

Does Culture Matter in Early Childhood Media Use?

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Researchers have found many surprising facts about the television exposure of very young children, among them: (a) Babies as young as 9 months are watching up to an hour of TV daily (Zimmerman, Christakis, & Meltzoff, 2007); (b) 65% of children less than 8 years old watch TV every single day; and (c) almost one third of children less than 3 years old have a TV in their bedroom (Rideout & Hamel, 2006). When average viewing time is examined by age group, the numbers show startling increases across infancy and early childhood: every day children from birth to 1 year old watch around 53 minutes of TV, children 2-4 years old watch 2 hours 18 minutes of TV, and children 5-8 years old watch 2 hours 50 minutes of TV (Rideout, 2011).

Placed in the context of everyday life, the average amount of time that a young child spends watching TV is almost 3 times the amount of time spent with other activities including listening to music or reading, and playing computer or video games (Christakis, Ebel, Rivara, & Zimmerman, 2004; Rideout, 2011). Overexposure to TV in early childhood, as well as exposure to programs aimed at adults rather than children, has been a longstanding concern of parents, teachers, clinicians, and child developmental researchers, as increased viewing has been linked to a variety of risk factors including poorer executive functioning, decreased parent-child interaction, impaired sleep, and

increased aggression (American Academy of Pediatrics, 1999; Anderson & Evans, 2001; Barr, Lauricella, Zack, & Calvert, 2010).

The data from these recent national studies is not only of concern, but also highlights the growing use of media as an activity consuming young children's waking hours. As these data illustrate, children less than 5 years old have liberal access to multiple types of media technology including TV's, videos/DVDs, computers, and even newer technology such as tablet computers, smartphones, and the like. This breadth of use has encouraged investigation around how young children are interacting with these various forms of media technology. Researchers are just

Abstract

Despite recommendations by the American Academy of Pediatrics for limited media use in childhood, children are watching increasing amounts of television. Ethnically and racially diverse children are watching more TV than their Caucasian peers. While there has been intense debate regarding rates of TV viewing and the concomitant risks or benefits, there has been less discussion about why ethnically and racially diverse children are watching more TV. This article covers some of the theories behind the increase in viewing time overall, and it presents some interesting exploratory findings highlighting similarities and differences in the viewing program choices of preschool-aged children and their families from several racial and ethnic backgrounds. Finally, the article suggests recommendations for researchers, clinicians, educators, and others working with families with young children to make more informed recommendations on early childhood viewing.

ing? Who makes the decisions about program choices? Do cultural and gender differences exist in program choices? Is language a consideration in program choices? These are the important questions that will help researchers understand the complex relationship between media use, culture, and developmental outcomes.

Cultural Differences in Media Use

WATCHING TV OR DVDs, playing video games or computer games, and using innumerable other forms of media technology is a part of children's everyday lives, and a part of culture. (Tudge, 2008) Several theories have focused on how children learn from early viewing experiences, through imitation as well as interpreting what they see on screen (Bandura, 1994; Bronfenbrenner & Morris, 1998). Research has shown that children's environments shape their expectations, beliefs, and attitudes. Related work has also shown that culture plays an important role in development and that cultural practices and expectations shape young children's development (Gauvain, 2001; Rogoff, 1998, 2003; Vygotsky, 1978). With the rapid increase in prevalence and amount of media use in early childhood, as well as the diversity of programming options, understanding more about the impact of media on child development is an increasing imperative.

African-American and Latino children have historically been found to watch more TV than do Caucasian children (Comstock, 1991), and recent national studies continue to highlight disparities in early childhood media viewing, with ethnically and racially diverse children consuming more media technology than their Caucasian peers (Anand & Krosnick, 2005; Certain & Kahn, 2002; Gentile & Walsh, 2002; Rideout, Vandewater, & Wartella, 2003). In the United States, African-American children top the list, spending an average of 4 hours 27 minutes daily interacting with media, followed by Latino children, who spend 3 hours and 28 minutes, and Caucasian children who spend 2 hours and 51 minutes per day interacting with media (Rideout, 2011). Although many studies have shown evidence of racial and ethnic disparities in media use, few have begun to address why these disparities exist, especially in light of many years of research on the potential adverse impact of heavy early viewing.

Why Are Kids Watching?

