

DIALOG FROM THE FIELD

Parents' Beliefs, Attitudes and Behaviors Concerning their Young Children's Screen Media Use

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Recent research concerning young children's screen media experiences suggest that parental mediation with children during joint viewing enhances children's attention and comprehension to program content. Using a small sample of 21 parents of young children as a phenomenological case study, this paper explores parent's beliefs, attitudes, and behaviors regarding young children's screen media use and exposure. Parents appear to value screen media as an educational tool for their children, and engage in covieing with children. However, parents report rarely utilizing screen media for teaching purposes. Parents also realize that some content may be inappropriate for their child to view, and yet most state they rarely discuss their child's viewing habits with a primary care provider. We discuss parents' beliefs of screen media use with their young children in light of the American Academy of Pediatrics' recommendations and implications for children's learning and development.

Of the screen media platforms available, TV, DVD, and video are the mediums reported as most often used by young children (ages 0-6 year olds), with computers and mobile devices being utilized less often by this age group (Common Sense Media, 2011; Gutnick, Robb, Takeuchi, & Kotler, 2010; Rideout & Hamel, 2006). Screen media has taken on a ubiquitous nature in society with children now growing up in environments surrounded by various screen platforms. Research findings suggest children may begin viewing as young as 6 to 9 months old, that children ages 0 to 24 months old who watch TV and DVDs spend approximately two hours per day doing so, and that preschool age children who use screen media may be watching three or more hours of screen time daily (Common Sense Media, 2011; Linn, Wolfsheimer Almon, & Levin, 2012; Rideout & Hamel, 2006; Vaala, Bleakley, & Jordan, 2013).

Research in the field of child development informs us that interactions with responsive, caring adults elicit optimal learning experiences for young children. By engaging in face to face interactions with responsive adults children are able to attain healthy growth and brain development. Yet with increasing trends of screen media technology and screen media exposure for young children, research concerning children's learning from screen media platforms is being revisited. The results from research in this area suggest that very young children (0 to 3 years) learn best from live, direct interactions with contingently responsive adults; that for this age

group, learners can greatly benefit when parents actively coview [screen media] educational programs with their children (Anderson, & Pempek, 2005; Fiese & Schwartz, 2008; Krcmar, Grela & Lin, 2007; Roseberry, Hirsh-Pasek, Parish-Morris, & Golinkoff, 2009).

MEDIATION RESEARCH

Research suggests that when parents actively coview educational programs with children, particularly children approximately 24 months and older, children may be more likely to attend, comprehend, and learn from the screen content (Anderson & Pempek, 2005). A child's ability to learn new words or prosocial skills from quality educational content may be facilitated by parents coviewing and engaging their children using an instructional type of mediation (Anderson & Pempek, 2005; Fender, Richert, Robb, & Wartella, 2010; Krcmar, Grela, & Lin, 2007). This style of engagement is known as instructive mediation and is one of three forms of parental screen media mediation strategies defined by Valkenburg, Krcmar, Peeters and Marseille (1999). These three strategies are referred to by Valkenburg et al. (1999) as instructive, restrictive, and social coviewing (see also Barkin, Ip, Richardson, Klinepeter, Finch, & Krcmar, (2006).

Parental instructive mediation was defined as coviewing with a focus on learning via parents interacting with the child through discussion of screen content, and gesturing, pointing to and labeling important program features (Valkenburg et al., 1999). Restrictive mediation was defined as parental rule setting that may or may not include coviewing (Valkenburg et al., 1999). Social coviewing was explained as a more recreational, passive activity where parent-child interactions focused on bonding and relaxing together (Valkenburg et al., 1999). Instructive mediation strategies have been suggested to be positively related to comprehension and learning outcomes in children (Anderson & Pempek, 2005; Barr, Danzinger, Hilliard, Andolina, & Ruskis, 2010; Fender, Richert, Robb, & Wartella, 2010; Krcmar, Grela, & Lin, 2007; Roseberry, Hirsh-Pasek, Parish-Morris, & Golinkoff, 2009).

