



Maternal beliefs about television and parental mediation in a low-income United States sample

Sarah E. Domoff, Alison L. Miller, Neeaz Khalatbari, Megan H. Pesch, Kristen Harrison, Katherine Rosenblum & Julie C. Lumeng

To cite this article: Sarah E. Domoff, Alison L. Miller, Neeaz Khalatbari, Megan H. Pesch, Kristen Harrison, Katherine Rosenblum & Julie C. Lumeng (2017) Maternal beliefs about television and parental mediation in a low-income United States sample, *Journal of Children and Media*, 11:3, 278-294, DOI: [10.1080/17482798.2017.1339102](https://doi.org/10.1080/17482798.2017.1339102)

To link to this article: <https://doi.org/10.1080/17482798.2017.1339102>



Published online: 16 Jun 2017.



Submit your article to this journal [↗](#)



Article views: 293



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)



Maternal beliefs about television and parental mediation in a low-income United States sample

Sarah E. Domoff^{a,b}, Alison L. Miller^{b,c}, Neeaz Khalatbari^d, Megan H. Pesch^e,
Kristen Harrison^f, Katherine Rosenblum^{b,g} and Julie C. Lumeng^{b,e,h}

^aDepartment of Psychology, Central Michigan University, Mt. Pleasant, MI, USA; ^bCenter for Human Growth and Development, University of Michigan, Ann Arbor, MI, USA; ^cDepartment of Health Behavior and Health Education, School of Public Health, University of Michigan, Ann Arbor, MI, USA; ^dThe Manhattan Children's Center, New York, NY, USA; ^eDepartment of Pediatrics, Medical School, University of Michigan, Ann Arbor, MI, USA; ^fDepartment of Communication Studies, University of Michigan, Ann Arbor, MI, USA; ^gDepartment of Psychiatry, Medical School, University of Michigan, Ann Arbor, MI, USA; ^hDepartment of Nutritional Sciences, School of Public Health, University of Michigan, Ann Arbor, MI, USA

ABSTRACT

Low-income children are at greater risk for excess screen time and negative correlates associated with screen media use. The goal of this study is to increase our understanding of low-income mothers' beliefs and practices around their children's television (TV) use (parental mediation). We administered semi-structured interviews to 296 low-income mothers of children ages four–eight years old in the United States. Five themes emerged from the qualitative analysis: (1) mothers are confident in restriction of TV content; (2) time limits are not as important as TV content and are only necessary in extreme situations; (3) mothers make meaning of child learning from TV content; (4) mothers identified individual differences in child TV overuse; and (5) mothers' policy on TV during mealtime depends on how they believe TV to affect child mealtime behaviors and mothers' mealtime goals. We discuss the implications of these themes for promoting parental mediation in low-income families.

ARTICLE HISTORY

Received 11 April 2016
Revised 30 March 2017
Accepted 3 April 2017

KEYWORDS

Parental mediation;
low-income; child; parent;
screen time; television

Young children spend many hours each day consuming media (Rideout, 2013), exceeding recommendations put forth by the American Academy of Pediatrics (AAP Council on Communications and Media, 2016). Children from low-income families have greater amounts of daily screen time, compared to peers from higher-income families (Rideout, 2015; Roberts, Foehr, Rideout, & Brodie, 1999), and are also at greater risk for experiencing the negative correlates of television use, such as obesity (Cunningham, Kramer, & Narayan, 2014; Wang & Beydoun, 2007) and poorer sleep quality and duration (El-Sheikh et al., 2013). Despite these well-supported differences by income level, we know surprisingly little about how, and under what circumstances, low-income mothers mediate television (TV). The goal of this study, therefore, is to increase our understanding of low-income mothers' beliefs and practices around their children's TV use (i.e., parental mediation of TV). That is, what factors

influence the decisions low-income mothers make around parental mediation of TV? We utilized qualitative methodology with the intention of fostering a deeper understanding of the experiences and perspectives of low-income mothers in the United States regarding parental mediation of TV.

Media use in low-income households

Across development, children from low-income backgrounds use more screen media compared to their like-aged peers from higher income brackets (Rideout, 2013, 2015; Roberts et al., 1999). A nation-wide study of the media consumption of children age 8 years old and under found that children from lower-income families watched TV for approximately 20 min longer each day, on average, than children of higher incomes (Rideout, 2013). Differences in the amounts of screen time by socio-economic status (SES) appear to widen as children grow older. For example, lower-income “tweens” (children ages 8–12 years old) watch TV for 46 min longer each day, on average, compared to higher-income peers (Rideout, 2015). Among teenagers, lower-income youth watch TV for more than one hour longer than higher-income peers (Rideout, 2015).

In addition to greater screen media use, the media environments in low-income households differ from higher-income households. For example, lower-income children are more likely to have a TV in their bedrooms (60%) compared to children from medium-(35%) or higher-income (21%) backgrounds (Rideout, 2013). Similarly, a greater proportion of low-income children (i.e., 70%) have the TV on during mealtime (compared to 48% in higher-income households; (Roberts et al., 1999). Constant television environments, where the TV is on most of the time in the home, are also more common among lower-income families (Baird et al., 2005).

Given these socio-economic differences in children’s TV viewing time and the home media environment, it is not surprising that children from low-income backgrounds experience higher rates of the health risks associated with TV consumption, such as overweight and obesity. Decades of research and numerous epidemiological studies have documented the association between TV use and obesity (Boulos, Vikre, Oppenheimer, Chang, & Kanarek, 2012; Coon, Goldberg, Rogers, & Tucker, 2001; Davison, Marshall, & Birch, 2006; De Jong et al., 2011; Dietz & Gortmaker, 1985; Harrison & Liechty, 2012; Hingle & Kunkel, 2012; Jago, Baranowski, Baranowski, Thompson, & Greaves, 2005; Jordan, 2004; Lumeng & Burke, 2006; Strasburger, 2011). Indeed, children of low SES experience higher rates of obesity, compared to their higher-income peers Wang & Beydoun, 2007). In efforts to promote the health and reduce negative media effects in this population, scholars have recently advocated for research to promote greater understanding of *why* low-income children have greater TV viewing time and may be more susceptible to media effects (Nathanson, 2015). That is, what is distinct about low-income families that may increase TV viewing or exacerbate negative media effects? Understanding the lived experiences of low-income mothers as they relate to TV viewing and parental mediation of TV could inform future efforts to reduce screen time and associated health risks in this population. Although few studies have explicitly focused on low-income children and their parents to advance such an understanding, we can draw from two bodies of literature to inform our qualitative inquiry: (1) SES and child development and (2) parental mediation of TV.