Media use, and more specifically television viewing, in early childhood has always been of interest to those of us working with families

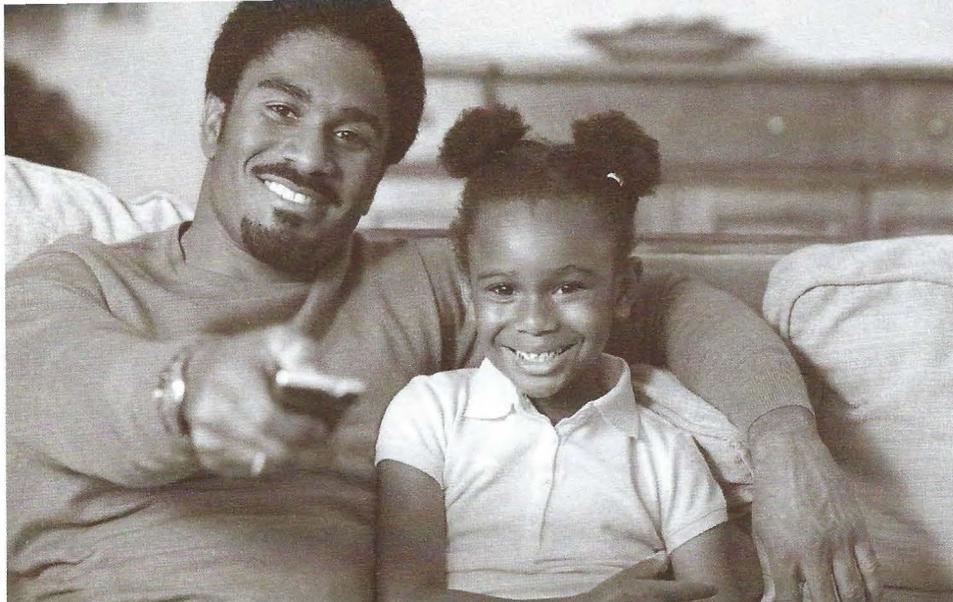


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The average amount of time that a young child spends watching TV is almost 3 times the amount of time spent with other activities.

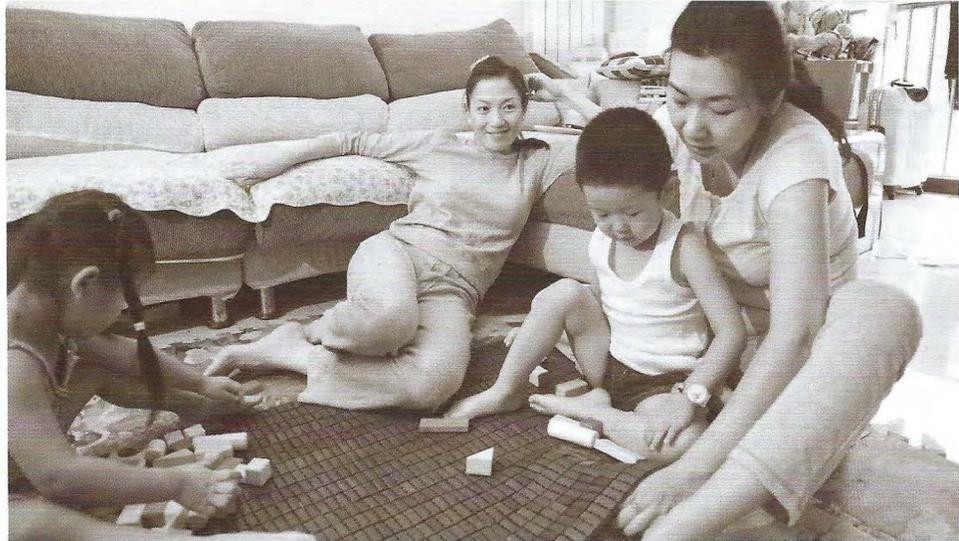
and young children. Apart from the entertainment value, parents report using TV as a tool "in order to get chores done", "to quiet down their kids", and because of its perceived educational potential (Rideout & Hamel, 2006; Rideout et al., 2003; Zimmerman et al., 2007). Parents or caregivers who are recent immigrants may have other motivations too, such as promoting English learning (Shivers & Barr, 2007).

