Mobile and interactive media use by young children: The good, the bad and the unknown

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Mobile devices are everywhere and children are using them more frequently at young ages. The impact these mobile devices are having on the development and behavior of children is still relatively unknown. In a commentary in the journal *Pediatrics*, researchers review the many types of interactive media available today and raise important questions regarding their use as educational tools, as well as their potential detrimental role in stunting the development of important tools for self-regulation.

While there are many research studies that have found children under the age of 30 months cannot learn from television and videos as well as they can from real-life interactions, there are fewer studies investigating whether this is the case with interactive applications. Early research suggests that interactive media, such as electronic books and learn-to-read applications can be useful in teaching vocabulary and reading comprehension, but only in children preschool-age or older. The potential educational benefits for children under two is questioned, as research on interactive media in this age group is scant, and it is well-known that infants and toddlers learn best through hands-on and face-to-face experiences.

This commentary notes that while mobile device use by children can provide an educational benefit, the use of these devices to distract children during mundane tasks may be detrimental to the social-emotional development of the child. The researchers ask "If these devices become the predominant method to calm and distract young children, will they be able to develop their own internal mechanisms of self-regulation?"

"It has been well-studied that increased television time decreases a child's development of language and social skills. Mobile media use similarly replaces the amount of time spent engaging in direct human-human interaction," explained corresponding author Jenny Radesky, MD, clinical instructor in Developmental-Behavioral Pediatrics at Boston University School of Medicine and a former fellow in pediatrics at Boston Medical Center.

The authors question whether heavy device use during young childhood could interfere with development of empathy, social and problem solving skills that are typically obtained by exploring, unstructured play and interacting with peers. "These devices also may replace the hands-on activities important for the development of sensorimotor and visual-motor skills, which are important for the learning and application of math and science," added Radesky.

While much remains unknown, the authors recommend that parents try each application before
allowing their children to access it. Parents are also encouraged to use these applications with their children, as using interactive media together enhances its educational value. "At this time, there are more questions than answers when it comes to mobile media. Until more is known about its impact on child development quality family time is encouraged, either through unplugged family time, or a designated family hour," added Radesky.

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