



Meeting Children Where They Are

June 6, 2024

The world is designed for mobile media, including smartphones and tablets, and young children are already using these tools in a range of settings. This ACM Trends report summarizes what is currently known about the ubiquity of mobile media in young children's lives, including the caregivers' decisions about their children's use. We end with a consideration of how children's museums might take advantage of current uses. This report builds on ACM Trends 7.1, which explored general principles of digital media that supports powerful learning.

This report is based on a review of the research literature. We read dozens of empirical reports and peer-reviewed articles about early childhood media use, from university researchers and organizations like Sesame Workshop, PBS KIDS, Common Sense Media, the National Association for the Education of Young Children, the Fred Rogers Institute, and the American Association of Pediatrics. One challenge in reviewing this research is a lack of consensus definitions. That means we took a broad view and included any research about **media content for young children delivered over the internet**, from synchronous digital programming and live video calls to games and apps. (For recommendations about games specifically, we recommend a recent UNICEF (2024) report.)

The typical (i.e. median) child in the United States is spending several hours a day using screen media. Shorter online videos have overtaken television and streaming videos, and mobile devices like smartphones and tablets account for a growing share of children's screen time. Yet parental decisions are nuanced and take both the specific content and their own child into account. Children are using tablets and smartphones in many public places and have been for some time. Some of those locations may currently be primarily associated with less interactive types of media use, which could represent an opportunity for children's museums to change this pattern.

ACM TRENDS

#7.2

ACM Trends #7.2

How often are children using mobile media?

Smartphones are everywhere. In 2023, about nine out of every ten US adults had one, and that number rises to 97% for adults under age 50 (Gelles-Watnick, 2024). That means that nearly all young children in the United States live in households with at least one smartphone or other mobile device.

Overall, the best empirical data we have on US children's media routines and practices comes from large scale surveys and syntheses conducted over time by two influential organizations: Common Sense Media and the Joan Ganz Cooney Center at Sesame Workshop. The most recent study of early childhood media use (Rideout & Robb, 2020) provides a snapshot of pre-pandemic norms, based on data collected in early 2020 from parents of young children.

At that time, the average child in the United States aged eight or younger spent 2.5 hours a day using screen media, which includes televisions, computers, and mobile devices (Rideout & Robb, 2020). As in previous years, about three-quarters of this time was spent watching TV or videos. However, short online videos outpaced television and streaming video for the first time in 2020 (Rideout & Robb, 2020). Other studies confirm that media use most likely went up during the first year of the COVID-19 pandemic (Eales et al., 2021), though longer-term trends are not yet clear.

Because of the growing popularity of short online videos, a companion Common Sense Media study took a deeper

dive into this form of media. This study found that most of the videos children watch on YouTube are age-appropriate, but children are being exposed to a great deal of advertisement as well as video genres that promote consumerism (Radesky, Schaller, et al., 2020). For example, children are seeing “unboxing” videos, in which other children open new toys. Three-quarters of videos in the study had either no or weak educational value.

A smaller study conducted in 2018-2019 directly tracked device use through an app which parents voluntarily installed. This study, which focused on three- and four-year-olds in a single US state, also found that YouTube and YouTube Kids are the apps most frequently used by children (Radesky, Weeks, et al., 2020). This research method has promise for more accurate reporting of children's phone and tablet usage, but it has not yet been deployed widely.

How do parents make decisions about screen time?

Parents are making complicated decisions about children's media access, weighing the nuances of particular content, value judgments around media use in general, and children's developmental stage (Nikken & Schols, 2015; Qaiser, 2020).



(Photo Credit: surface on Unsplash)

The oldest children in the early childhood age range generally have more autonomy than the youngest. In 2020, two-thirds of US children ages 5-8 had their own mobile device, compared to about one-half of children 2-4, and few children under age two (Rideout & Robb, 2020). Similarly, a survey of Dutch parents found that

ACM Trends Reports

The Association of Children's Museums (ACM) is the world's foremost professional member service organization for the children's museum field. We leverage the collective knowledge of children's museums through convening, sharing, and dissemination. ACM has partnered with Knology to create the ACM Trends Reports. Knology is a nonprofit that produces practical social science for a better world.

ACM Trends Reports are commissioned on behalf of our membership to help advance the work of this community. They seek to draw attention to emerging issues and opportunities for elevating the field, and help our members use data to become more accountable to their mission and fiscal responsibilities. A product of collaborative efforts to collect data, the Trends Reports are an effort to support ongoing, accessible dialogue. Our objective is for this approach to be an equitable and inclusive way for museum professionals to contextualize our work and use data to produce effective outcomes.

children whose parents see them as more skilled with electronic media are more likely to have access to devices, as are older children (Nikken & Schols, 2015). Moreover, most children in this oldest group were selecting their own content, while parents were much more likely to choose content for the youngest children (Rideout & Robb, 2020). Recommendation algorithms were also likely to play a considerable role in children's video selection on sites like YouTube (Radesky, Shaller, et al., 2020; Rideout & Robb, 2020).

Which children are using mobile media most?

In the United States, White children and children from higher-income households spend considerably less time using media than other children (Rideout & Robb, 2020). Researchers aren't yet sure about the reasons why, but they point to **two possible explanations**.

The first is based on the finding that parents who see media as primarily educational allow their children to use it more often (Nikken & Schols, 2015). In 2020, Black parents were about twice as likely as White ones to say that media use helps their child learn **"a lot"** (Rideout & Robb, 2020). The same study found a similar gap between low-income and high-income parents (Rideout & Robb, 2020).