Studies have also found both consistencies and variability in the TV rules families use, including rules about the amount of TV that can be watched and the specific programs that are allowed. One study on TV viewing in infants 6 to 18 months old (majority Caucasian sample) revealed that, while 56% of parents had rules about the amount of time their infant could spend watching TV and 8% had an explicit no-TV policy, neither of these rules was associated with the actual amount of time that infants spent watching TV. In contrast, 20% of parents had rules about the types of programs their infants could watch (restricting to only child-directed programming or avoiding violent programming), and rules of this sort were associated with infants viewing a higher proportion of child-directed programming (Barr, Danzinger, Hilliard, Andolina, & Ruskis, 2010).

Socioeconomic factors also interact with family TV rules to influence TV use in infancy and young childhood. In a national survey of parents of children 6 months to 6 years old, 67% of parents reported having rules about TV time, and even more (88%) had rules about which programs their children could and could

not watch. Parents with higher levels of education were more likely to have either type of rule than parents with lower levels of education, and parents with higher family incomes were more likely to have rules about program content. Children whose families had rules about TV time watched less television than children whose families did not have such rules, and children whose families had rules about TV content watched more TV than children whose families did not have such rules (Vandewater, Park, Huang, & Wartella (2005). Looking specifically at low-income families, parents of children 3-5 years old (majority African-American sample) were more likely to place restrictions on their children's TV use than to watch TV together or explain events happening on-screen. This is consistent with data from parents of other socioeconomic backgrounds, but it is important to note that these rules were tied to parents' attitudes about the negative influence of media in terms of potential exposure to violent or sexual content, rather than a general approach for all children at this age (Warren, 2005).

In fact, the 2011 Common Sense Media survey found low-income children watch more educational TV than their higher-income peers (Rideout, 2011). Parental rules and restrictions on programmatic content, as well as basic demographic factors like age, presence of siblings, and socioeconomic status do matter, as they are all associated with actual outcomes including children watching greater amounts of child-directed programming compared to the amount of time spent watching TV (Barkin et al., 2006; Barr, Danzinger,



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et al., 2010; Vandewater et al., 2005). Given that concerns around media use in young childhood include both time spent and content viewed (Friedrich-Cofer, Huston-Stein, Kipnis, Susman, & Clewett, 1979; Moses, 2008; Wright, 2001) looking at cultural differences in parents' views about media use in young childhood—including what they think about early TV viewing and the possible benefits of developmentally appropriate, educational, and prosocial viewing—is essential to understanding cultural disparities in actual media consumption. Parental rules and regulations around media use for their young children are influenced by their views toward TV (i.e., whether they believe it is a positive or negative influence on child development; Warren, 2003, 2005). However, very few studies have gone beyond race and ethnicity or socioeconomic status to examine how culture and media intersect in terms of their potential impact on early child development.

What Are Kids Watching?

Research has shown that, although young children watch a great deal of TV, parents can have a positive impact in terms of what they watch. Although there is a robust body of literature highlighting differences in educational versus noneducational viewing or developmentally appropriate versus inappropriate viewing on developmental outcomes, less work has focused on the possibility or impact of young children watching programming that reflects themselves, their families, and their communities (including their languages) versus programming that is a mismatch on any of these factors. Parents do endorse the belief that certain types of TV can be beneficial for

early childhood development, but group differences do exist in regards to that belief (Barr, Danzinger, et al., 2010; Njoroge, Elenbaas, Garrison, Myaing, & Christakis, in press; Rideout et al., 2003). More specifically, many parents find viewing diverse programming to be an important introduction to diversity for their children that may not be present in their home communities (Rideout & Hamel, 2006). Furthermore, research has shown that the quality of a child's social relationship with a TV character influences the child's likelihood of learning from an educational program (Richert, Robb, & Smith, 2011), and when a character more closely resembles a viewer, emotional investment with a program increases, and the likelihood that viewers will learn educational content also increases (Fisch, 2004). If children are to benefit from the educational aims of certain programs, it is important to ask not only what the lesson of the program is, but perhaps also, who is teaching it.

3 to 5 years old (*n* for the subset examined here = 600), we explored links between the race and ethnicity of participating children and the racial and ethnic demographics of their chosen TV programs as a way of initially assessing both the racial and ethnic diversity of popular programs and the extent to which the preschoolers in our sample were watching shows with characters who resembled them (at least phenotypically). All parents who participated in the larger study completed a survey that assessed child and family characteristics including: media use, household income, parental education, child's race and ethnicity, number of adults in the household, marital status, number of TV sets in the household, and presence of a TV in target child's bedroom. The families also completed a 1-week media diary by recording daily how much screen time (including TV and DVDs or videos) their child watched and the names of specific programs or films.