Current research regarding parental screen media mediation of young children has shown mixed results regarding the strategies most often used by parents. Warren (2001, 2003, 2005) investigated parent's use of media mediation styles based on the Valkenburg et al. (1999) scale of mediation strategies. Warren's research indicated parents most often reported using a restrictive mediation style during screen use by children aged 1 to 12 years old. Parent reports published by Valkenburg et al. (1999) stated that social coviewing strategies were used most frequently by Dutch parents of children aged 5 to 12. Valkenburg et al. (1999) also pointed out that parents of younger children (5-8) utilized instructive mediation strategies more than parents of older children (9-12). Research by Barkin, Ip, Richardson, Klinepeter, Finch, and Krcmar (2006) found parents of children 2 to 11 years old most often reported using multiple mediation strategies. Barkin et al. (2006) however found when data for the younger children (2-5) were analyzed separately from the older children (6-11), the analysis suggested parents of these younger children tended to use instructive mediation most often. The literature also points to indications that parents tend to use combinations of mediation strategies, as opposed to one single style of mediation, and that the frequencies with which the different strategies are employed varies (Barkin et al., 2006; Valkenburg et al., 1999; Warren, 2001, 2003, 2005).

PARENT ATTITUDES AND MEDIATION

Parents' attitudes and beliefs toward screen media are found to be key mechanisms influencing decisions related to young children and screen media use in the home (Rideout & Hamel, 2006; Warren, 2001, 2003, 2005; Takeuchi, 2011). Parent attitudes towards screen viewing's effects on children are suggested to be consistently associated with parental screen mediation (Barkin, et al., 2006; Warren, 2001, 2003). Warren (2001) found that parents who reported "highly negative attitudes" towards television's effects on children were more likely to use rules and discussion than parents having "medium" or "low" negative attitudes. Barkin et al. (2006) reported parents were more likely to use restrictive and instructive mediation strategies when they held negative attitudes toward screen media's effects on children. Rideout and Hamel (2006) report findings which suggest parents may introduce their young children to screen media because it is perceived as a means offering benefits, of providing "uninterrupted time for chores, some peace and quiet, or even just an opportunity for parents to watch their own favorite shows." Other examples reported in the literature as to why parents make TV, DVD, and video accessible to young children include: choosing to watch favorite programs during family mealtimes; placing a television set in the child's bedroom to enable other family members opportunities to view programs they desire; and enlisting the assistance of age appropriate educational screen media to enhance children's cognitive and social learning (Gutnick et al., 2010; Rideout & Hamel, 2006; Warren, 2001; Takeuchi, 2011).

Research points to the important role parents have in mediating (i.e., covieing, discussing content, monitoring and setting limits) children's screen media consumption, and diminishing or negating the negative effects of program content (Gutnick et al., 2010; Rideout & Hamel, 2006; Takeuchi, 2011). The American Academy of Pediatrics' (AAP) reports (1999, 2001, 2010, 2011) recommend parents avoid TV and video viewing for children under the age of 2, and to limit the amount of TV and video viewing for children older than 2 years of age to 1 to 2 hours per day. The AAP (1999, 2001, 2010, 2011) cites research implicating screen media exposure and the potential displacement of or interference with important parent-child interactions. Research demonstrates that the healthy growth and development of infants, toddlers, and preschoolers is facilitated most ideally through time spent interacting and communicating with responsive adults (Anderson & Pempek, 2005; Fiese & Schwartz, 2008; Krcmar, Grela, & Lin, 2007; Roseberry, Hirsh-Pasek, Parish-Morris, & Golinkoff, 2009). Acknowledging the cultural trend leading children's environments to become increasingly immersed in digital media, Anderson, Huston, Schmidtt, Linebarger, and Wright (2001) set out to examine the long-term associations between early childhood television viewing and behavioral and academic outcomes in adolescence. Anderson et al. (2001) found positive relationships between viewing informative programs as preschoolers (i.e., *Sesame Street* and *Mr. Rogers' Neighborhood*) and "higher grades, reading more books, placing more value on achievement, greater creativity, and less aggression" in adolescence, whereas high rates (versus low rates) of watching programs of violent or entertainment content were associated with lower math competence beliefs, higher aggression, and lower grades for girls at adolescence. The results suggest that program content is a vital factor to be considered when investigating correlations between early screen media use and developmental outcomes. The findings of Anderson et al. (2001) also underline the important role parents play in guiding and monitoring young children's consumption of and exposure to screen media content.