SES and child development

As well as the home media environment, low-income households differ from middle or higher income households on other aspects that may underlie differences in media use and effects among low-income children. In the child development literature, the two pathways linking low SES to child outcomes that are most relevant to children's TV use and parental mediation of TV are the investment model and the family process model (Yeung, Linver, & Brooks-Gunn, 2002; see also Bradley & Corwyn, 2002). The investment model proposes that income facilitates parents' ability to purchase stimulating materials, experiences, and services for their children (i.e., invest in their child's development; Yeung et al., 2002). In other words, lower-income parents, due to financial constraints, are unable to provide a range of cognitively stimulating toys and activities for their children. Indeed, poverty is associated with the number of cognitively stimulating materials in the home environment (Bradley, Corwyn, McAdoo, & Coll, 2001; Yeung et al., 2002), which in turn are associated with more parent-child interaction (Yeung et al., 2002). Recent research has highlighted that lower-income families may also have a paucity of time to devote to their children (Kalil, 2013), which may be another form of material "investment." These findings from the child development literature could explain why low-income children have greater amounts of TV screen time. First, given the fewer resources available, TV programming may be one of the few available options for children in low-income households that is entertaining and stimulating. Another reason is that children in less cognitively stimulating settings may become bored or frustrated more often (Bradley & Corwyn, 2002), and TV (or other media formats) may provide a way to relieve child boredom or internal distress.

The family process model (also referred to as the family stress model; Conger et al., 2002) proposes that family economic hardship has an impact on psychological functioning of parents, which in turn influences parenting practices (Yeung et al., 2002) and feelings of efficacy (Elder, Jr., Eccles, Ardel, & Lord, 1995). For example, parents with greater financial strain and material hardship experience higher levels of psychological distress, which predicts lower parental responsiveness (e.g., praise and warmth) and lower disciplinary efficacy (e.g., more difficulty managing their child and greater child resistance to discipline; Mistry, Vandewater, Huston, & McLoyd, 2002; see also: Elder, Jr. et al., 1995). The on-going stress associated with poverty, and other adverse experiences more common among low-income families (e.g., unemployment, unsafe housing, community violence), requires significant coping by parents, and thus, may limit the cognitive energy that parents have available to engage in certain parenting practices (Bradley & Corwyn, 2002). Additionally, socio-economic disadvantage may interfere with the development of parental self-efficacy or affect feelings of parenting competence (Jones & Prinz, 2005). These mechanisms linking poverty to parenting behaviors and efficacy may also apply to media-specific parenting practices such as regulating or actively monitoring children's TV use (i.e., parental mediation of TV).

Parental mediation of TV

Parents are the gate-keepers to children's media use in the home and have a major influence on children's use and susceptibility to both positive (e.g., educational, prosocial) and negative media effects via parental mediation. As a broad definition, parental mediation of TV "refers to interactions with children about television" (Nathanson, 2001, pp 116, 117). Parental

mediation of children's TV consists of three main components: active mediation, restrictive mediation, and social co-viewing (Nathanson, 2001). Active mediation entails talking to children about the content of TV, such as elucidating the motivations of characters, clarifying the content, explaining the intent of advertisements or commercials (Buijzen & Valkenburg, 2005). Active mediation has been found to mitigate the negative effects of media on children (see Collier et al., 2016 for a recent meta-analysis on the effectiveness of parental mediation on child outcomes such as aggression, sexual behaviors, substance use). For example, active mediation of TV advertising has been found to reduce the effect of advertising on children's purchase requests (Buijzen & Valkenburg, 2005). Restrictive mediation encompasses the rules or regulations that parents set on how much their child is watching TV, what their child is watching (i.e., the content of TV programs), and the context of the viewing (e.g., TV use during mealtime; Valkenburg, Krcmar, Peeters, & Marseille, 1999). Whether the parent uses TV as a reward or punishment also falls under the category of restrictive mediation (Gentile & Walsh, 2002). Greater restrictive mediation of TV has been found to associate with lower amounts of TV watching in children (Vandewater, Park, Huang, & Wartella, 2005). Considered together, active mediation and restrictive mediation have been found to associate with better child outcomes in various domains (e.g., sleep, school performance, social behaviors), through a reduction in total TV and video game time (e.g., Gentile, Nathanson, Rasmussen, Reimer, & Walsh, 2012). Finally, social co-viewing is shared viewing of TV programming between a parent and child, of shared interest/enjoyment of program, but without dialog about its content (Valkenburg et al., 1999). Social co-viewing appears to enhance the effects of TV, which may be positive or negative for children, based on the content (e.g., prosocial or educational vs. violent). For example, co-viewing in the context of violent TV is associated with greater aggressive tendencies in children (Nathanson, 1999). Across its main components, parental mediation is an essential facet underlying children's media consumption; it is important to promote active mediation, restrictive mediation, and social co-viewing of prosocial or educational content to reduce children's susceptibility to negative media effects and enhance positive effects.

Decades of research have demonstrated that parents' attitudes and beliefs about TV are important contributors to parental mediation of TV and child TV viewing (Austin, Knaus, & Meneguelli, 1997; Nathanson, Eveland, Jr., Park, & Paul, 2002; Nikken & Schols, 2015; Warren, 2001). Attitudes about the positive effects of TV (e.g., educational TV can help child learn or play better) associate with children watching more TV (Beyens & Eggermont, 2014; Njoroge, Elenbaas, Garrison, Myaing, & Christakis, 2013; Vaala, 2014), whereas greater concern about the potential negative effects of viewing TV (e.g., watching violent TV can make my child aggressive) associates with more rules about TV viewing (restrictive mediation; Warren, 2005), discussion about content (active mediation; Warren, 2001, 2005), and less TV screen time (e.g., Vaala, 2014). Parental beliefs about TV are key factors underlying media parenting practices and therefore, children's screen use and susceptibility to media effects. Few studies (e.g., Warren, 2005) have examined how these processes operate in low-income parents who may experience greater tensions regarding how to enact mediation, particularly given the daily stressors more common among low-income families.

In sum, the literature on the associations between poverty and parenting and child development, as well as the research on the predictors of parental mediation of TV and its effects, underscores the importance of understanding the perspectives of low-income parents on parental mediation. In the current study, we utilized a qualitative methodological design in

order to deeply consider the experiences of low-income primary caregivers (the majority of whom were the child's biological mother), and to gain insights into their practices that may be new or important to draw upon for both theory building and clinical practice (e.g., obesity prevention, reduction in screen use).