When looking at the ethnically and racially diverse children's media diaries, we saw some similarities in the top programs across the groups, which included African-American (*n* = 62), Latino (*n* = 34), and Asian-American/Pacific Islander/Hawaiian children (*n* = 95). Many of the most popular programs (by proportion of the sample who reported watching them during the 1-week media diary recording period) were appropriate for the ages of the children studied (3–5 years old), and many had educational or pro-social aims (e.g., themes or overt lessons about letters, numbers, caring for others, helping). Many of the top programs also had diverse lead characters or a diverse cast. Table 1 presents a list of the top four most popular diverse programs (by proportion of the sample who reported watching them on the 1-week media diary) for the four racial and ethnic groups examined. Diverse programs were defined as those with at least one main character of a racially or ethnically diverse background.

Table 1. Most Popular Diverse Programs in Each Group and Percentage of Group Who Watched

African-American (<i>n</i> = 62)	Asian-American/ Pacific Islander/ Hawaiian (<i>n</i> = 95)	European-American (<i>n</i> = 409)	Latino/a (<i>n</i> = 34)
<i>Dora the Explorer</i> (37%)	<i>Dora the Explorer</i> (20%)	<i>Sesame Street</i> (18%)	<i>Sesame Street</i> (29%)
<i>Sesame Street</i> (19%)	<i>Sesame Street</i> (18%)	<i>Dora the Explorer</i> (15%)	<i>Dora the Explorer</i> (18%)
<i>Go, Diego, Go!</i> (18%)	<i>Ni Hao, Kai-lan</i> (14%)	<i>Super Why</i> (15%)	<i>Sid the Science Kid</i> (15%)
<i>Super Why</i> (15%)	<i>Handy Manny</i> (9%)	<i>Sid the Science Kid</i> (14%)	<i>Super Why</i> (15%)

Note: Diverse programs were those with at least one main character of a racial or ethnic minority background.

backgrounds made. Across the four groups, the programs *Sesame Street* and *Dora the Explorer* were consistently the two most popular programs with a diverse cast. *Super Why* also appears on the top-four list for three groups, and *Sid the Science Kid* appears twice. Other popular choices included *Go, Diego, Go!* and *Ni Hao, Kai-lan*.

Figure 1 uses the top 10 most popular programs overall for each group (by proportion of the sample who reported watching them on the 1-week media diary) and presents a count of the number of programs from each group's top-10 list that were diverse in terms of their main characters. Diverse programs were defined again as those with at least one main character of a racially or ethnically diverse background. Because many programs for the preschool age group have animal or other nonhuman main characters, a count of animal-only programs is included as well. Of the top 10 most popular programs for each group, 40–50% were classified as diverse.

Although this data suggests interesting trends, it is important to note secondary to the small numbers of racially and ethnically diverse children included in this sample that these findings while interesting are exploratory. Taken together, they do indicate that young children watch programs with a diverse cast of characters, and the choices that parents make regarding diversity could be a function of intentional choice and availability of programs (e.g., many children's programs have Caucasian main characters, but less have main characters of other races or ethnicities).

Reasons for allowing their young children to watch TV, diverse attitudes about the impact of television on child development, and varied rules and regulations around how much TV is too much and which programs are okay to watch. Television use is a part of children's daily lives and a part of culture, and much more research is needed in order to understand the reciprocal influence of TV and culture on child developmental outcomes. The literature reflects parents are extremely concerned regarding the different types of programs their children are watching and that this concern is completely warranted (Vandewater et al., 2005). Research on variability in media use to date has outlined the ways in which media consumption in young childhood varies by race and ethnicity and socioeconomic status, but thus far very little work has examined the reasons for these demographic differences. Research addressing how parents from different racial and ethnic and socioeconomic backgrounds regulate their children's media intake (in terms of time and content) has begun to address the question of why viewing disparities exist, but again, very little work has assessed the reasons that parents make the rules that they do for their young children's TV use. Increasingly, TV is a large part of young children's everyday lives and is incorporated in the customs, habits, and daily decisions of children and families. Although it has not always been viewed as such, TV is a part of culture and therefore susceptible to cultural variability. Examining cultural variability in parents' views about TV use in early childhood and its relation to developmental outcomes may help shed light on observed

