CHAPTER 16

How Parents Mediate Children's Media Consumption

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In 2016, one would expect to find a typical child in the United States spending many hours a day consuming a variety of media content through interactive technology, both in formal and informal learning environments (Common Sense Media & VJR Consulting, 2015). The rapid adoption of media by "digital natives" and the ubiquity of devices within family life seem to have exacerbated the anxieties of modern parenting (Uhls, 2015). In the early days of the Internet, parents worried about sexual predators and "stranger danger," while more recently, many express concerns over the addictive allure of devices (Felt & Robb, 2016; Livingstone & Blum-Ross, 2016). Traditionally, the introduction of a new medium (e.g., the romantic novel, the radio, the computer) has brought on a host of worries on the part of adults who look to understand its influence on healthy development; the current anxieties about digital media may be part of that oft-repeated pattern (Brooks-Gunn & Donahue, 2008). Adults who are unfamiliar with the technology often feel overwhelmed, and with media headlines highlighting all of the dangers, some envision the rare worst-case scenario (Uhls, 2015). This kind of fear can impact parents' ability to provide guidance in an important environment with the potential for positive and negative cognitive learning. Yet, one of the recurring themes in research on media effects is the importance of parents in children's media experience (Alexander, 2008).

Despite concerns about the negative influences of new media, parents also express confidence that the net impact of digital media is positive, in particular when associated with education, learning and career potential, and accordingly want to learn how to guide their families on best media practice and use (Lauricella, Cingel, Beaudoin-Ryan, Robb, & Wartella,

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2016; Romer, Bagdasarov, & More, 2013). According to a recent Common Sense Census, 94% of parents believe that technology supports their children with schoolwork and education (Lauricella et al., 2016). In addition, an increasing body of social science research finds cognitive benefits associated with use of interactive technologies, such as playing video games, which include improved spatial learning, self-regulation, and information processing (Brown & Bobkowski, 2011; Powers, Brooks, Aldrich, Palladino, & Alfieri, 2013). Thus, it is crucial to help parents determine mediation strategies that minimize the risks and maximize the benefits of their children's engagement with media. Parental mediation is important to understand because mediation can impact what media a child is exposed to and how they use the technology (Gentile, Nathanson, Rasmussen, Reimer, & Walsh, 2012). Parental mediation often results in less screen time and selection of higher quality content, in line with recommendations made by trusted family resources, such as Common Sense Media and the American Academy of Pediatrics (2016). In addition, consistent exposure to high-quality content can promote learning (Cantlon & Li, 2013; Morrow, 2005).

Decades of research on parenting can inform the study of helping children to safely, productively, and proactively use media. Moreover, much of the literature on parenting practices that are correlated with optimal development also applies to the digital realm (Jago, Edwards, Urbanski, & Sebire, 2013). In the last few years, researchers have turned their attention to parenting practices with newer media and now know much more about how parents mediate their children's use of media.

This chapter examines the extant literature on parental mediation of their 0- to 18-year-old children's media use. Much of this literature is concerned about positive or negative effects on cognitive development and how parents may influence their children's cognitive development through active and restrictive mediation strategies. Our focus is on newer interactive technologies such as the Internet, social media, and videogames, as informed by the literature on television viewing and parenting practices, as this body of work often applies to newer media and family dynamics. Moreover, children still consume more television content than any other content (Common Sense Media & VJR Consulting, 2015), albeit on a variety of devices rather than a fixed television set in one room (Uhls, 2015). Thus, the literature on parental mediation of children's television use is relevant; for example, decades of research on the TV show *Sesame Street* found that when parents choose content to promote learning the effect was substantial (Cantlon & Li, 2013; Sammond, 2007).

PARENTAL MEDIATION STRATEGIES

Parents turn to a variety of mediation strategies when scaffolding their children's use of interactive technologies. Thus, parents may monitor their children by checking which websites they visit, checking their social media profiles, limiting their time using media, checking their text messages on phones, and using filtering software on home computers (Anderson, 2016; Jago et al., 2013). Some parents rely heavily on specific types of mediation strategies each with their own suite of cognitive outcomes (Brown, Halpern, & L'Engle, 2005; Collier et al., 2016; Samuel, 2015). However, parents who spend time getting involved with their children's media usage often use several different types of mediation strategies depending on the context and age of the child. We describe these below.