The literature discusses the necessity for parents to be aware of and understand the implications regarding associations between young children's screen media viewing and the potential development of lifelong screen media viewing habits (Gutnick et al., 2010; Rideout & Hamel, 2006; Takeuchi, 2011). Scholars state that not only is program content important, as is demonstrated in the investigation by Anderson et al. (2001), but that the context of the viewing experience matters as well (Gutnick et al., 2010; Richert, Robb, & Smith, 2011; Warren, 2003).

Reports indicate that TV, DVD, and video viewing may begin when children are as young as six months old (Rideout & Hamel, 2006). The screen media mediation strategies parents use early on in a child's life have the potential to impact children's academic, social, and physical outcomes (Anderson et al., 2001; Richert et al., 2011). The period of early childhood is an optimal time for parents to establish and model for children a balanced pattern of print and screen media consumption and to develop children's critical thinking skills. When parents engage their children during covieing experiences (similar in manner to shared book reading activities) of educational programs—taking the time to point out and discuss salient program features—parents place themselves in a position which offers an opportunity to enhance children's learning at that moment. Utilizing this type of screen media mediation strategy over time as children mature and develop may offer parents additional opportunities to strengthen children's cognitive capacity, fostering the child's ability to more easily comprehend complex screen content such as narratives. By mediating children's experiences of educational programs, parents may enhance infants', toddlers' and preschoolers' vocabulary and prosocial skills as well as advancing their ability to think critically about the messages they perceive from screen media (Anderson and Hanson, 2009; Barr, Danzinger, Hilliard, Andolina & Ruskis, 2010; Linebarger & Vaala, 2010; Warren, 2003).

PARENTS' ATTITUDES, BELIEFS, AND BEHAVIORS

Surveying 21 parents of children ages 6 months to 5 years from an urban Head Start program and a suburban childcare facility, in a phenomenological case study, we found that parents in our sample believed screen media was an important learning tool for children; however they also reported rarely using this medium for the purpose of teaching children. The findings of this case study showed that the majority of parents report having a neutral attitude (as opposed to a positive or negative attitude) toward children's screen media use. Parents also indicated that they believed it is important to watch TV, DVD, and video with children and that they "often or most of the time" intentionally watch programs with their children. Although parents reported they believed it is important to watch programs with their children and the majority of parents indicated they do watch with their children, they also reported "often, most of the time, or always" engaging in other tasks while children are viewing screen media. Finally, when asked to respond to items regarding how often they instruct, restrict, or socially coview children's screen media experiences, we found parents reported using a combination of mediation styles most often with their children; yet appeared to lean in favor of instructional mediation during children's viewing episodes. When asked to explain "Do you point to and/or name things you and your child see on TV, DVD, and Videos" parents responded with statements depicting active engagement, for example "We talk about what is happening to clarify what we are seeing" or "So he understands it better". Only 29% of parents in our sample reported that the child's doctor or someone else had talked with them about children's TV, DVD, and video use. This figure

suggests that most of the parents had not had a doctor or other person speak with them about their child's screen media use. The AAP (1999, 2001, 2010, 2011) suggests parents should avoid screen media exposure for children under 2 years of age and to limit screen exposure and consumption in children 2 years and older to a maximum of 2 hours per day.

Children are growing up in screen media rich environments—in many homes TV, DVD and video are now part of the daily routine of infants, toddlers and preschoolers (Gutnick et al., 2010; Rideout & Hamel, 2006; Rideout, Vandewater, & Wartella, 2003; Takeuchi, 2011). Parents employ educational programs directed at infants, toddlers and preschoolers to entertain and educate their children. The decisions parents make appear to be based on the attitude and belief that children at this young age have the ability to learn—concepts such as letters, colors, numbers and ideas, such as sharing—from screen media (DeLoache, Chiong, Sherman, Islam, Vanderborght, Troseth, Strouse, & O'Doherty, 2010; Fender, Richert, Robb, Wartella, 2010; Robb, Richert, & Wartella, 2009; Roseberry et al., 2009). Current literature points to the paucity of research available regarding associations between TV, DVD, and video exposure and developmental outcomes in young children (DeLoache, et al., 2010; Linebarger & Vaala, 2010; Robb et al., 2009). In light of this dearth however parents, health care providers, educators, and policy makers continue to make decisions influencing the screen media experiences of young children, specifically decisions regarding the areas of context, content, and amount of screen media children consume or are exposed to. Therefore it may be of benefit to parents, educators, health care providers, and policy makers that research continue and be expanded upon in this area enabling those responsible for children's care to make informed decisions regarding young children's screen media use and exposure (Anderson & Hanson, 2009; Warren, 2003).