(Photo Credit: smartdicson on Unsplash)

The second explanation has to do with the fact that lower-income households and families of color have higher rates of mobile phone adoption (Rideout & Robb, 2020). As of 2023, Black and Hispanic Americans were about twice as likely as White Americans to be **"smartphone dependent"** (that is, to rely on

smartphones for internet access) (Gelles-Watnick, 2024). Moreover, people in the lowest income households were about seven times as likely to be smartphone dependent as those in the highest income households (Gelles-Watnick, 2024).

Where are children using mobile media?

Children are not necessarily using their own devices. Chiong and Shuler (2010) termed parents' tendency to hand children their devices the **"pass-back effect."** They found that even very young children had at least some access to mobile devices, primarily for entertainment purposes, and that this kind of access typically took place in short sessions of no more than twenty minutes, several times a week. According to their parent survey, children most frequently used iPhones in the car. The next most common locations were at home, while waiting in general, or while traveling outside the car. Less common locations included friends' or relatives' homes, in restaurants, and



while shopping (and maybe even under chairs!).

(Photo Credit: charlesdeluvio on Unsplash)

A more recent observational study that took place in laundromats, restaurants, and airports (Floegel et al., 2021) found that children were more likely to co-use mobile phones with adults as a form of educational family bonding in restaurants, while they were more likely to be fully immersed and isolated in laundromats and airports. These authors also observed that parents continue to use toys and coloring in similar settings as a portable form of distraction, and that mobile media is used in some of the same ways.

The Takeaway

Media and technology are ubiquitous in children's lives. The typical American child is spending several hours a day using screen media, which includes tablets, smartphones, and other mobile devices. Media thus represents an opportunity for children's museums to meet their audiences where they already are.

Screen time is not the only factor parents take into account when making decisions about their children's mobile device use. They also consider content and their specific child's development. Museums can support parents by creating media for children from a brand (their local children's museum) that parents trust. Museums can also help parents identify the educational goals of their content and reinforce them through their interactions with their children.

Smartphones provide a way to reach low-income families and families of color. Museums can ensure their content is accessible by designing for mobile first. As discussed in 7.1, mobile devices also offer opportunities for children to explore the physical world in new ways, and thus provide avenues to both enhance the accessibility and deepen the learning experience simultaneously.

Children are using mobile media in many public places. Some locations are primarily associated with passive media uses, which provides an opportunity for children's museums to create interactive learning experiences for use in these contexts. Consider creating 5-10 minute experiences that can be done while waiting or in transit, particularly experiences that encourage active noticing.

Young children are already using YouTube both alone and with their families, which represents another opportunity to meet them where they are. Taking advantage of this platform may be a key way to reach children.

About This Research

Data for this report was collected through a search of available literature. This research was supported by the Institute for Museum and Library Services.

References

- Chiong, C., & Shuler, C. (2010). *Learning: Is there an app for that? Investigations of young children's usage and learning with mobile devices and apps*. The Joan Ganz Cooney Center at Sesame Workshop.
- Eales, L., Gillespie, S., Alstat, R. A., Ferguson, G. M., & Carlson, S. M. (2021). Children's screen and problematic media use in the United States before and during the COVID-19 pandemic. *Child Development, 92*(5), e866–e882.
- Floegel, D., Elias, N., & Lemish, D. (2021). Young children's mobile device use in public places: immersion, distraction, and co-use. *Studies in Media and Communication, 9*(1), 30-40.
- Gelles-Watnick, R. (2024). *Americans' use of mobile technology and home broadband*. Pew Research Center.
- Nikken, P., & Schols, M. (2015). How and why parents guide the media use of young children. *Journal of Child and Family Studies, 24*(11), 3423–3435.
- Qaiser, Z. (2020). Early childhood education and care and the use of digital media in informal environments. *Berkeley Review of Education, 9*(2).
- Radesky, J. S., Schaller, A., Yeo, S., Weeks, H. M., & Robb, M. B. (2020). *Young kids and YouTube: How ads, toys, and games dominate viewing, 2020*. Common Sense Media.
- Radesky, J. S., Weeks, H. M., Ball, R., Schaller, A., Yeo, S., Durnez, J., Tamayo-Rios, M., Epstein, M., Kirkorian, H., Coyne, S., & Barr, R. (2020). Young children's use of smartphones and tablets. *Pediatrics, 146*(1), e20193518.
- Rideout, V., & Robb, M. B. (2020). *The common sense census: Media use by kids age zero to eight, 2020*. Common Sense Media.
- UNICEF Innocenti – Global Office of Research and Foresight. (2024). *Responsible Innovation in Technology for Children: Digital technology, play and child well-being*.

Started in 1962, the Association of Children's Museums (ACM) is the world's foremost professional member service organization for the children's museum field. With more than 460 members in 50 states and 19 countries, we leverage the collective knowledge of children's museums through convening, sharing, and dissemination.

Knology is a nonprofit that produces practical social science for a better world. Since 2012, the collective of scientists, writers, and educators has been dedicated to studying and untangling complex social issues.



This study was made possible in part by the Institute of Museum and Library Services.

ACM Trends #7.2 by Knology is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License



Knology Publication #IML.145.842.03

Recommended Citation:

Barchas-Lichtenstein, J., Reich, C., Voiklis, J., Field, S., Bowen, E. (2024). *Meeting Children Where They Are*. ACM Trends 7(2). Knology & Association of Children's Museums.