Restrictive Mediation

This method of parental mediation relies on restricting a child's access to media content and/or interactive technology. This can manifest itself through installing Internet filters, setting time limits, restricting access to mobile devices, and controlling content choices. This strategy has also been called cocooning, monitoring, and rule setting, and parents who use this strategy have been referred to as limiters (Livingstone & Blum-Ross, 2016; Samuel, 2015; Valcke, Bonte, De Wever, & Rots, 2010). Research finds that restrictive mediation tends to be used more when children are younger, usually before preadolescence when it may in fact be the most effective strategy (Davies & Gentile, 2012; Top, 2016). However, as children age, the strategy is not as effective given that adolescents begin to desire autonomy and become more interested in peers, thus wishing to make their own decisions concerning media and using it to connect with friends. Teens themselves report that this strategy is not useful and believe that trust is a better strategy in the family (Vaterlaus, Beckert, Tulane, & Bird, 2014).

Restrictive mediation can in fact backfire during adolescence leading to behavior that is not sanctioned by adults. For example, a recent study found that restrictive mediation of middle and older children's playing of video games was associated with higher levels of child delinquency (Martins, Mathews, & Ratan, 2015). A meta-analysis found this strategy to be associated with higher levels of child aggression (Collier et al., 2016). Interestingly enough, the same meta-analysis also found a relationship between restrictive

mediation and sexual outcomes, such that children whose parents relied on this strategy engaged in less sexual activity and at later ages. By contrast, a longitudinal study found that restrictive mediation at time one was the only strategy related to more sexual experience at time two (Nikken & Graaf, 2012). This same study found that communicating about sex with friends or parents was a better predictor of sexual activity than parental mediation. As this research indicates, the effects of using restrictive mediation with teenagers may differ by individual and are likely to be context specific.

Context Versus Activity Constraints

Hiniker, Schoenebeck, and Kientz (2016) surveyed 249 parent-child (ages 10–17) dyads from 40 states to examine the types of rules within restrictive mediation, which they characterized as context versus activity constraints. The researchers asked an open-ended question to children that queried them on their home rules. This resulted in a list of 455 reported rules, which were then categorized into context and activity rules, with each representing nearly 50% of the total. Context rules restricted technology use as a whole, while activity rules banned certain kinds of content such as violent video games. The researchers found that both parents and children found context rules (e.g., no phones at the dinner table) more difficult to enforce than activity rules (e.g., no using Instagram). Children reported that they found it easier to follow rules about what to post and to watch than to not use their devices, highlighting the consuming nature of these interactive technologies. This finding lends support to parents getting involved in guiding their children's content choices, which in turn will affect their technology use for activities that promote cognitive learning (Ito et al., 2009).

PERMISSIVE MEDIATION

Much like the laissez-faire parenting strategy in the parenting styles literature, parents who use this mediation strategy do nothing to monitor their children's media use. This type of strategy has also been called nonintervention, and parents who adopt this strategy have been referred to as enablers (Samuel, 2015). One large study of North American families found that while a third of parents of young children adopted this approach, when their children reached adolescence, nearly half the sample of parents allowed them to set the family's technology agenda. This approach is frequently associated with children spending the most time consuming media (Samuel, 2015; Valcke et al., 2010). Researchers also have shown that when teens report

on parental mediation, the majority of them report permissive mediation as the strategy their parents use most (Vaterlaus et al., 2014).

Active Mediation

Parents who rely on active mediation work to participate in their children's media experience through discussion and conversation, thus supporting cognitive learning, both academic and social. For example, parents who actively mediate their children's media consumption will engage in open communication and discuss the content; this kind of mediation can develop a child's critical thinking skills vis-à-vis the content (Davies & Gentile, 2012; Rasmussen et al., 2016). Other names for this form of mediation include "media mentor" and instructive mediation (Samuel, 2015). Teens report that active mediation means asking questions and letting them talk about their media use (Vaterlaus et al., 2014).