The decisions parents make during the early childhood years have the potential to influence the trajectory of children's growth and development. Early viewing experiences may impact early childhood development, and later academic achievement. Thus, working from the perspective which acknowledges the vital role parents play regarding children's use and exposure to screen media in the home, it becomes essential to investigate the beliefs, attitudes and behaviors associated with parents' decisions regarding the contextual factors associated with the screen media experiences of young children.

CONCERNING TRENDS

The amount of time young children spend viewing television, DVDs, and video (i.e., screen media) in the home has increased over the last several decades (Fidler, Zack, & Barr, 2010; Gutnick, Robb, Takeuchi, & Kotler, 2010; Wartella, Richert, & Robb, 2010). Screen media is ubiquitous for the majority of children living in the United States. One research investigation shows that among the 6 months to 6 year olds studied, 98% have at least one TV in their home, 84% have two or more, and 24% have four or more televisions in their home; and 33% of the parents report that their children have a TV in their bedroom (Rideout & Hamel, 2006). Researchers, parents, educators, healthcare providers, and policy makers voice concerns regarding the possible negative impacts of screen media use on children's social, physical and academic development (American Academy of Pediatrics, 1999, 2001, 2010, 2011; Children's Television Act, 1990; Christakis, Gilkerson, Richards, Zimmerman, Garrison, Gray, & Yapanel, 2009). Examples of concerns cited pertain to childhood obesity, decreases in levels of vocabulary acquisition, imitation and adoption of aggressive or anti-social behaviors, and

increases in hyperactive or inattentive behaviors. Studies report, infants and toddlers average approximately one to two hours of screen consumption per day, 2-3 year olds spend two or more hours per day viewing screen media, and preschool age children may consume screen media three or more hours per day (see Common Sense Media 2011; Gutnick et al. 2010; Linn, Wolfsheimer Almon, & Levin, 2012; Rideout & Hamel 2006; Vaala, Bleakley, & Jordan, 2013). Rideout and Hamel's (2006) investigation also indicates that the average age in which children begin viewing screen media is 6 months, and that young children primarily use TV and DVDs as mediums for viewing. Gutnick et al. (2010) reports that as children mature their computer and video game use tends to increase, however this does not appear to decrease the amount of time spent with TV and DVDs, which continue to comprise the majority of 0-10 year olds' overall screen media use.

Literature documenting screen media use by young children also point to reports stating parents are watching screen media with their children approximately 36% of the time, and note that children are watching alone or with a sibling a majority of the time (Rideout & Hamel, 2006; Rideout, Vandewater & Wartella, 2003). Scholars have documented increases in the amount of screen media used by children over the last several decades, specifically pointing to advances in technology which have led to the varieties of screen media platforms currently available to children (Gutnick et al., 2010; Wartella, Richert, and Robb 2010).

Children's programs. Today there are many television and screen media programs produced for children ages 0-5 years, ranging in content from curriculum based, child-tested educational series to those purely focused on entertaining (Courage, & Howe, 2010; Gutnick et al., 2010; Wartella, Richert, & Robb, 2010). Beyond *Sesame Street* and *Mr. Rogers' Neighborhood*, is a program titled *Blue's Clues*, which premiered on cable TV in 1996. *Blue's Clues* is an educational television series created for 2-6 year olds. *Blue's Clues* is designed to encourage and support the interactions of young children with characters seen on-screen and to teach processes involved in problem solving (Anderson, Bryant, Wilder, Santomero, Williams, & Crawley, 2000). Empirical research findings suggest *Blue's Clues* does have the potential to enhance problem solving skills in young children and may be capable of promoting viewers' interactions with on-screen characters (Anderson et al., 2000).