Method

Participants

Participants were originally recruited from a cohort of primary caregivers and their children attending Head Start programs in Michigan. Head Start is a federally-funded pre-school program offered to low-income children in the United States. Participants from this longitudinal cohort were later invited (in the years 2011–2013) to participate in a larger study on children's eating behaviors when their children were between the ages of 4 and 8 years old. Inclusion criteria for the study included: (1) caregiver had less than a four-year college degree, (2) caregiver was fluent in English, (3) child was born without perinatal or neonatal complications, (4) child had no history of food allergies or serious medical problems, and (5) child was not in foster care at time of participation.

A total of 301 primary caregivers enrolled in the study, including five male caregivers who were excluded from the current analyses. We excluded the few male caregivers given that mothers are more likely than fathers to utilize certain parental mediation practices (Valkenburg et al., 1999). Of the 296 female primary caregivers in the sample, nearly all were the child's biological mother ($n = 282$). The remaining subsample of female caregivers self-identified as adoptive mothers, step-mothers, and grandmothers and will, henceforth be referred to as "mothers." Approximately 45% of the mothers in the study were single parents ($n = 132$).

The mean age of the mothers was 30.98 years ($SD = 7.02$ years) and their children ranged from four to eight years old (M age = 5.91 years, $SD = 0.69$ years; 51.4% boys). The majority of mothers were White (67.6%), with 15.9% identifying as Black, 8.4% as Hispanic, and 7.1% Biracial. Most mothers reported low educational attainment: 48.0% had a high school degree or less and 39.5% had taken college courses but had not attained a 2- or 4-year college degree. The remaining 12.5% of the sample reported attaining a 2-year college degree. All participants were Head Start eligible at the time of recruitment in the parent study in the years 2009–2011. Head Start is a no-cost pre-school program for children between the ages of 3 and 5 years old, whose families are at or below the poverty guideline set forth by the US Department of Health and Human Services (HHS). For context, the poverty guideline for 2014 for a family of four in the United States was an annual household income of \$23,850 or less (US Department of HHS, 2014). The average total household income (pre-tax for this sample) was between \$20,000 and \$24,999 (mode = \$10,000–\$14,999).

Procedures

The Institutional Review Board of the authors' institution approved the study. The methodology used in this study has been extensively described elsewhere (Goulding et al., 2015; Hayman, Jr., Lee, Miller, & Lumeng, 2014) and is briefly described below. After obtaining written informed consent from the participants, research assistants conducted

semi-structured interviews with mothers privately in their home or, if the participant preferred, at a community location (e.g., Head Start, community health agency). Research assistants were trained to establish and maintain rapport, and to avoid leading reactions to mothers' responses.

The semi-structured interviews consisted of a series of questions covering a variety of topics related to children's eating behaviors and health (see Goulding et al., 2015, for protocol). Individual interviews are a preferred modality in which to assess mothers' beliefs about parenting around media, as these topics likely elicit strong feelings and may be subject to social desirability bias that could arise in focus groups. In the current study, we analyzed participants' responses to seven questions pertaining to mothers' perceptions of their child's TV use. These questions were: (1) How do you feel about the television [your child] watches?; (2) Do you think it is too much?; (3) How do you feel about the programs he/she watches? Who chooses?; (4) Are there time limits?; (5) How often does [your child] eat dinner and watch TV at the same time?; (6) Do rules about TV watching work?; and (7) Do you think TV watching influences eating? Audio-tapes of the interviews were transcribed and identifying information was removed. Transcripts were independently reviewed to confirm accuracy of transcription.

Theme generation

The constant comparative method (Glaser & Strauss, 1967) was used to generate themes regarding mothers' beliefs about TV use in their children. We utilized grounded theory in our study in order to foster theory development and hypotheses that could be tested in future quantitative studies. Four readers, not involved in the data collection, independently read mothers' responses to the seven questions in a set of randomly chosen transcripts. Readers identified potential themes with supporting quotations based on mothers' interview responses. The constant comparative method involves having readers compare themes that emerge with previous themes that were generated from earlier interviews, to determine if a new theme arises or if the quotes identified fit within an already generated theme. After these independent reviews, the readers met to review the themes, identify potential biases, and discuss different ways of classifying the themes identified (e.g., splitting themes into smaller themes or lumping themes together). Readers shared supporting quotes reflecting the themes to ensure that all authors agreed that the supporting quotes were reflective of the themes. Themes that were concordant across all four readers were identified and were the focus of this study. Theme saturation was reached after reviewing 50 transcripts in this manner. The first author subsequently read the remaining 246 interviews to identify additional illustrative quotes and to confirm no new themes emerged. No other new themes emerged in this process.

Results

Five themes regarding mothers' perceptions of parental mediation of TV emerged. For each theme, a description of the content of mothers' statements, the affective quality of their responses, and illustrative quotes are provided.

Theme 1: confidence in restricting children's TV content

Many mothers were highly engaged and confident in managing the content that their child was exposed to. They described feeling efficacious in this aspect of parental mediation and rarely endorsed feeling unable to manage what their child watched.

I monitor what's being watched ... if I just let them watch whatever was on TV or they just watched everything that was on TV, then I would see that being problematic because like I said like, a lot of the stuff on TV is not appropriate for children, and you know, parents need to be aware of that.

Certain channels they won't ever be able to watch, until they are grown and out of my house. They watch all G. Cause he's five, she's seven, they watch rated G movies, and that's it. I won't let 'em watch PG or PG-13 or anything like that. It's all parental control locks. I choose what they watchI'm mom. They're gonna watch what I tell them they can...Simple as that.

Mothers were very aware and attuned to their child's preferred TV programs and were proactive in preventing children's exposure to inappropriate content. Mothers closely monitored the programs their children regularly watched for content and the broader messages the show was promoting. In particular, many mothers were concerned about the characters' use of inappropriate language and crass or violent behaviors. In addition, they expressed concerns regarding sexual content and the sexualization of TV characters. However, there was hardly any mention about concerns regarding the effects of commercials or advertising on their child's health and food preferences.

Spongebob sometimes isn't really the greatest either because there is some violence... I watch everything that he watches on TV. I will not let him sit down and watch something until I've watched three or four episodes of it myself. I have a DVR in my room and ... I'm watching you know whatever [child] wanted to watch... I put it on the DVR so I can go through and fast forward through all the commercials but find out what this cartoon is going to teach my child.

He's only allowed to watch Cartoon Network right now, and then when it hits nighttime he watches Sprout. Because at nighttime on Cartoon Network there's some inappropriate cartoons that come on so we switched it to Sprout.