This kind of mediation is generally found to be most effective for teaching children to be responsible consumers of media (Top, 2016). In fact, Collier et al. (2016) found that when parents talked to their children about violent TV, they later developed negative attitudes toward these kinds of programs. Active mediation of media content has also been associated with lower hours of video gaming (Mendoza, 2009; Smith, Gradisar, & King, 2015) and lower levels of aggression and substance abuse. Additionally, as with restrictive mediation, active mediation predicted later and fewer sexual outcomes for children and teens (Collier et al., 2016). A variety of measures have been used to measure mediation, with few attempts to understand the reliability or validity of the measures being used. As Jago et al. (2013) point out, interpreting the associations between parenting media practices and screen-viewing time is difficult without this knowledge. Interventions could be better targeted with increased understanding of which practices are related to positive or negative outcomes (limiting time, limiting content, co-viewing), and how those practices can best be applied with children at different ages in multiple contexts. The rise of smartphones, tablets, and video games, for example, further compromises the application of these practices.

Subcategories of Active Mediation: Positive, Negative, and Neutral

Recently, researchers have begun to tease apart active mediation to better examine its efficacy (Collier et al., 2016; Martins et al., 2015). Three subcategories have been identified: positive, negative, and neutral. Positive active mediation refers to messages that are complimentary about the media, negative refers to condemning the content, and neutral is neither positive nor negative with regard to evaluation of the content. Limited research

has addressed these subcategories, but one recent study found an association between child delinquency and parents' use of negative mediation of video game play (Martins et al., 2015).

CHILD AND TEEN PERCEPTIONS OF PARENTAL MEDIATION

A robust finding is that parent and adolescent perception of parental mediation often varies, with teens' perceptions differing from parents, such that teens have reported fewer rules than adults (Gentile et al., 2012). Vaterlaus et al. (2014) interviewed 80 adolescents, aged 16–18 years, and their parents, to further examine this finding. As with other larger samples, they found that 76% of the teens reported that their parents did not mediate their Internet use; only 45% of parents reported as such. The authors examined how parents monitored their teens' cell phone and Internet use and found methods such as checking use summaries and content on the devices, as well as engaging in discussion about usage.

In other cultures, researchers found similar results. For example, in a study across eight cultural contexts, teens in Europe perceived that their parents paid no attention to what they did on the Internet (Martínez de Morentin, Cortés, Medrano, & Apodaca, 2014). Here, teens were asked what they considered was the most effective means of mediation. Surprisingly, the largest number (33%) advocated for monitoring content and usage. The next largest group (26%) suggested active participation and open communication. A further 18% suggested rule setting and 15% indicated that restrictions would be most effective. Similarly, other studies have reported differences in parent and teen perceptions. For example, Smith et al. (2015) examined parental influences on video game play and found that while 74% parents reported that they talked to their teens about cyber-safety, 64% of teens said their parents allowed gaming in the bedroom, and 75% of teens reported that their parents rarely or never limited the online content they accessed.

ROLE MODELING MEDIA BEHAVIOR

Role modeling is a critical component of parenting. A robust finding in the TV effects literature (Wisniewski, Jia, Xu, Rosson, & Carroll, 2015) is that a child's TV viewing is highly correlated with their parents' viewing (Bleakley, Jordan, & Hennessy, 2013). More research is needed to reveal whether this pattern is likely to hold with digital media and interactive technologies. Moreover, children, particularly younger ones, are sensitive to

when parents spend time looking at their phones rather than giving them their attention (Highlights Magazine, 2014; Uhls, 2015). Thus, parents and adults who teach children would be wise to examine their own media behavior before deciding on rules for their children.

One salient example is that parents often want their children to exercise caution about posting photos online despite their own posting of photos of their children online. Hiniker et al. (2016) recently found that children were frustrated by this parental practice with 18% of children reporting that "oversharing" photos of children without asking was inappropriate behavior. Further, only 17% of the participants believed that parents should not be held to similar rules and expectations as they expected for their offspring.

AGE DIFFERENCES IN PARENTAL MEDIATION

Nearly every study that looks at age as a moderator finds that parental mediation varies by age. As a child develops socially, emotionally, and cognitively, it is natural that parental mediation will also develop. Specifically, parents of younger children tend to co-view and use restrictive mediation while parents of older teens either stop mediating all together (i.e., laissez-faire) or continue to use instructive mediation if that was a part of their strategy when their children were younger.

Parental Mediation of Children

How parents communicate with their young children around media can greatly influence what messages they internalize, what they learn, and what they retain. Even the American Academy of Pediatrics has pointed to the importance of parental involvement in their policy statement on media, recommending that parents monitor their children's media use and consider that use with their children as a way of talking about family values (American Academy of Pediatrics, 2016). Decades of research on children's television watching speak to one aspect of active mediation called co-viewing, the act of watching television and video content with children.