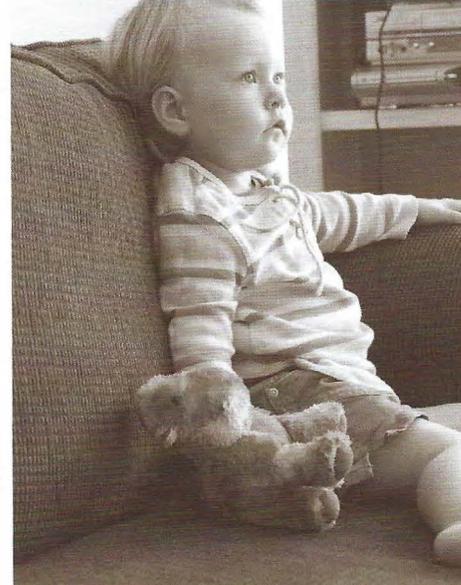


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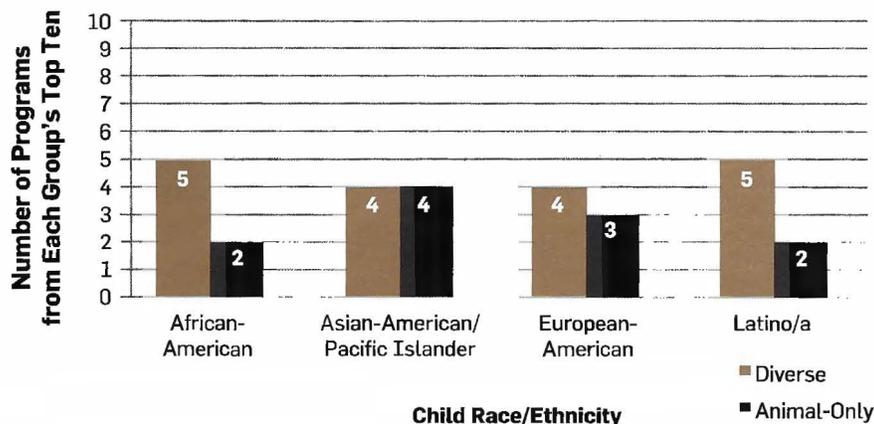
Every day children from birth to 1 year old watch around 53 minutes of TV.

racial and ethnic and socioeconomic viewing disparities, and answer the questions of why parents make the decisions they do for their young children's TV viewing—both in terms of time and content—and how these decisions influence child developmental outcomes. §

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Figure 1. Racial/Ethnic Diversity for Popular Programs



Note: Diverse programs were those with at least one main character of a racial/ethnic minority background. Animal-Only programs were those that had no human main characters.