Theme 2: time limits not as important as content restrictions

Mothers placed greater importance on the content of children's TV programming, compared to how much time their children watched TV. It was clear from their statements that mothers had given much thought to what constituted appropriate TV content (Theme 1), particularly around violence and sexual content, but did not specify certain time limits or rules (e.g., two hours or less). Mothers' reference point for too much screen time appeared to have a high threshold: watching TV all day with participation in no other activities (e.g., playing with friends, being outside). Thus, time limits were seen as only necessary in extreme situations. This view on too much time was reflected in statements such as:

Not a time limit. There would be if she wanted to sit in front of it all day, that wouldn't be okay.

I see that during the summer they're trying to veg out for three or four hours and it's a, nice sunny day, and they're not sick....Shut the TV off, let's get going.

If he watched it [the TV] all day then I would stop [it] after a while.

Theme 3: enjoyment of child learning from and engaging with TV content

Mothers expressed enjoying, and made meaning of, child's learning from and engaging with TV content. The child's choices about TV programs and other screen content were seen as a source of positive emotional connection that mothers shared with their children. A sense of excitement and pride was exuded as mothers described what their children learned through the programs they watched. To the mothers, positive TV content represented a source of positive socialization in their homes and for their children. TV was a resource to these families, particularly in that it supported the child's social development. Relatedly, mothers described their child's preferences for certain TV programs with enjoyment. For mothers, children's TV show preferences informed them about their child's personality and interests.

I like her watching that [My Little Pony] because that teaches her a lot about caring and stuff like that. Sort of like the Care Bears. Except Ponies. You know, it teaches them stuff and I've actually seen her use that stuff in real life.

He does watch a lot of educational stuff and it does help him learn a lot. It really does. 'Cause you know when he watches it, he interacts with it. You know they ask questions and he answers the questions. So he's pretty good with that. Like, let's see, Dora is one that he loves. Dora is teaching him Spanish and it's teaching him how to be kind to others, you know, and then we'll do and reenact what Dora had taught him that day. We reenact that. I mean, they're always watching something educational.

He's very smart – he soaks things in like a sponge... he just, like, he loves information so he'll watch Discovery Channel Animal Planet and he'll actually learn stuff about animals and the universe and whatever else and Big Foot.

Theme 4: individual differences in child TV overuse

Mothers drew upon perceptions of their child's interest and engagement with screen time, and made parenting decisions based on these perceptions. Individual differences in children's engagement with TV and children's activity levels were referenced in decision-making around TV rules. For those children who were not interested in screen time, mothers remarked how minimal TV time was compared to children's more preferred activities.

To be honest, [child] really is not a TV person. Um, I actually had a cable box in his room that like converted his TV over to digital because you know you can't run any kind of TV without the little box. I took it out. He didn't watch it, he never watched it. Um. He'll watch a movie at night but it's always the same thing it's either Berenstain Bears or Kai-Lan [Ni Hao Kai-Lan] um, and he makes it about halfway through the movie and he's zonked out.

Umm, she really doesn't be really concerned about TV because she's always wantin' to be outside playing with her friends so, I'm not really concerned. Like, she watch kid shows and stuff but she doesn't spend long periods of time tryin' to watch TV and movies. Like she likes to do other things. It's a wide range of activities she likes to do.

I don't have to give him time limits. With my oldest son I did, but with [child] he is- he's too active. And for him to sit down in front of the TV for more than 10 or 15 min is a joke. You would have to literally probably tie him down to get him to sit there. That's just not him – that's not his demeanor.

Mothers contrasted these children with children who were passionate about and highly engaged in TV. In other words, mothers who described their child as having high interest in screen media also expressed the need to have rules and set limits around screen time.

There's times when she wants to watch cartoons all day long ... she has a very big TV problem. She loves TV.

He wants to watch television all day. He comes home first thing – he says “Can I get on the computer?” Wake up in the morning, “Can I watch?” or, “Can I get on the computer?”.

I mean, I dunno how to get it through to him that you don't need television to go to sleep. He watches it a little too much. I've been- me and his doctor ... been trying to figure out ways to get it to where he wouldn't want to watch it so much.

Theme 5: TV during mealtime depends on child and maternal factors

Two questions were posed to mothers that were specific to eating and watching TV. Mothers' decisions about whether or not TV would be allowed during dinner or while, eating reflected their perceptions of how TV affects their child's mealtime behaviors, and whether mothers believed that such TV use would facilitate or hinder mothers' goals for the meal. Two goals that were mentioned in relation to rules about TV use were to make sure the child eat their dinner and to ensure that conversation and dialog was fostered. For example, mothers who endorsed TV use during dinner explained that it helped with getting the child to sit and eat. For example:

If I don't let him watch TV while he's eating he'll like refuse to eat until I turn on the TV, so. If I turn on the TV he'll actually sit there and he'll eat. If I don't he's more willing to get up and run around.

He does it a lot [eat dinner and watch TV at the same time] and, and that's okay. I'll say to him if you eat dinner you can watch television so in order for him to eat I'll-I'll tell him you can watch television.

On the other hand, mothers who reported that they did not allow TV during dinner explained that TV use during dinner would distract their child from eating or make them eat slowly. Again, perceived individual differences in children's mealtime behaviors in response to TV played a role in decision-making. In addition, mothers for whom dinner time consisted of family interaction and bonding expressed disdain for TV during dinner time. Mothers saw TV as something that could prevent interaction with family members and should be turned off.

If I'm getting in the shower or I need to get things done I'll turn on the TV ... [later in the interview] we always sit at the table together as a family 'cause I feel like that's an important time to be together and talk about the day and have no distractions. There's no phones, no TV, nothing.

You can't even see the TV from my table and I do it on purpose. When I get to the point if I think they're trying to sneak around the corner, I'll turn the TV off 'cause it's not – that's not dinner time – you can't react or interact with everybody at the table. If they're watching TV they're not paying attention – so that never happens.

I don't let, like – the kids don't get to watch TV and eat at the same time, because nine times out of ten we're sitting together. We're eating. We're discussing things that, you know, maybe they've done at school today or what not. So, we're not looking at the television when we're eating.

TV is forbidden at dinner time. That's family time, to discuss the day. We don't watch TV and eat. I won't let it happen.

Discussion

Our aim in this study was to gain a rich understanding of the perspectives of low-income mothers regarding children's TV use and parental mediation of TV. Five themes emerged in our interviews with 296 low-income mothers of children ages 4–8 years old that shed light onto the experiences of TV use and parental mediation of TV in low-income households. These themes have implications for how clinicians can facilitate parental mediation in low-income families, as well as barriers that may need to be addressed to reduce screen use and improve health outcomes in low-income children.

