Parenting and Digital Media

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abstract

Understanding the family dynamic surrounding media use is crucial to our understanding of media effects, policy development, and the targeting of individuals and families for interventions to benefit child health and development. The Families, Parenting, and Media Workgroup reviewed the relevant research from the past few decades. We find that child characteristics, the parent-child relationship, parental mediation practices, and parents' own use of media all can influence children's media use, their attitudes regarding media, and the effects of media on children. However, gaps remain. First, more research is needed on best practices of parental mediation for both traditional and new media. Ideally, this research will involve large-scale, longitudinal studies that manage children from infancy to adulthood. Second, we need to better understand the relationship between parent media use and child media use and specifically how media may interfere with or strengthen parent-child relationships. Finally, longitudinal research on how developmental processes and individual child characteristics influence the intersection between media and family life is needed. The majority of children's media use takes place within a wider family dynamic. An understanding of this dynamic is crucial to understanding child media use as a whole.

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Children today average more hours engaged with media each week than they do engaged with almost any other activity (between 6 and 9 hours/day).[1] Population-based studies have documented associations between excessive digital media use and obesity, developmental delays, and academic (or learning) difficulties. These are outcomes which, like digital media use, are strongly influenced by the broader family and psychosocial context. Understanding how parenting and family dynamics both influence and are influenced by screen media use is crucial to identify targets for interventions to benefit child health and development.[2] This article provides a brief overview of the current research evidence regarding family and media, including parental mediation behaviors (how parents use media with or around children, discuss media, and implement family rules regarding media), how this relates to the broader family context and effects on parent-child dynamics, and the areas clearly in need of additional research.

CURRENT STATE

Child Characteristics

Numerous studies have explored child characteristics (eg, gender, personality) that relate to media habits.[3] One vein of research has addressed how child behavior might contribute to parents' allowance of screen time. For instance, infants who were rated as fussy or more intense criers[4] or who showed poor self-regulation[5] were more likely to exceed American Academy of Pediatrics media guidelines as toddlers, especially if they were from a low-income family. In addition, low-income parents with toddlers with social-emotional delays were more likely to give their child mobile devices to calm them down or keep them quiet.[6] For older children,

better self-regulation abilities predict lower levels of parental restrictive media monitoring.[7] Overall, these studies suggest that child factors and their interaction with parenting practices should be considered when examining children's media use habits, especially to understand mechanisms and bidirectional relations between parenting, media use, and child behavior.

Parental Mediation Practices

Parental mediation of media involves the interactions parents have with their children about media use.[8,9] Restrictive mediation is when parents set rules regarding the content allowed or the time spent viewing media. This can be done in either an autonomy-restrictive or an autonomy-granting way,[10] and includes e-Discipline in which media use is granted as rewards for good behavior and prohibited in reaction to bad behavior.[11] Active mediation refers to parent-child conversations about media, including parental attempts to provide children with critical viewing skills regarding media. For example, a parent might discuss themes of bullying after the child views a television program containing aggressive behavior.[9] Finally, co-viewing is when parents view, use, or consume media with their children but do not necessarily discuss the content with them.[12]

Research on parental mediation has found that some forms can be beneficial for children's cognitive and social development as well as successful in mitigating negative media impacts, although the effects are moderate. A recent meta-analysis revealed that both restrictive and active mediation can reduce negative media effects, such as the learning of aggressive behavior, substance use, and sexual behavior, whereas co-viewing (without discussion) tends to enhance or facilitate media effects.[13] For young children, active mediation can influence their

comprehension of media, learning, and language exposure. When parents ask questions and scaffold interactions during media use, children as young as 3 can learn from videos and transfer learning to other settings.[14] Between ages 1 and 2, toddlers can interact over video chat more effectively with parent support and learn content from media more readily when a parent co-views and teaches them the presented material.[15,16] Nonetheless, researchers have found that parents talk to their young children less when watching a screen or when the television is on in the background.[17]

Parental mediation may change over time, with active mediation being more common with young children, and restrictive mediation with some co-use (eg, watching television together, texting each other) increasing as children move into middle childhood and then decreasing during adolescence.[18] Cross-sectional research indicates that the strength of the relationship between parental restrictive mediation (eg, limits on time and content, consequences of rule violations) and screen time in youth decreases from early childhood to adolescence.[19] To date, little is known about how parental mediation behaviors develop and evolve over time or interact with child characteristics. To our knowledge, only a handful of longitudinal studies have examined parental mediation over time and only over the course of a few years.

Parenting Style, Family Connectedness, and Media

Most recently, research has begun to explore how parents make choices about their children's media use and their sense of agency to control their child's screen time and content. Parents who exercise low control over their children are more likely to allow excessive screen exposure for their 10- to 11-year-olds.[20]

Conversely, parents who exercise more control while still being supportive are more likely to use active and restrictive mediation with their teens.[7] In addition, research has found that social media can strengthen family bonds and feelings of connectedness.[21] Among adolescents, there is evidence that social media are used to keep in touch with family,[22] and parents who use social media report keeping up with their children and other family members as the top reasons for use.[23] However, more research is needed to understand how parenting behaviors connect to parental mediation of various types of digital media, especially at different child ages.

