clubs and organizations, family walks, puzzles, and learning a foreign language. Family-based activities, such as group volunteering, teach a solid foundation that children are able to apply later in life.

Educational Issues

Current literature brings up a valid point: What is it about television that is harmful to babies? Christakis says the pacing with television is surreal. Babies don't see what adults see – they see flashing lights, loud sounds, and sharp cuts from objects to objects. Babies are engaged by this action. As the brain develops, real life doesn't seem as interesting. This is the foundation

of attentional problems, such as AD/HD, later in life. When children begins school life, their lives change dramatically. What may have been large chunks of unstructured time turns into a very routine, scheduled day. The kindergarten expectations of our current academic culture are extremely different from the atmosphere even 15 years ago. Because of our accountability legislation, mainly *No Child Left Behind*, there are strict grade-level benchmarks and standards that teachers have to adhere. In most public schools in Wisconsin, there is not a lot of curricular freedom. When a child enters a classroom having spent the majority of his or her childhood engaging in screen time, whether television- or computer based, many issues may arise. Unfortunately, I have experienced some of these issues on a first-hand basis.

Chapter III: Project Goals and Objectives

I have two levels of goals and objectives associated with my thesis project. They consist of personal and professional goals. Although there are distinct differences between the two mediums, there are many things each have in common as well. At home, I strive to be the best mother I can be. Because my children were seven weeks premature (born at 33 weeks gestation), it has been an extreme challenge to get them to where they are today. I go out of my way (just as any loving, responsible parent would do) to make their life wonderful to do things that have positive impacts on them. I nurse them, and plan on doing so until they are gestationally one-year old, just as the AAP recommends. All of the solid food they eat has been organically produced and prepared fresh in my home by me. I incorporate a variety of Western-and Eastern-medicine into their daily lives and each decision I make has, in my opinion, their best interests in mind.

It is my belief that most parents want to do the best they possibly can for their kids. Because children and television is such an important topic in our society's times, I feel it crucial to try and educate as many parents as possible on this. Sometimes it's difficult for me to empathize with parents because as a general rule, they are not in education and do not keep current on trends. I have found that with the exception of a select few individuals, most people are very open and responsive to the research on children and television. My parents, especially, were very intrigued by the research I was completing and how television does impact infants and toddlers.

I have attended Individualized Education Plan (IEP) meetings for my students when the parents have admitted to their child watching TV non-stop before the age of two. One parent said to me, "My child found it very hard to connect with me but he connected really well to Barney. He watched a lot of Barney when he was little!" While this was meant as sort of a tongue-in-

check comment, in reality, it was quite sad. I think sometimes individuals, child-care providers, and parents become overwhelmed and need to step back. I believe that by negligently marketing “Child-Development” videos and DVDs to vulnerable parents, these media companies are directly adding to our influx of children with attention problems when they enter school.

While the majority of this thesis has been dedicated to asserting why television is not a developmentally-responsible choice for children under two, I find it necessary to explain that I am absolutely not against television as a whole medium. I believe television – and computers, if all screen time is categorized – can be very beneficial if used correctly and in moderation. I think moderation is a blueprint for life in general. While there are things/ideas that are wholly terrible, the majority of things in our life are acceptable in moderation.

I believe my biggest project goal with my thesis to be dissemination of information. As a relatively new professional working in the education field and a very new parent, I am constantly exposed to information. It is our job, as both professionals and parents, to sort through the material we’re bombarded with and differentiate between fact, fiction, or something in between. I also believe we’re responsible to make responsible decisions regarding our lives and the lives of our children and students. Because the research done by Christakis (Chapter II) was longitudinal and peer-reviewed, it has validity. As a teacher and a parent, I will directly experience the consequences of early screen influence. I feel confident, however, that, because my children have not been exposed to multi-media images on television and via computers, I am giving them the best possible beginning to becoming life-long learners with few obstacles to overcome.

Although the majority of my research was peer-reviewed, there are certainly limitations in what information I was able to acquire. I tried multiple times to contact board members at

BabyFirst TV; all of which turned out to be unsuccessful. It would have been interesting to get their perspective on what types of research they read in order to develop television specifically designed for infants. There is also a multitude of research available in Europe that may provide supplementary information to this topic.

My recommendations for further research on this topic include interviews with the supporters and board members of BabyFirst TV™ and Baby Einstein™. Speaking with parents, both who share the opinions expressed in this resource guide as well as supporting early screen time, would provide a dual-perspective and give readers personal accounts from both sides of the issue. It is this writer's intention to provide useful, valid, and reliable information to parents and child-care providers to ensure they have their child/children's best intentions in mind when child-rearing decisions are made and implemented.

References

- Baby's first TV channel. Retrieved May 2, 2007, from www.cbs.com
- Brophy, B. Unplug the television. (2006, December). *U.S. News and World Report*. 141(24). 75.
- Child Development Institute. Television and children. Retrieved May 2, 2007, from <http://www.childdevelopmentinfo.com/televisionandchildren>
- Children, adolescents, and television. (2001). *Pediatrics*. 107(2). 423-426.
- Chronis, A.M., Lahey, B.B., Pelham, W.E., Williams, S.H., Baumann, B.L., Kipp, H., et al. 2007. Maternal depression and early positive parenting predict future conduct Problems in young children with attention-deficit/hyperactivity disorder. *Developmental Psychology*. 43(1). 70-82.
- Hassink, M.D., S.G. and Gavin, M.D., M.L. (2007). Overcoming overweight and obesity in your child. *Nemours Foundation*. 2007.
- Lavoie, Richard. Retrieved May 2, 2007. from www.ricklavoie.com
- Mayo Clinic. (2007). Kids and obesity. Retrieved May 2, 2007, from <http://www.mayoclinic.com/health/childhood-obesity/DS00698>
- Parents share blame for obese children. (2007). *Television Week*. 26(5) 11.
- Paul, P. (2006, January). Want a brainier baby? *Time*. 167(3). 104-109.
- Savage, L.C. (2007, February). Is big bird bad for baby? *MacLean's*. 120(7). 46-47.
- Short attention span linked to television. (2004). *USA Today*.
- Shute, N. Programmed for trouble? (2004, April). *U.S. News and World Report*. 136(13). 76.
- Stanley, T.L. (2004). Nickelodeon targets the stroller set. *Advertising Age*. 75(23). 6.

Stanovich, K. (2007). *How to think straight about psychology*. New York, NY: Pearson.

The television taboo. (2006). *American School Board Journal*. 193(12).10. Toddler

development hurt by TV viewing. (2005, September). *Brown University*

Children & Adolescent Behavior Letter. 21(9). 7.

TV stimulation may be re-wiring children's brains. (2004). *USA Today*.

Tynan, PhD, W. D. (2007). AD/HD. *Nemours Foundation*.