Mothers exuded confidence in restrictive monitoring of TV content that was violent or inappropriate for children and selecting programming that was perceived as beneficial for their child. This is consistent with recent qualitative research describing Latino parents' beliefs about TV viewing (Beck, Takayama, Badiner, & Halpern-Felsher, 2015) and Mexican-origin mothers of young children (Thompson et al., 2015). Restricting exposure to violence was something that mothers valued highly and felt efficacious in their practice. This finding is positive, and suggests that low-income mothers in our sample draw on resources to guide aspects of their child's media exposure (especially violent content). Mothers identified many strategies for how they reduce their child's exposure to TV content and were proactive, overall, in this aspect of parental mediation. For the most part, mothers relied on their perceptions of whether the channel/content was child-appropriate (e.g., PBS Kids, Sprout, Cartoon Network, Discovery Channel, Disney Channel were described) in setting content restrictions. It may be that decision-making around content for these mothers is a way that they can invest in their child. It is known that poverty limits the resources and types of investments that parents can make to foster their child's development (Bradley & Corwyn, 2002). For low-income mothers, TV content may be a salient socializing influence on their child that they have efficacy around (or access to). Whereas children living in safer neighborhoods with access to social groups and extracurricular activities experience socialization in many avenues outside the home, low-income children may only have resources within the home as means of socialization.

Since content was important to these mothers, time allotted to viewing TV seemed less of an issue. As one of the mothers wondered, are screen time limits necessary if her child primarily watches educational programming? Although other research has found that mothers generally find content of TV more important than amount of TV viewing (e.g., Haines et al., 2013), our study adds to the literature by identifying perceptions of low-income mothers that may provide an explanation for this view. Investing around TV content was a source of pride and may be one way that mothers ensure their child is safe and is appropriately socialized. It may be that low-income mothers' decisions regarding TV content reflected prioritizing child exposure to appropriate material, over setting time limits. Indeed, setting rules about time limits seemed less imperative to these mothers except when TV viewing created problems in the child's functioning. In other words, mothers' decisions around TV time rules reflected consideration of the child's overall functioning and activities (e.g., child enjoyed playing outside or spending time with friends were reasons why TV time rules were not needed). Mothers identified needing or wanting to institute time limits when their child used TV excessively (e.g., child was unable to sleep without the TV and made frequent requests for use of TV or other screens throughout the day).

We did not hear mothers discuss active mediation, as responses about content restriction and social co-viewing were quite common. However, because we did not quantitatively assess it, or explicitly ask this in the interviews, we cannot say that active mediation did not occur in these families.

Another finding in our study that has implications for contextualizing the greater amount of screen time in low-income households was that social co-viewing was a source of positive emotional connection with children for mothers. Previous research has already identified that educational content is a perceived benefit or positive outcome expectation for mothers (e.g., De Decker et al., 2012; O'Connor, Chen, del Rio Rodriguez, & Hughes, 2014; del Rio Rodriguez, Hilmers, & O'Connor, 2013; Vaala, 2014); we also found that witnessing their child interact with TV and learn different facts was meaningful to mothers and evoked positive affect. Mothers of children in this age range also drew meaning and delight from children's choices in programs. For families with limited access to other resources or activities where they learn about their child's interests and passions, shared positive engagement in educational programming may be a benefit of screen use that these families find meaningful.

Finally, we found that mothers' decisions to allow TV during mealtime depended on how the child was affected by TV use during dinner time and whether that interfered with mothers' goals for mealtime. Mothers who had difficulty getting their child to sit still and eat dinner expressed using the TV as a reward for eating or to facilitate a child's consumption of food. On the other hand, mothers who felt their child would eat less with the TV on during dinner endorsed that as a rationale for no TV during dinner. For mothers who perceived that dinner time should be devoted to discussion, conversation, and positive interactions with children and other family members, TV was not permitted to be on. Taken together, mothers' rules about TV during mealtimes reflected consideration as to whether such use would facilitate or hinder parenting goals in that context.

Taken together, the themes that emerged in our analysis extend parental mediation theory and have implications for quantitative research in two distinct ways. By drawing from developmental theories on the impact of socio-economic disadvantage on child development (investment model and family process model), we gained insight into the perspectives of low-income mothers and how these may influence low-income mothers' mediation of TV. For the families in our study, TV viewing was recounted as positive, shared experience between mother and child. Questions posed about child TV viewing brought to mind prideful recollections of witnessing children learn something new or discover a passion. These experiences hint to why screen time may be greater in low-income families – they may provide an opportunity for economically disadvantaged families to relate and connect to one another, given the time and resource constraints they experience. Future research should empirically test whether these positive perceptions or the belief that educational programming is a way to “invest” in your child's development are greater in families with fewer resources in the home or in their communities.

A second implication for theory and future research was the role that both child characteristics and maternal mealtime goals played in permitting TV use during mealtime. Child factors (e.g., temperament, regulation) and parenting efficacy during the mealtime context are two potential predictors of parental mediation that could be examined in future quantitative research. As supported by research testing the family process model, parents experiencing financial hardship experienced lower parenting efficacy and more challenging child behaviors (Mistry et al., 2002). In our study, mothers reported using TV during mealtime if

it helped manage child behaviors and accomplish mealtime goals. Future research may explore whether socio-economic disadvantage predicts greater TV viewing in certain contexts (e.g., mealtime, bedtime) via lower parental efficacy to handle child behaviors in those specific contexts.

Limitations

There are aspects of the study design that are important to consider. First, this study was qualitative and no self-report data on amount of TV use or type of TV programming viewed was collected. Thus, themes reflect mothers' perceptions of parental mediation but cannot be directly compared to what they actually do or amount of child screen time. It is our hope, however, that the themes generated in this qualitative study will foster quantitative research that can empirically test mechanisms discussed and examine whether seemingly prevalent beliefs in this sample are common in larger samples of low-income families. Further, with our study design and sample characteristics (i.e., the majority of participants identified as non-Hispanic White), we were unable to examine racial/ethnic differences in these perceptions and practices. Future research could examine whether these perspectives are experienced by low-income mothers of different racial/ethnic backgrounds. Given that nearly half of the primary caregivers in this sample were single mothers, future research should also examine differences in parental mediation by family structure/make-up among low-income families. Another constraint of our study is that the sample consisted of a selected age range of children; thus, other maternal beliefs may arise with regard to younger children or adolescents in low-income families. We studied the four- to eight-year-old age range because it precedes a developmental period of marked increase in media use (i.e., children ages 8–12 years old average 4.5 h of screen media use per day; Rideout, 2015). Although mothers in this study were confident in managing the content of children's TV viewing in this age group and were aware of their child's favorite programs, this may change as children grow older.