Co-viewing is not a monolithic act—there is substantial variation in when and how parents choose to co-view with their children, ranging from very high to very low levels of involvement. For example, some parents may be present with their children while watching a TV show, but not engaging or talking with them. Other parents may be highly involved, trying to be sensitive to children's developmental level and needs when talking about what their children are seeing or hearing. For example, they might choose to label on-screen objects (Krcmar, Grela, & Lin, 2007), encourage their children to

imitate what they see (such as singing a song or dancing), or ask questions after a show is over. Even low levels of co-viewing can have positive benefits. For example, researchers have shown that cueing children to think of a media experience as educational, instead of merely entertainment, can lead to learning outcomes (Salomon, 1984). Not all co-viewing behaviors are equal, and parents can engage in different levels of co-viewing at different times.

The value of co-viewing has been demonstrated in several studies. Many of the earliest involved studies of *Sesame Street* found that children often understood program content more when watching with adults (for a review of research on the role of parents and caregivers in supporting learning from *Sesame Street*, see Sammond, 2007). For example, Rice, Huston, Truglio, & Wright (1990) found that children learned letters and numbers better when parents watched the program with them and asked the children to repeat them while viewing. While getting children to repeat content out loud can be effective for learning, just having a parent say the letters and numbers is not as effective (Reiser, Tessmer, & Phelps, 1984; Reiser, Williamson, & Suzuki, 1988).

Researchers have also demonstrated the effectiveness of active mediation on social and emotional outcomes. In Rasmussen et al.'s, 2016 study, 127 2- to 6-year-olds and their parents were randomly assigned to watch or not watch 10 episodes of the animated program *Daniel Tiger's Neighborhood,* a show designed to teach socio-emotional skills. Parents were randomly assigned to one of three treatment conditions or to a control group. In the first group, parents were instructed to watch each episode with their child and talk about the show as much as possible over the following 2 weeks (active mediation). In a second group, parents watched each episode with their child but did not discuss the episodes with their child. In the third group, children watched the show without parents present and parents were instructed not to talk about the show. Children in the control group watched a different show, and parents were not given instructions about interacting with their child. Findings showed that watching the program was associated with high levels of empathy but only when children received frequent active mediation.

Similarly, a study of 3-year-old children suggested that adapting dialogic reading techniques for television viewing could have positive effects on story comprehension and vocabulary (Strouse, O'Doherty, & Troseth, 2013). Pausing, asking questions, and encouraging children to tell parts of the story they were viewing were effective in producing learning gains, while pausing to comment but not asking questions to children was less effective. Interestingly, using an onscreen actress to engage in dialogic questioning was

also effective (though less so than having a live parent do the questioning), indicating the potential impact of using nonlive characters in mediating content.

Mediating behaviors also can be effective in directing attention among infants. A study of 12- to 21-month-old children and their parents found that parents were able to guide their child's focus to a television by looking at the screen themselves and by talking to their children to direct their attention to the screen (Demers, Hanson, Kirkorian, Pempek, & Anderson, 2013). Parental looking behaviors also seemed to alert infants to content that would be relevant or comprehensible to them. Further findings show that scaffolding in the form of questions, labeling, or providing descriptions is an effective means of orienting infant attention and responsiveness to television (Barr, Zack, Garcia, & Muentener, 2008).

One interesting way of facilitating active co-viewing is using onscreen prompts to assist parents. A study of 59 parent-child dyads with children aged 3 to 5 years found that parents who viewed enhanced text prompts embedded within a children's show engaged in more educationally valuable interactions with their children as compared to parents viewing a show without on-screen text prompts (Fisch et al., 2008). Parents were more likely to talk about characters' emotions, encourage children to participate in the show, and connect onscreen events to children's lives. Thus, parents were the mechanism for learning, but only when prompts modeled specific comments or behaviors. A separate group of parents who saw prompts with general parenting advice and jokes did not interact with their children in ways that contributed to story comprehension or language development. Again, these findings suggest the potential of using nonlive characters to encourage or enable mediating behaviors (in this case, only text was necessary absent an actual character).