Blue's Clues utilizes on-screen characters (Steve and Blue) to speak directly to viewers, to elicit the attention of the viewing audience, and to facilitate interactions with on-screen characters by incorporating pauses for audience responses to problems encountered by the on-screen characters (Anderson et al., 2000). This interactive element is imitative of live adult interactions with children, particularly age-appropriate parent-child dyadic interactions associated with learning, such as when parents gesture to and label objects, and build, or scaffold, on the child's prior knowledge (Linebarger & Walker, 2005). *Teletubbies* is another TV series airing in contemporary times. *Teletubbies*' target audience is children 9- 36 months of age, airing on Public Broadcasting Service (PBS) stations, and is marketed as an educational program. Current research by Linebarger and Walker (2005) however, indicate negative associations between viewing *Teletubbies* and word learning and use of expressive language in children 6-36 months of age. The findings from the Linebarger and Walker (2005) study suggest that *Teletubbies* may be unable to offer the educational benefits it claims to extend, therefore the content appears to be less educationally centered and more apt to provide entertainment for young children, particularly in light of the fact that the program's characters use only repetitive non-verbal language.

The advent of increased accessibility of TV has now been joined by the production of TV series, DVDs and videos created for infants and toddlers and advertised as having educational content. Currently this is a heavily marketed multi-million dollar industry, implying there exists a strong demand for recreational or entertainment centered programs for young children—which the literature reports as having scant empirical evidence substantiating or refuting claims of learning enhancement in young children (Deloache, et al., 2010; Fenstermacher, Barr, Salerno, Garcia, Shwery, Calvert, & Linebarger, 2010; Linebarger & Vaala, 2010; Robb et al., 2009). Rideout and Hamel (2006) state that infants, toddlers and preschoolers are watching TV in spite of 1999 recommendations from the American Pediatrics Association (AAP). The AAP recommendations, which have been reiterated by the AAP in 2001 and again in 2010 and 2011 Policy Statements on media education, advise parents to avoid TV and video viewing for children under the age of 2, and to limit the amount of TV and video viewing for children older than 2 years of age to 1 to 2 hours per day. The AAP supports this warning citing research suggesting that screen media exposure may be related to the displacement of or interference with vital parent-child interactions; stating that infants, toddlers and preschoolers' time is most optimally spent communicating and engaging with responsive parents and caregivers, thereby facilitating healthy growth and development (Anderson & Pempek, 2005; Fiese & Schwartz, 2008; Krcmar et al., 2007; Roseberry, Hirsh-Pasek, Parish-Morris, & Golinkoff, 2009). The AAP also states that children age 2 and older may benefit when parents watch TV programs with their children. Parent-child joint viewing, known as *coviewing*, has the potential to foster early learning experiences, particularly when parent-child interactions relate to on-screen content (Fidler, Zack & Barr, 2010; Warren, 2003).

Researchers found learning was enhanced when children viewed educational programs during joint viewing episodes with parents who gestured, pointed to and discussed important content features with children (Barr, Zack, Garcia, & Muentener, 2008; Fender, Richert, Robb, & Wartella, 2010; Warren, 2001; Valkenburg et al., 1999). Barr et al. (2008) studied 12-18 month olds during joint viewing activities. The researchers found that infants attended to the screen content more often when parents utilized higher levels of scaffolding behaviors compared to when parents used lower or medium levels of scaffolding (Barr, et al., 2008). Fender et al. (2010) investigated word learning from screen media in children ages 12-25 months and found that word learning outcomes were related to the teaching focus of the parent. The researchers suggested that new word learning only occurred in children whose parents actively engaged the child with the screen content (Fender, et al., 2010). The investigations mentioned above relate the important role instructional parental mediation plays in facilitating positive learning opportunities for young children during screen viewing experiences.