Family Media Culture and Family Dynamics

The overall family climate, including family roles and norms, and parent media use habits, are also likely determinants of child screen viewing. For example, Wartella et al[24] found that in families with media-centric parents (average parent screen time ~11 hours/day), young children have more daily screen time and are more likely to have a television in their bedroom. Additionally, media-centric parents are more likely to use media as a way to connect with their children and to keep their children busy during the day or settled before bedtime. These families are more likely to be from lower socioeconomic strata, have lower educational attainment, be of minority race and/or ethnicity, have depressed parents, have single-parent households, or have fewer developmental resources, all of which are aspects of the child's social ecology that affect health and behavioral outcomes.

Parent media use also has the potential to interrupt or displace family interactions and routines, which are protective for child development, school success, and resilience. For example, studies have found a decrease in parent-child verbal interactions[25] and play[17] when the television is on. More recently, parent mobile media use has been associated with fewer mother-child interactions.[26] However, in older children, gaming has the potential to encourage more family interactions because children often attempted to bring parents into their online and console playing.[27] Additionally, regardless of the number of screen devices in the home, siblings tended to share devices and play on them together.

Ecological Influences

There is little understanding of how cultural norms (eg, adoption of technology, watching other parents using devices in the playground), neighborhood environments (eg, physical activity opportunities), work (eg, stress, need for parents to be connected), and social supports and psychosocial stress influence child and family technology use habits. Additionally, there is little known about environmental supports for parental mediation and parents tend to either not use or not trust current media rating systems.[28]

FUTURE RESEARCH

We have listed 5 key questions that we feel media and family scholars need to address over the coming years.

- What are the best practices in terms of parental mediation that will be relevant in an ever-changing media world?

- Does the pervasive and instant access to new media affect parents' mediation practices in ways that television did not?

Research has revealed some general guidelines regarding parental mediation. However, we need to know if these general principles work regardless of media type, content, or platform. This is difficult to grasp when media are changing rapidly and parents are struggling to keep up with these changes. Additionally, research should examine whether these principles work regardless of family dynamics. It is likely that some types of parental mediation may work better in some families compared with others.

- How does parent media use influence interaction with children, child media use, and child health and developmental outcomes and how do both influence family dynamics as a whole?

Research is just beginning to examine the interplay between parent and child media use. To fully understand the effect of media in a family, researchers need to examine the family system as a whole via longitudinal, ecologically valid research methods. This includes parents and children, but it may also include others, like siblings, grandparents, cousins, and more. It should also consider the ways in which media may promote more communication and parental monitoring as children age (eg, checking in via text, monitoring Facebook profile).

- How can parents use media as a tool to strengthen their family?

Researchers are often focused on the negative influence that media can have, both on individuals and in families. However, research is just beginning to examine how media (particularly, new media) can be a positive force in families.[21,27] Experimental, longitudinal, and cross-sectional research should continue to examine the ways that parents can use the media as a tool to strengthen connections and family relationships as a whole, from early childhood to adolescence.

- How do developmental processes and individual child characteristics influence the intersection between media and family life?

Media use changes rapidly over the course of childhood and adolescence. Additionally, parent-child dynamics regarding media use, appropriate parental mediation techniques, and the effect of media on family relationships may also change depending on child age. Longitudinal research should examine how media functions in a family context across different developmental stages.

RECOMMENDATIONS

Clinicians and Providers

In accordance with the new American Academy of Pediatrics' policy statements on digital media use by children from infancy to adolescence,[29,30] we suggest that families emphasize using media to connect, co-view, and create. We recommend that clinicians encourage parents to choose high-quality content and use mediation strategies. For restrictive mediation, we advise parents to minimize screen time for young children so that they have time for the hands-on play and interactions needed for optimal development. Active mediation is recommended for children, especially young children, and is essential for children < 2-years-old, who can

be taught to use media to connect with loved ones (eg, via video chat) and learn more about the world by having a parent reteach what is viewed on the screen. Co-viewing alone, however, tends to result in negative outcomes, so parents should discuss media content with their children and pay particular attention to content or themes involving violence, sex, substance use, body image, etc. Parents should also be encouraged by providers to help frame a child's relationship to digital media, discussing online etiquette, empathy, ethics, internet safety, personal boundaries, and how to regulate their own media habits. We advise pediatricians to encourage parents to both monitor children's screen time and be mindful of how parents' screen use may affect family dynamics. Also, pediatricians could recognize and support the many functional purposes that media use serves for families (especially low-income or stressed families), such as avoiding conflict in the house, getting things done in single-parent families, keeping difficult kids calm, offering social support from peers, and that changing media use habits will not be possible unless we offer

alternative approaches to each of these functional needs.

Policy Makers

Many parents struggle with the rating system as currently constructed, finding it difficult to make sense of a system that is plagued with inconsistency and lack of clarity.[28] We encourage policy makers to consider ways to streamline the rating system, making it more accessible and understandable to empower parents.

Educators

As more and more schoolwork and testing become digitized, educators should be cognizant of how much they are assigning screen-based homework and how that connects to family rules about media, parents' ability to mediate use, and children's opportunities to engage with the physical, face-to-face world. Ideally, educators and families could work together around thoughtful screen time that supports children's development. Additionally, we encourage education systems to develop and implement media literacy programs that can empower parents and children to thrive in a media-saturated world.

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