Beyond co-viewing, parents can influence their children's viewing experiences through their monitoring practices. Monitoring can take many forms, including co-use, setting time limits, setting rules around types of content, and active mediation. Parents and children do not always agree on the extent of monitoring that occurs within a household. For example, one study of parental monitoring of television and video games found that parents of third, fourth, and fifth grade children reported more monitoring (of all kinds) than their children, with the exception of playing video games, where parents reported significantly less co-play (Gentile et al., 2012). Further, girls were monitored more closely than boys, perhaps indicating parental gender stereotyping. Parental monitoring also declined with age, as parents may have believed that they had less control of their children's media experiences as they got older and scaled back their monitoring.

With respect to interactive products, joint media engagement expands the definition of co-viewing to describe the experiences of people using media together and includes co-viewing, playing, reading, creating, and other forms of interactions around media (Takeuchi & Stevens, 2011). However, new media present special challenges for parents trying to mediate technology and media experiences (Livingstone & Helsper, 2008). Televisions may be conducive to parents who want to be able to monitor their children's media from a distance because of their larger size and louder volume. A parent can more easily glance at a TV screen from within the same room, or keep tabs on it by monitoring the audio when out of the room, and decide if and when to actively mediate. However, smartphones, tablets, and other mobile devices prove more difficult because screens are smaller, and because they are more portable and can move to new environments. Thus, it is more difficult for a parent to monitor or mediate their child's game, video, or other media when that child is holding a five-inch screen or taking it into the backseat of the car. Parental mediation of Internet use is of special concern because of children's difficulty in understanding what can be accessed on it. In a study of Australian 5- to 8-year-olds, children were unable to employ Internet safety behaviors because they were unable to recognize potential dangers (Ey & Cupit, 2011).

Parental Mediation of Adolescents

As children reach later childhood and transition from their parents being the primary agents of socialization to their peers, media become more important and are sometimes called a super-peer (Brown et al., 2005). For many families, children's ability to own and control their own mobile devices has increased the stress placed on the parents. The myriad of choices of interactive technology and devices befuddles many adults, who did not grow up with these kinds of choices. Parents express the most confusion about how to best mediate this age group with frequent questions such as "When should I get them a phone?" and "When should I allow my child on social media?" and "How much time should I allow my child to play video games?" (Uhls, 2015). Parental mediation can be fraught with conflict between the child and the adult.

As children reach their teenage years and push for autonomy, parental mediation of media usually becomes less frequent (Collier et al., 2016). During these years, some theorists suggest that children self-socialize with their media content because they make their own choices about what to watch

(Arnett, 1995; Martins et al., 2015). Thus, active mediation in earlier years, which helps guide children to process and think critically about their content choices, becomes all the more important. Interactive technology connects teenagers with their peers, and mobile devices allow them to do so more easily without the oversight of parents. While some parents attempt to continue mediating media usage, many parents become less active in doing so as children reach adolescence. However, parents of younger teens aged 13–14 tend to use parental controls more often and check web history. In addition, parents of younger teens report having frequent conversations about acceptable online and media content. Roughly a third of parents know their children's password to a social media account. Many parents report talking to their children about their online behavior and about what they share digitally (Anderson, 2016).

Studies find that during adolescence, the choice of mediation strategy correlates with a variety of behaviors, including sexual activity, delinquency, and online sharing of content. For example, researchers found that the consumption of sexual media was positively related to sexual behavior (American Psychological Association, 2010; Brown et al., 2005). Counterintuitively, a longitudinal study that examined this relationship found that Dutch parents who were more restrictive with their daughters' media use at time one were more sexually experienced at time two. Further, no mediation strategy was related to a decrease in sexual experience and less permissive attitudes toward sex (Nikken & Graaf, 2012). The authors speculated that the idiosyncratic nature of the Dutch culture might have contributed to this finding. Martins et al. (2015) found that when parents were still using mediation during adolescence, they tended to use more negative mediation. Moreover, she and her colleagues found that when parents used negative mediation, their middle-aged and older children were more likely to rebel or engage in delinquency.

