PEDIATRICS PERSPECTIVES

TECH Parenting to Promote Effective Media Management

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As media and technology proliferate in the lives of US children, parents are confronted with the ever-growing task of home media management. Accumulating evidence reveals that youth media exposure to health risk behaviors (HRBs) (eg, risky sexual behavior, substance use) during the preteen years is associated with increased risk for subsequent engagement in HRBs,^{1,2} and greater intensity of exposure leads to greater youth risk. Whereas parents remain a strong influence on youth behavior and guidelines advocate for parental media restriction and monitoring, the definition of specific media parenting behaviors that impact child outcomes is needed. The American Academy of Pediatrics (AAP) has offered an evidence-informed summary of recommended parenting practices within the media environment.³ However, parents generally express a desire for more information about effective youth media management and are relatively unaware of the AAP's media recommendations.⁴ To support AAP guidelines, a review of the literature and evidence from behavioral observation and focus group studies reveal 4 behavioral domains encapsulated by our proposed talk, educate, co-view, and house rules (TECH) parenting.⁵ We propose TECH parenting as a useful framework to address important behavioral targets for parental media management of preadolescent youth (Table 1 and Supplemental Fig 1).

T: TALK TO KIDS ABOUT MEDIA USE AND MONITOR THEIR MEDIA-RELATED ACTIVITIES

Parental monitoring is associated with reduced youth risk for HRBs, and talking with youth about media use allows parents to learn what their child is viewing or using.⁵ Some 84% of preteenagers (ages 8–12 years) reported that their parents have talked with them about the content of media they use; however, only 54% reported that their parents knew "a lot" about their social media use.⁶ Parents should talk to children about media regularly because kids' preferences and/or behaviors can change quickly over time. The use of open-ended questions (Table 1) can facilitate engagement in conversation and allow parents to receive more comprehensive information on children's media exposure. These conversations can be used as periodic check-ins and as a starting point for education about HRBs that may have been depicted in media and/or



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TECH Parenting		Behavioral Strategies	Example Wording and Rules
Т	Talk to your kids about their media use and monitor their activities	Ask questions in an open and nonjudgmental way	What is your favorite TV show?
		Seek information on media your child consumes (eg, connect in social media)	What do you like to watch when you go over to your friend's house?
		Find out what TV, movies, applications, social media, and video games their friends like	How do you interact with your friends on social media?
		Stay informed about new media sources	What new applications are you using?
E	Educate your children about media-related risks	Describe marketing practices of alcohol, tobacco, food, and cannabis industries	Do you notice how alcohol companies use partying or sex to promote drinking?
		Discuss how media rarely depicts negative consequences of risky behavior	That show had a lot of drinking in it, but it didn't show anyone getting sick.
		Discuss normative, legal, and safe behavior as it relates to substance use and sexual behavior	It's uncommon for children your age to drink alcohol, and most don't drink at all.
С	Co-view and co-use media with your kids actively	Watch appropriate, kid-targeted media together	Let's watch your favorite show together!
		Model turning off inappropriate content and explain why it is not appropriate	I'm sorry, but this show has too much alcohol use in it; we need to turn it off.
		Learn about your child's applications, video games, social media, and Internet sources	Wow, that bullying was really mean. What might you have done differently to help?
		Spend time learning about who funds media sources and what data new media sources collect	Tell me about this new application you downloaded; how does it work? Who sponsors this application? Let's
Η	Establish house rules for media usage	Set clear boundaries on rating level of media allowed and where media is allowed in the house	find out together. No R-rated movies; only actively co- view PG-13 movies or shows over TV-Y7.
		Use technology (eg, TV show V-chip parental controls) to promote house rules	No screened media in the bedroom.
		Set up rules specifically related to industry-sponsored media	No Facebook account until 13 y old.
		Take the "wait until eighth" pledge	No industry-sponsored application or online game use.
			No youth smartphone ownership until eighth grade.

TABLE 1 Behavioral Strategies and Example Wording to Promote Effective TECH Parenting

Additional resources include AAP Media Guidelines, Circle Disney Parental Control, Common Sense Media, www.mediatechparenting.net, and www.waituntil8th.org. PG-13, parental guidance suggested for children <13 y old; TV, television; TV-Y7, television for children ≥7 y old.

product marketing (eg, alcohol brands) that children have viewed. Researchers have demonstrated that effective parental communication with children about HRBs and HRBrelated media content can reduce youth risk for HRB engagement.⁷

E: EDUCATE CHILDREN ABOUT THE RISKS PRESENT ACROSS VARIOUS FORMS OF MEDIA

A review of research on substance use in the media revealed high rates of substance appearances in television and movies (eg, alcohol was found in 70% of prime time television programs), with few depictions of negative consequences of HRBs.^{8,9} Parents need to educate youth on negative consequences of violence, substance use, and risky sexual behavior, especially if youth are exposed to inaccurate media depictions of HRBs. For example, characters may be shown drinking alcohol excessively without getting sick. These depictions suggest risk behaviors are safe or have only positive outcomes, which can impact youth expectancies related to HRBs and their subsequent willingness to engage in HRBs.