Another limitation is that questions focused only on TV use, although mothers also brought up video games, computer time, and mobile phones in their responses. Future research should assess low-income mothers' beliefs about mobile devices, especially given the rise of tablet and other mobile device use by children from lower SES backgrounds (Kabali et al., 2015). Finally, it is important to note that this study was on the beliefs of low-income mothers, and not fathers or other (i.e., non-primary) caregivers. Prior research has demonstrated that fathers and mothers differ in their parental mediation of TV viewing (Valkenburg et al., 1999). Thus, perspectives of fathers may differ from the beliefs expressed by mothers in this study, and therefore is an important focus for future research.

Implications for intervention and conclusions

There are two main applications of the results that are particularly relevant to clinicians and researchers developing healthy media use interventions in low-income populations. It is important to emphasize, first, that the mothers in our study described already engaging in recommended parental mediation practices (i.e., content restrictions of violent programs), which challenges an assumption that low-income mothers experience problems with their children's media use. Rather, we heard more positive experiences with managing TV viewing

than negative experiences. When challenges were described by the mothers, it seemed to reflect more on specific child factors (i.e., challenging child behaviors or individual differences in child TV overuse) or situational stressors (e.g., mealtime and bedtime). It is in these areas where clinicians and interventionists can help low-income mothers in their child's TV viewing. First, mothers expressed concern and desired help when TV use became a problem for the child or the family. The examples given as indicators of excessive use include needing it to sleep, preoccupation with watching TV through persistent requests to use TV and other media, and lack of interest in other activities. Indeed, these behaviors have been previously considered as examples of "addictive" use in research on gaming and other screen media addiction (e.g., van den Eijnden, Lemmens, & Valkenburg, 2016; Lemmens, Valkenburg, & Gentile, 2015). Assessing mothers' perceptions of child TV or other media engagement may help clinicians identify the subset of children particularly at risk for excessive or "addictive" screen media use. These children may be the key demographic to focus on in media use interventions as they may be more at risk for the negative outcomes related to excessive screen time. Pediatricians and clinical psychologists may be able to identify children in most need of media use interventions by assessing for these characteristics (e.g., loss of interests in other activities, persistent requests to use TV or other media, sleep difficulties perceived to only be remedied by screen media use). No screening tools exist that identify children who could be at most risk for being excessively engaged in TV use, though recent measures have been developed for adolescents' problematic use of other media formats (e.g., van den Eijnden et al., 2016; Lemmens et al., 2015; Lister-Landman, Domoff, & Dubow, 2015). Future research should seek to fill this gap by developing and validating a screening tool for clinicians or researchers to use to identify children most at risk for showing signs of problematic (i.e., "addictive") use of screen media broadly.

Second, parenting support and skills during contexts salient to obesity prevention appear necessary, especially for mothers who use TV as a tool to help them attain certain goals (e.g., getting the child to eat). Depending on parenting efficacy and child characteristics, the TV could be a potentially useful parenting tool. Asking mothers to reduce or stop screen media use during challenging contexts (e.g., dinner or other family routines), will require something equally rewarding in order to replace the function that the TV is serving. Specifically, challenges around structuring dinner time and ensuring that the child eats enough dinner without the TV will have to be overcome for some low-income families to heed such obesity prevention advice. Promotion of parental mediation in low-income families may be enhanced by considering the perspectives and experiences described by low-income mothers in this study.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the National Institute of Child Health and Human Development (NICHD) [grant number F32HD085684], [grant number R01HD061356]; National Center for Advancing Translational Sciences (NCATS) [grant number 2UL1TR000433]; and an American Heart Association Post-doctoral fellowship to Dr. Pesch.

Notes on contributors

Sarah E. Domoff, PhD, is an assistant professor in the Department of Psychology at Central Michigan University. She is also a research faculty affiliate at the Center for Human Growth and Development at the University of Michigan. Domoff is a child clinical psychologist whose research focuses on precursors to parental mediation, childhood problematic media use, and the impact of mobile media on children's physical and psychosocial health.

Alison L. Miller, PhD, is an associate professor in the Department of Health Behavior and Health Education in the School of Public Health and associate research professor at the Center for Human Growth and Development, all at the University of Michigan. She is a developmental psychologist whose research focuses on bio-behavioral underpinnings of stress and self-regulation in young children as they relate to child health outcomes.

Neeaz Khalatbari is a behavioral therapist at the Manhattan Children's Center. She completed her undergraduate degree in Behavioral Science at Western Michigan University. She is hoping to pursue graduate training in behavioral analysis and developmental psychology.

Megan H. Pesch, MD, MS, is a post-doctoral fellow and pediatrician at the University of Michigan. She is a clinical fellow in developmental and behavioral pediatrics, whose research focuses on the impacts of parent-child interactions on children's risk for obesity.

Kristen Harrison, PhD, is a professor of Communication Studies and director of the Media Psychology Program at the Institute for Social Research, University of Michigan. She co-founded the STRONG Kids Program on early childhood obesity at the University of Illinois and now runs the Media and Healthy Development Lab at the University of Michigan. Her research focuses on family media habits and children's dietary intake, nutrition perceptions, body image, and obesity.

Katherine Rosenblum, PhD, is a clinical associate professor in the Department of Psychiatry at the Medical School and an associate research scientist at the Center for Human Growth and Development, all at the University of Michigan. She is a clinical and developmental psychologist whose research focuses on parenting and early childhood bio-behavioral health.

Julie C. Lumeng, MD, is a professor in the Department of Pediatrics at the Medical School, professor of Nutritional Sciences in the School of Public Health, and research professor at the Center for Human Growth and Development, all at the University of Michigan. She is a developmental and behavioral pediatrician whose research focuses on understanding the causes of childhood obesity from a developmental perspective.