One important concern for adolescents, and for anyone who uses the Internet, is privacy behaviors. Researchers from Penn State found that direct parental intervention, similar to restrictive mediation, had no relationship to sensitive information disclosures but was positively associated with advice seeking (Wisniewski et al., 2015). In contrast, active meditation was associated with more sensitive online disclosures. Moreover, the teens whose parents actively mediated took more corrective measures on their own when they made a mistake, such as posting sensitive information online, while those whose parents intervened were not proactive in seeking solutions by themselves. The researchers concluded that teens whose parents

intervened too frequently were losing valuable learning opportunities to practice autonomy and problem solving, key components of executive functioning (Wisniewski et al., 2015). Other researchers also find that heavy restriction on media use leads to fewer opportunities for learning and engagement (Livingstone & Blum-Ross, 2016).

OTHER MODERATORS OF PARENTAL MEDIATION

Gender Differences

The literature on how gender affects parental mediation strategies is mixed. For example, parents tend to mediate how girls use media more than boys, in particular when it comes to video game exposure (Nikken & Graaf, 2012; Nikken & Jansz, 2006). However, other studies have yielded no gender differences in parental mediation (Connell, Lauricella, & Wartella, 2015), or have shown, for video game play, that parents used more negative mediation with sons than daughters (Martins et al., 2015).

Ethnicity and Culture

One study measured ethnicity and parental monitoring to determine if different groups, such as White, African-American, Hispanic and Asian, exhibited varied strategies. The researchers found that Asian parents limited the time their children spent with TV and video games the most. In addition, Hispanic families limited their children the least (Connell et al., 2015).

Culture can deeply affect a variety of attitudes and behaviors (Greenfield, 2009), and researchers have begun to examine how parental mediation of digital media differs across cultures. A 2013 study queried 1238 adolescents between the ages of 14 to 19 and their parents in eight different cultural contexts (i.e., Spain—three cities, Ireland, Mexico, Dominican Republic, Bolivia, and Chile). The findings showed that parents reported three different parenting styles: co-viewing, instructive, and restrictive. Teens, however, reported an additional parenting style called inhibitive (which refers to not doing anything), which teens reported as the most frequent form of parental mediation (Martínez de Morentin et al., 2014). Few differences were found in parental report of mediation by country, with both teens and adults reporting that the restrictive style was the most frequent. Teens in Bolivia, however, reported that their parents used the instructive style most frequently. Parents in Ireland were most often reported to use inhibited mediation with nearly 63% of teens reporting this parental style. In Aragon, Spain, parents reported using the restrictive style more than other cities, and the Dominican Republic

parents reported they used co-viewing the most. Interestingly enough, the researchers found that the greater the level of parental mediation, the more adolescents reported using the Internet to search for information. The researchers also examined how teens in these different contexts used the Internet. In six of the cities, teens used the Internet most to communicate and least to shop; in two countries, Bolivia and the Dominican Republic, the Internet was used mostly by adolescents for looking up information.

Gender of Parents

A nationally representative survey of over 2300 parents of children aged 0–8 years provides insight into demographic differences in joint media engagement behaviors (Connell et al., 2015). Mothers tended to spend more time co-using media with their children, likely because they spent more time with children overall than fathers. However, while mothers were more likely to read books with children, fathers were more likely to play video games with children, and co-use computers and smartphones. Parents' age and education level also influenced mediation behavior as younger parents and/or parents with a high school education or less were more likely to co-play video games. Co-use of media was higher in families with younger children and decreased as they got older, perhaps because older children were perceived as able to handle technology more independently.

PARENTAL MEDIATION OF MEDIA LITERACY

Media literacy skills are defined as the abilities to access, analyze, evaluate, create, and act using all forms of communication (National Association for Media Literacy Education, 2010). Traditionally, the teaching of these skills was relegated to the K-12 classroom, but more recently, some scholars have noted that parental involvement in their children's media consumption can greatly contribute to their developing media literacy skills (Duerager & Livingstone, 2012). As such, Mendoza (2009) reviewed the parental mediation literature as based in the television literature to determine how it might map onto the media literacy framework. She reported that co-viewing was the most common form of parental mediation but did not find that watching content with a child promoted media literacy, which may reflect that the majority of parents who co-view do not discuss the content with their children. Thus, the opportunity to learn critical thinking skills through analyzing content is minimized. Indeed, a parent's co-viewing of a show may act as a "silent" endorsement of the content, even if it is inappropriate for a child. Mendoza further reported that active mediation would

be the most effective way for parents to get involved in teaching their children media literacy. Other researchers concur (Top, 2016). However, more research is needed to determine whether the forms in which parents traditionally actively mediate, through sharing values about the content versus inquiry based discussion, which is the kind of pedagogy recommended by scholars of media literacy, can effectively teach critical thinking skills.