- AMERICAN ACADEMY OF PEDIATRICS, COMMITTEE ON PUBLIC EDUCATION. (1999). *Pediatrics*, 104(2 pt1), 341-343.
- ANAND, S., & KROSNICK, J. A. (2005). Demographic predictors of media use among infants, toddlers, and preschoolers. *American Behavioral Scientist*, 48(5), 539-561.
- ANDERSON, D. R., & EVANS, M. K. (2001). Peril and potential of media for infants and toddlers. *Zero to Three*, 22(2), 10-16.
- BANDURA, A. (1994). Social cognitive theory of mass communication. In J. Bryant & D. Zillman (Eds.), *Media effects: Advances in theory and research* (pp. 61-90). Hillsdale, NJ: Lawrence Erlbaum.
- BARKIN, S., IP, E., RICHARDSON, I., KLINEPETER, S., FINCH, S., & KRUMHOLTZ, M. (2006). Parental media mediation styles for children aged 2 to 11 years. *Archives of Pediatrics and Adolescent Medicine*, 160(4), 395-401.
- BARR, R., DANZINGER, C., HILLIARD, M. E., ANDOLINA, C., & RUSKIS, J. (2010). Amount, content and context of infant media exposure: a parental questionnaire and diary analysis. *International Journal of Early Years Education*, 18(2), 107-122.
- BARR, R., LAURICELLA, A., ZACK, E., & CALVERT, S. L. (2010). Infant and early childhood exposure to adult-directed and child-directed television programming: Relations with cognitive skills at age four. *Merrill-Palmer Quarterly*, 56(1), 21-48.
- BRONFENBRENNER, U., & MORRIS, P. (1998). The ecology of developmental processes. In W. Duncan & N. Eisenberg (Eds.), *Handbook of child psychology*, 5th ed. (pp. 993-1028). New York: John Wiley.
- CERTAIN, L. K., & KAHN, R. S. (2002). Prevalence, correlates, and trajectory of television viewing among infants and toddlers. *Pediatrics*, 109(4), 634-642.
- CHRISTAKIS, D. A., EBEL, B. E., RIVARA, F. P., & ZIMMERMAN, F. J. (2004). Television, video, and computer usage in children under 11 years of child. San Diego, CA: Academic Press.
- FISCH, S. M. (2004). Characteristics of effective materials for informal education: A cross-media comparison of television, magazines, and interactive media. In F. C. Blumberg, H. T. Everson, & M. Rabinowitz (Eds.), *The design of instruction and evaluation: Affordances of using media and technology* (pp. 3-18). Mahwah, NJ: Erlbaum.
- FRIEDICH-COFER, L. K., HUSTON-STEIN, A., KIPNIS, D. M., SUSMAN, E. J., & CLEWETT, A. S. (1979). Environmental enhancement of prosocial television content: effects on interpersonal behavior, imaginative play, and self-regulation in a natural setting. *Developmental Psychology*, 15, 637-646.
- GAUVAIN, M. (2001). *The social context of cognitive development*. New York, NY: Guilford Press.
- GENTILE, D. A., & WALSH, D. A. (2002). A normative study of family media habits. *Journal of Applied Developmental Psychology*, 23(2), 157-178.
- MOSES, A. M. (2008). Impacts of television viewing on young children's literacy development in the USA: A review of the literature. *Journal of Early Childhood Literacy*, 8(1), 67-102.
- NJOROGE, W. F. M., ELENBAAS, L., GARRISON, M. M., MYAING, M. M., & CHRISTAKIS, D. A. (in press). Parent cultural attitudes and beliefs regarding young children and television. *JAMA Pediatrics*.
- RICHERT, R. A., ROBB, M. B., & SMITH, E. I. (2011). Media as social partners: The social nature of young children's learning from screen media. *Child Development*, 82(1), 82-95.
- RIDEOUT, V. J. (2011). *Zero to eight: Children's media use in America*. Available at: www.common-sense-media.org/sites/default/files/research/zerotoeightfinal2011.pdf
- RIDEOUT, V. J., & HAMEL, E. (2006). *The media family: Electronic media in the lives of infants, toddlers, preschoolers and their parents*. Menlo Park, CA: Kaiser Family Foundation.
- RIDEOUT, V. J., VANDEWATER, E. A., & WARTELLA, E. A. (2003). *Zero to six: Electronic*
- ROGOFF, B. (1998). Cognition as a collaborative process. In W. Damon (Ed.), *Handbook of child psychology: Volume 2: Cognition, perception, and language*. (pp. 679-744). Hoboken, NJ: John Wiley & Sons Inc.
- ROGOFF, B. (2003). *The cultural nature of human development*. Cambridge, UK: Oxford University Press.
- SHIVERS, E. M., & BARR, R. (2007). Exploring cultural differences in children's exposure to television in home-based child care settings. *Zero to Three*, 27(5), 39-45.
- TUDGE, J. (2008). *The everyday lives of young children: Culture, class, and child rearing in diverse societies*. New York, NY: Cambridge University Press.
- VANDEWATER, E. A., PARK, S. E., HUANG, X., & WARTELLA, E. A. (2005). "No-You can't watch that". *American Behavioral Scientist*, 48(5), 608-623.
- VYGOTSKY, L. S. (1978). *Mind in society: The development of higher psychological processes*. (M. Cole, V. John-Steiner, S. Scribner & E. Souberman, Trans.). Cambridge, MA: Harvard University Press.
- WARREN, R. (2003). Parental mediation of preschool children's television viewing. *Journal of Broadcasting & Electronic Media*, 47(3), 394-417.
- WARREN, R. (2005). Parental mediation of children's television viewing in low-income families. *Journal of Communication*, 55(4), 847-863.
- WRIGHT, J. C. (2001). The relations of early television viewing to school readiness and vocabulary of children from low-income families: the Early Window Project. *Child Development*, 72, 1347-1366.
- ZIMMERMAN, F. J., CHRISTAKIS, D. A., & MELTZOFF, A. N. (2007). Television and DVD/video viewing in children younger than 2 years. *Archives of Pediatrics and Adolescent Medicine*, 161(5), 473-479.