References

- AAP Council on Communications and Media. (2016). Media and young minds. *Pediatrics*, 138, e20162591. doi:10.1542/peds.2016-2591
- Austin, E. W., Knaus, C., & Meneguelli, A. (1997). Who talks how to their kids about TV: A clarification of demographic correlates of parental mediation patterns. *Communication Research Reports*, 14, 418-430.
- Baird, J., Fisher, D., Lucas, P., Kleijnen, J., Roberts, H., & Law, C. (2005). Being big or growing fast: Systematic review of size and growth in infancy and later obesity. *British Medical Journal (BMJ)*, 331, 1-6.
- Beck, A. L., Takayama, J., Badiner, N., & Halpern-Felsher, B. (2015). Latino parents' beliefs about television viewing by Infants and Toddlers. *Journal of Health Care for the Poor and Underserved*, 26, 463-474.
- Beyens, I., & Eggermont, S. (2014). Putting young children in front of the television: Antecedents and outcomes of parents' use of television as a babysitter. *Communication Quarterly*, 62, 57-74. doi: 10.1080/01463373.2013.860904
- Boulos, R., Vikre, E. K., Oppenheimer, S., Chang, H., & Kanarek, R. B. (2012). ObesiTV: How television is influencing the obesity epidemic. *Physiology & Behavior*, 107, 146-153. doi:10.1016/j.physbeh.2012.05.022

- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53, 371–399. doi:[10.1146/annurev.psych.53.100901.135233](https://doi.org/10.1146/annurev.psych.53.100901.135233)
- Bradley, R. H., Corwyn, R. F., McAdoo, H. P., & Coll, C. G. (2001). The home environments of children in the United States part I: Variations by age, ethnicity, and poverty status. *Child Development*, 72, 1844–1867.
- Buijzen, M., & Valkenburg, P. M. (2005). Parental mediation of undesired advertising effects. *Journal of Broadcasting & Electronic Media*, 49, 153–165.
- Collier, K. M., Coyne, S. M., Rasmussen, E. E., Hawkins, A. J., Padilla-Walker, L. M., Erickson, S. E., & Memmott-Elison, M. K. (2016). Does parental mediation of media influence child outcomes? A meta-analysis on media time, aggression, substance use, and sexual behavior. *Developmental Psychology*, 52, 798–812. doi:[10.1037/dev0000108](https://doi.org/10.1037/dev0000108)
- Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., & Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, 38, 179.
- Coon, K. A., Goldberg, J., Rogers, B. L., & Tucker, K. L. (2001). Relationships between use of television during meals and children's food consumption patterns. *Pediatrics*, 107, e7–e7. doi:[10.1542/peds.107.1.e7](https://doi.org/10.1542/peds.107.1.e7)
- Cunningham, S. A., Kramer, M. R., & Narayan, K. M. V. (2014). Incidence of childhood obesity in the United States. *New England Journal of Medicine*, 370, 403–411. doi:[10.1056/NEJMoa1309753](https://doi.org/10.1056/NEJMoa1309753)
- Davison, K. K., Marshall, S. J., & Birch, L. L. (2006). Cross-sectional and longitudinal associations between TV viewing and girls' body mass index, overweight status, and percentage of body fat. *The Journal of Pediatrics*, 149, 32–37. doi:[10.1016/j.jpeds.2006.02.003](https://doi.org/10.1016/j.jpeds.2006.02.003)
- De Decker, E., De Craemer, M., De Bourdeaudhuij, I., Wijndaele, K., Duvinage, K., Koletzko, B., & Cardon, G. (2012). Influencing factors of screen time in preschool children: An exploration of parents' perceptions through focus groups in six European countries. *Obesity Reviews*, 13(Suppl 1), 75–84. doi:[10.1111/j.1467-789X.2011.00961.x](https://doi.org/10.1111/j.1467-789X.2011.00961.x)
- De Jong, E., Visscher, T., Hirasing, R., Heymans, M., Seidell, J., & Renders, C. (2011). Association between TV viewing, computer use and overweight, determinants and competing activities of screen time in 4-to 13-year-old children. *International Journal of obesity*, 37, 47–53.
- Dietz, W. H., & Gortmaker, S. L. (1985). Do we fatten our children at the television set? Obesity and television viewing in children and adolescents. *Pediatrics*, 75, 807–812.
- van den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The social media disorder scale. *Computers in Human Behavior*, 61, 478–487.
- Elder, Jr., G. H., Eccles, J. S., Ardelt, M., & Lord, S. (1995). Inner-city parents under economic pressure: Perspectives on the strategies of parenting. *Journal of Marriage and the Family*, 57, 771–784.
- El-Sheikh, M., Bagley, E. J., Keiley, M., Elmore-Staton, L., Chen, E., & Buckhalt, J. A. (2013). Economic adversity and children's sleep problems: Multiple indicators and moderation of effects. *Health Psychology*, 32, 849–859. doi:[10.1037/a0030413](https://doi.org/10.1037/a0030413)
- Gentile, D. A., Nathanson, A. I., Rasmussen, E. E., Reimer, R. A., & Walsh, D. A. (2012). Do you see what I see? Parent and child reports of parental monitoring of media. *Family Relations*, 61, 470–487. doi:[10.1111/j.1741-3729.2012.00709.x](https://doi.org/10.1111/j.1741-3729.2012.00709.x)
- Gentile, D. A., & Walsh, D. A. (2002). A normative study of family media habits. *Journal of Applied Developmental Psychology*, 23, 157–178.
- Glaser, B., & Strauss, A. (1967). *The discovery grounded theory: Strategies for qualitative inquiry*. Chicago, IL: Aldin.
- Goulding, A. N., Lumeng, J. C., Rosenblum, K. L., Chen, Y.-P., Kaciroti, N., & Miller, A. L. (2015). Maternal feeding goals described by low-income mothers. *Journal of Nutrition Education and Behavior*, 47(331–337), e1.
- Haines, J., O'Brien, A., McDonald, J., Goldman, R. E., Evans-Schmidt, M., Price, S., ... Taveras, E. M. (2013). Television viewing and televisions in bedrooms: Perceptions of racial/ethnic minority parents of young children. *Journal of Child and Family Studies*, 22, 749–756.
- Harrison, K., & Liechty, J. M. (2012). US preschoolers' media exposure and dietary habits: The primacy of television and the limits of parental mediation. *Journal of Children and Media*, 6, 18–36. doi:[10.1080/17482798.2011.633402](https://doi.org/10.1080/17482798.2011.633402)