Beyond depictions of behavior, children need to learn how to interpret advertising that promotes certain product-related behaviors, such as drinking or smoking. For example, in the new media environment (eg, Internet, social media, and applications), some alcohol companies employ "advergames" that could be highly engaging for underage drinkers.⁸ Parents should alert children to what these games are intended to do (eg, change product interest) and teach them about other marketing strategies employed in the media (eg, product placements). The social media environment provides additional venues for marketing and new ways for youth to share inappropriate social media content. Integrated marketing campaigns promote youth exposure to marketing across media venues, and parents must remain aware of the various sources of potential exposure to ideally mitigate youth risk. Risks for youth within the media environment continue to evolve as technology advances. However, youth can learn how to effectively interpret marketing messaging, and preventive interventions that include a media literacy component have demonstrated efficacy in reducing youth risk for problematic behaviors such as substance use.¹⁰

C: CO-VIEW AND CO-USE MEDIA WITH KIDS ACTIVELY

Many parents indicate concern about what their children see across media and report inappropriate media content as a primary concern. Yet, parents also report that they are not fully aware of the content within the programming and games that kids view and use. Whereas 82% of parents reported high awareness of the content their child sees on television, only 56% report high awareness of online video content, and 40% report high awareness of social media exposures.¹¹

Active co-viewing and co-use of media can help parents learn about evolving media, such as video games and social media applications, allowing parents to more effectively and comprehensively monitor children's media use.

Parents can also use this time to teach their children to develop healthy online behaviors and help children recognize and respond to inappropriate content (eg, alert an adult). Parents should model good media decision-making by only co-viewing content that is age-appropriate for their child. In addition, parents should talk to their children about media containing sex, violence, or substance use immediately and consider turning off the inappropriate content. If parents co-view media with their children without addressing the risk content within it, it could be perceived as passive endorsement of the behaviors depicted, potentially increasing youth risk for engagement in those behaviors.12

H: ESTABLISH CLEAR AND EFFECTIVE HOUSE RULES FOR MEDIA USAGE

Parents vary in their approach to house rules for youth media use; 88% of parents of preteenagers have rules about what content their children can watch, but only 33% report variations in their rules based on the specific device (eg, television versus tablet versus cell phone).¹¹ Although many technological tools exist to support restriction of content, only a minority of parents (less than one-third) report employing them.¹¹ For example, only 1 in 4 parents report using a thirdparty application to manage child device use or shut off the Internet at a certain time of the night.¹¹ Parents should establish clear house rules for where, when, and what media is allowed. Some evidence-informed rules include the following³:

- 1. Designate media-free zones in your home (eg, dinner table, children's bedrooms).
 - Children with media-free bedrooms get more sleep at night, perform better in school, and are less likely to be overweight.

- 2. Only allow media use after homework and physical activity have been completed.
 - Kids who use less screen-based media report better social and emotional functioning.
- Store all digital technology in a central house location (not in bedrooms) overnight at least 1 hour before bedtime.
 - Use of screened media immediately before bedtime can interfere with sleep patterns and impact educational performance.
 - Notifications from digital devices can interrupt sleep.
- 4. Review applications, Web sites, video games, or social media programs your child uses.
 - Some applications contain information gathering and location tracking of which youth may not be aware.
 - Review social media activity; youth may not understand the long-term and public nature of posting information on the Internet.
- 5. Be explicit about allowable movie and television show ratings and content your children can watch.
 - Youth whose parents allow them to watch R-rated movies are at higher risk for underage smoking, alcohol use, and cannabis use.^{1,2,12}
 - Television shows rated above TV-Y7 include significantly greater amounts of sex, smoking, and alcohol use.⁹ Media ratings provide information about age-appropriateness of content for children, although some behaviors (eg, violence and substance use) are not well captured in ratings.
 - Technological controls on cell phones, computers, or televisions can be used to constrain youth exposure to age-appropriate content.

Parents can influence youth health risk trajectories,^{5,7,12} and pediatricians can help by offering them specific skills to improve media management in the home. Paired with the AAP Family Media Plan (https://www.healthychildren.org/ English/media/Pages/default.aspx), the memorable acronym of TECH parenting may be used as a frame to promote positive and specific media parenting behaviors that have the potential to mitigate media-related risks for HRB development in youth.

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ABBREVIATIONS

AAP: American Academy of Pediatrics HRB: health risk behavior TECH: talk, educate, co-view, and house rules

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