Child development and screen media scholars offer varying views regarding the AAP recommendations. Some agree with the AAP recommendations, pointing to empirical research demonstrating negative associations between TV and video use prior to age 2 and developmental outcomes (Christakis, Gilkerson, Richards, Zimmerman, Garrison, Gray, & Yapanel 2009; Zimmerman & Christakis, 2005; Tomopoulos, Dreyer, Berkule, Fierman, Brockmeyer, & Mendelsohn, 2010); others claim the recommendations are premature and too general. Specifically, Anderson and Hanson (2009) contend that the AAP recommendations are based on inadequate empirical data, pointing to the paucity of investigations in this field. Scholars also argue that the conclusions and implications stemming from this research are often founded on outcomes from investigations of older children (school age) while omitting the different developmental trajectories inherent between younger and older children (Anderson & Hanson,

2009). Researchers suggest that the maturity of the child is an important mechanism effecting children's viewing experiences—that screen media experiences vary depending on the age of the child (Anderson & Hanson, 2009; Barr, et al., 2008). Both proponents and opponents of the AAP recommendations do however agree on the necessity for continued investigations. Researchers contend that results from further studies regarding associations of early exposure and cognitive development and health outcomes may be utilized to inform public policymakers, health care providers, educators and parents, potentially leading to positive decisions regarding screen media use and exposure by young children (Anderson & Hanson, 2009; Barr et al., 2010; Linebarger & Walker, 2005).

DISCUSSION

The majority of parental screen media mediation research has focused on school aged children, and there are few investigations assessing the parental media mediation strategies of young children. Children in our sample ranging in age from 6 months to 5 years are watching television an average of 2.5 hours per day, which is consistent with reports from Rideout and Hamel (2006) and Vandewater, Rideout, Wartella, Huang, Lee and Shim (2007). This daily average of screen time is in excess of the AAP recommendations of no screen content for children under 2 and the suggested amount of 1-2 hours per day for children 2 and older. Parents in our sample believe screen content may be used for educational purposes, however, parents report rarely utilizing screen media for teaching. Parents also realize that some content may be inappropriate for their child to view, yet most state they rarely discuss their children's viewing habits with a primary care provider.

If education is the goal parents seek from screen media, perhaps research seeking to distinguish which factors most facilitate or impede the use of screen content as a medium for learning should be further endeavored. Parents perceive screen media as having the potential to be educational for young children. With this in mind, it would be beneficial for research literature to clearly distinguish factors related to parental media mediation which may facilitate or impede children's learning from screen media.

Implications for Future Research. Further research of household media habits may lead to a more comprehensive understanding of what guides parent's beliefs, attitudes and behaviors regarding young children and their screen media use. By exploring parents' perceptions of screen media in general and specifically focusing investigations on the contextual nature of young children's household screen media consumption and exposure, a more complete picture of what comprises the viewing experiences of infants, toddlers, and preschoolers can be established and used to inform the literature.

The literature points to the vital role parents play guiding screen media experiences of young children. As noted previously, screen media mediation in the form of intentional parental interactions may elicit learning in young children; however it is important to point out that not all mediation strategies provide educational benefits for children. Research suggests that infants, toddlers and preschoolers rely on adult interactions to mediate their screen media experiences, helping to enhance the positive and inhibit the negative effects of screen content. Specifically, research suggests that when parents point to, gesture, and discuss the important features of age-appropriate screen content with children during joint viewing sessions, children tend to comprehend more of what they view (Fender et al., 2010; Roseberry et al., 2009).

Researchers discuss the need for future investigations in this area (Anderson & Hanson, 2009; Gutnick et al., 2010; Rideout and Hamel, 2006; Takeuchi, 2011). There is a need for empirically and ecologically based research focusing on screen media use and exposure during the early childhood years. Investigations taking place in lab and natural settings (i.e., the home) may yield important findings related to parent mediation, co-viewing, and young children's healthy growth and development. Research findings can be used to provide support and guidance in educating parents regarding the benefits associated with actively mediating, and watching and interacting with children during screen media viewing. To aide in bridging the gap between research findings and providing these findings to inform parents, the AAP guidelines would need to be updated. The AAP recommendations should be revised to reflect the reality of the ubiquitous nature of screen media in the lives of young children today. The AAP guidelines must be based on current empirical research findings regarding the negative as well as the positive aspects of parents' and young children's screen media experiences. Research concerning young children's screen media use and exposure has the potential of enhancing policymakers', parents', educators', and health care providers' access to pertinent information which can help guide appropriate decision making impacting children's growth and development.

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