- Hayman, Jr., L. W., Lee, H. J., Miller, A. L., & Lumeng, J. C. (2014). Low-income women's conceptualizations of emotional- and stress-eating. *Appetite*, 83, 269–276.
- Hingle, M., & Kunkel, D. (2012). Childhood obesity and the media. *Pediatric Clinics of North America*, 59, 677–692, ix. doi: [10.1016/j.pcl.2012.03.021](https://doi.org/10.1016/j.pcl.2012.03.021)
- Jago, R., Baranowski, T., Baranowski, J. C., Thompson, D., & Greaves, K. A. (2005). BMI from 3–6 y of age is predicted by TV viewing and physical activity, not diet. *International Journal of Obesity*, 29, 557–564. doi: [10.1038/sj.ijo.0802969](https://doi.org/10.1038/sj.ijo.0802969)
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, 25, 341–363. doi: [10.1016/j.cpr.2004.12.004](https://doi.org/10.1016/j.cpr.2004.12.004)
- Jordan, A. (2004). The role of media in children's development. *Journal of Developmental & Behavioral Pediatrics*, 25, 196–206.
- Kabali, H. K., Irigoyen, M. M., Nunez-Davis, R., Budacki, J. G., Mohanty, S. H., Leister, K. P., & Bonner, Jr., R. L. (2015). Exposure and use of mobile media devices by young children. *Pediatrics*, 136, 1044–1050. doi: [10.1542/peds.2015-2151](https://doi.org/10.1542/peds.2015-2151)
- Kalil, A. (2013). Effects of the great recession on child development. *The ANNALS of the American Academy of Political and Social Science*, 650, 232–250. doi: [10.1177/0002716213500453](https://doi.org/10.1177/0002716213500453)
- Lemmens, J. S., Valkenburg, P. M., & Gentile, D. A. (2015). The internet gaming disorder scale. *Psychological Assessment*, 27, 567–582. doi: [10.1037/pas0000062](https://doi.org/10.1037/pas0000062)
- Lister-Landman, K. M., Domoff, S. E., & Dubow, E. F. (2015). The role of compulsive texting in adolescents' academic functioning. *Psychology of Popular Media Culture*. Advance online publication. doi: [10.1037/ppm0000100](https://doi.org/10.1037/ppm0000100)
- Lumeng, J. C., & Burke, L. M. (2006). Maternal prompts to eat, child compliance, and mother and child weight status. *The Journal of Pediatrics*, 149, 330–335. e331.
- Mistry, R. S., Vandewater, E. A., Huston, A. C., & McLoyd, V. C. (2002). Economic well-being and children's social adjustment: The role of family process in an ethnically diverse low-income sample. *Child Development*, 73, 935–951.
- Nathanson, A. I. (1999). Identifying and explaining the relationship between parental mediation and children's aggression. *Communication Research*, 26, 124–143.
- Nathanson, A. I. (2001). Chapter 4: Mediation of children's television viewing: Working toward conceptual clarity and common understanding. *Communication Yearbook*, 25, 115–151.
- Nathanson, A. I. (2015). Media and the family: Reflections and future directions. *Journal of Children and Media*, 9, 133–139.
- Nathanson, A. I., Eveland, Jr., W. P., Park, H.-S., & Paul, B. (2002). Perceived media influence and efficacy as predictors of caregivers' protective behaviors. *Journal of Broadcasting & Electronic Media*, 46, 385–410. doi: [10.1207/s15506878jobem4603_5](https://doi.org/10.1207/s15506878jobem4603_5)
- Nikken, P., & Schols, M. (2015). How and why parents guide the media use of young children. *Journal of Child and Family Studies*, 24, 3423–3435.
- Njoroge, W. M., Elenbaas, L. M., Garrison, M. M., Myaing, M., & Christakis, D. A. (2013). Parental cultural attitudes and beliefs regarding young children and television. *JAMA Pediatrics*, 167, 739–745. doi: [10.1001/jamapediatrics.2013.75](https://doi.org/10.1001/jamapediatrics.2013.75)
- O'Connor, T. M., Chen, T. A., del Rio Rodriguez, B., & Hughes, S. O. (2014). Psychometric validity of the parent's outcome expectations for children's television viewing (POETV) scale. *BMC Public Health*, 14, 894. doi: [10.1186/1471-2458-14-894](https://doi.org/10.1186/1471-2458-14-894)
- Rideout, V. (2013). *Zero to eight children's media use in America*. Common Sense Media.
- Rideout, V. (2015). *The common sense census: Media use by tweens and teens*. San Francisco, CA: Common Sense Media.
- del Rio Rodriguez, B., Hilmers, A., & O'Connor, T. M. (2013). Hispanic parents of overweight and obese children and their outcome expectations for children's television viewing: A qualitative study. *Journal of Nutrition Education and Behavior*, 45, 718–722. doi: [10.1016/j.jneb.2013.04.263](https://doi.org/10.1016/j.jneb.2013.04.263)
- Roberts, D. F., Foehr, U. G., Rideout, V., & Brodie, M. (1999). *Kids and media at the new millennium: The Henry J. Kaiser Family Foundation*.
- Strasburger, V. C. (2011). Children, adolescents, obesity, and the media. *Pediatrics*, 128, 201–208. doi: [10.1542/peds.2011-1066](https://doi.org/10.1542/peds.2011-1066)

- Thompson, D. A., Polk, S., Cheah, C. S. L., Vandewater, E. A., Johnson, S. L., Chrismer, M. C., & Tschann, J. M. (2015). Maternal beliefs and parenting practices regarding their preschool child's television viewing. *Clinical Pediatrics*, 54, 862–870. doi:10.1177/0009922815574074
- US Department of Health and Human Services. (2014). *Annual update of the HHS poverty guidelines* (Document No. 2014-01303). Retrieved from <https://federalregister.gov/a/2014-01303>
- Vaala, S. E. (2014). The nature and predictive value of mothers' beliefs regarding Infants' and Toddlers' TV/Video viewing: Applying the integrative model of behavioral prediction. *Media Psychology*, 17, 282–310. doi:10.1080/15213269.2013.872995
- Valkenburg, P. M., Krcmar, M., Peeters, A. L., & Marseille, N. M. (1999). Developing a scale to assess three styles of television mediation: "Instructive mediation," "restrictive mediation," and "social coviewing". *Journal of Broadcasting & Electronic Media*, 43, 52–66.
- Vandewater, E. A., Park, S.-E., Huang, X., & Wartella, E. A. (2005). "No–You Can't Watch That": Parental rules and young children's media use. *American Behavioral Scientist*, 48, 608–623.
- Wang, Y., & Beydoun, M. A. (2007). The obesity epidemic in the United States gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta-regression analysis. *Epidemiologic Reviews*, 29, 6–28.
- Warren, R. (2001). In words and deeds: Parental involvement and mediation of children's television viewing. *Journal of Family Communication*, 1, 211–231.
- Warren, R. (2005). Parental mediation of children's television viewing in low-income families. *Journal of Communication*, 55, 847–863.
- Yeung, W. J., Linver, M. R., & Brooks-Gunn, J. (2002). How money matters for young children's development: Parental investment and family processes. *Child Development*, 73, 1861–1879.