PARENTAL MEDIATION BY TYPE OF MEDIA

Video Games

The literature on video games is robust with many studies finding a host of positive cognitive, social, and emotional effects (Blumberg & Fisch, 2013; Granic, Lobel, & Engels, 2014; Powers et al., 2013). Nevertheless, parents worry more about video games than any other media content. More so than with other media, gender differences emerge, with parents being more restrictive of girls' video game exposure (Nikken & Jansz, 2006). As with other kinds of media, parents rely on similar strategies: restrictive, active, and laissez-faire.

One study looked at which type of monitoring was related to the number of hours of video game play (Smith et al., 2015). The researchers measured parental discussion of cyber-safety, limiting online content, and physically monitoring video game play. The only parenting strategy that predicted the number of hours teens spent playing games was a discussion of cyber-safety; in other words, active mediation. Interestingly, the study also measured whether the ability to carry mobile devices that hosted video games would increase gaming hours, and this variable was not significant. The strongest predictor of game play was the number of devices owned by the adolescents.

Another study looked at different kinds of active mediation used with children during video game play and whether any of these were related to child delinquency (Martins et al., 2015). The researchers found that negative mediation of video game play was associated with higher levels of child delinquency. Thus, parents who had negative attitudes about video games were more likely to have delinquent children than those who felt less negatively. In addition, parents used negative mediation more with boys and older children. Restrictive mediation was also measured and this strategy was negatively related to delinquency. Consistent with findings from studies of parental attitudes toward different media (e.g., video games, TV, etc.), Martins and colleagues found very few parents used positive mediation when speaking to their children about these games.

Social Media

As children reach later preteen years, they increasingly join social media networks, even though COPPA forbids children younger than thirteen from joining the majority of social media (e.g., Instagram, Facebook, Snapchat, etc.). Among 8- to 18-year-olds who have a social media account, parents reported that they first joined one at 12.6 years (Lauricella et al., 2016). Pew Research Center found that parents of younger teens were more concerned about their online privacy than those of older teens and used more parental controls (Anderson, 2016). Not surprisingly, when parents directly intervened with their teen's use of social media, the amount of time their teens were on social networking sites was reduced. Some of the parental mediation measures that these parents used include reading website privacy policies, helping set up privacy settings, and using parental monitoring systems. The most risky online behavior, being contacted and connecting to strangers online who made them feel uncomfortable, was not associated with any parental mediation strategy (Wisniewski et al., 2015).

RECOMMENDATIONS AND BEST PRACTICES

Digital media are a tool that can be used for both positive and negative learning. Parental mediation of their children's consumption of interactive technologies and media can serve as a means to mitigate negative effects while promoting positive effects. As such, it is incumbent on anyone concerned with positive youth development to seek information to guide parents on best practices, grounded in well-designed research.

While each family and context is different, the literature does seem to suggest a few overall ways to mediate children's media use proactively to help them learn safe online behavior. We list these below.

1. Educators and policy makers should guide *parents to consider how they are role modeling their own media use to their children*. Children learn from watching their parents and learning media behavior is no different than other forms of activities (Bleakley et al., 2013; Uhls, 2015).
2. Educators and policy makers should guide parents to *provide clear and consistent rules*. Teens in one study suggested that parents are the authorities and they should provide consequences when misbehavior occurs. However, trust and communication were incredibly important, and

adolescents suggest that they prefer when their parents include them in the process of deciding the rules around technology. Interestingly enough the most common recommended rule was to put the phone away during family meals, both parents and children felt this was important (Hiniker et al., 2016).

3. *Those working with parents should suggest that they involve children in determining the family media plan*. Organizations such as Common Sense that provide guidance for parents have long advocated using family media agreements and device contracts to help develop and enforce rules. Data confirm that child buy-in of rules helps. In one study, giving children input into the process was strongly correlated with their ability to follow rules (Hiniker et al., 2016). The authors also suggest that other successful strategies include discussing the reasoning behind rules, making similar rules for parents and kids, and being consistent. Another study found similar thinking from their participants (Vaterlaus et al., 2014). Not surprisingly, children report that they follow parental mediation rules most when the rule is easy to follow and they believe it to be fair.

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