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Update on Screen-related Parenting Practices in Early Childhood

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This report is an update on progress in the field of screen-related parenting practices since we submitted our manuscript “Screen-related parenting practices in low-income Mexican American families”¹ in November 2017. In our study, which focused on low-income Mexican American families with preschoolers, maternal screen-related beliefs and self-efficacy were associated with TV-related parenting practices (maternal restriction of time and allowing viewing while snacking). These parenting practices were, in turn, associated with child TV use behaviors.¹ Below we review 7 more recent studies that further inform efforts to support healthy parenting and child screen use.

Recent evidence continues to show that parenting practices, as defined in Table 1, are important contributors to screen use in early childhood. In a study of 193 mainly middle-class and white Canadian families with toddlers, higher parental negative outcome expectations regarding limiting child screen use was associated with less parental restriction of screen time ($\beta = -0.15$, 95% CI: $-0.17, -0.13$).² Furthermore, higher parental restriction of screen time was associated with less child screen use ($\beta = -0.18$, 95% CI: $-0.31, -0.05$). Similarly, a small study ($n=39$) in a mostly white and middle-class Canadian sample (ages 1.5–5 years) found that both maternal and paternal restriction of screen use were associated with lower child viewing amounts on weekdays ($\beta = -0.31$, $p<0.01$; $\beta = -0.44$, $p<0.01$) and weekends ($\beta = -0.41$, $p=0.01$; $\beta = -0.58$, $p=0.01$).³ Moreover, maternal and paternal higher mealtime screen use were both associated with increased child screen use on weekdays ($\beta=0.21$ and $p=0.02$ for both maternal and paternal models) and maternal and paternal greater use of screens to control child behavior were associated with increased child screen use on weekends ($\beta=0.37$, $p<0.01$; $\beta=0.31$, $p=0.02$).³ A larger study ($n=289$) conducted in Israel examined the use of screens as a parenting tool in mainly college-educated mothers of toddlers (1.5–3 years old). On weekdays, mothers’ use of screens as a schedule regulator and

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for enrichment were associated with more child screen use ($\beta=0.14$, $p<0.05$; $\beta=0.17$, $p<0.05$), whereas on weekends, use for calming ($\beta=0.2$, $p<0.05$), as a reward ($\beta=0.32$, $p<0.001$) and as a babysitter ($\beta=0.22$, $p<0.01$) were associated with more child screen use. Background screen use was associated with greater toddler screen use amounts on both weekdays and weekends ($\beta=0.20$, $p<0.05$; $\beta=0.18$, $p<0.05$).⁴ Finally, in a six-country European study of families with school-aged children (mean 8.2 years, $n=10,969$) TV co-viewing (parents and children watching TV together) was associated with increased child and parent screen use ($B=11.85$, $p<0.001$; $B=14.47$, $p=0.001$).⁵ All four of these studies further extend the evidence on the various types of screen-related parenting practices that contribute to the amount of child screen use.

Three notable studies provided further evidence on the role of parental self-efficacy regarding managing screen devices. Lee et al (described above) reported that higher self-efficacy to restrict child screen time was associated with higher parental restriction of screen time ($\beta=0.45$, 95% CI: 0.32, 0.57), which, as noted above, was associated with less child use of screens.² In a study of preschool-aged Brazilian children in mainly employed, single, female caregiver households ($n=318$), higher parent screen use on weekdays and weekends was associated with lower parental self-efficacy to restrict amounts of child screen use ($\beta=-0.12$, 95% CI: -0.23, -0.01; $\beta=-0.17$; 95% CI: -0.29, -0.06). In turn, lower self-efficacy was associated with higher child screen use (weekday: $\beta=-0.15$, 95% CI: -0.25, -0.05; weekend: $\beta=-0.16$; 95% CI: -0.28, -0.05).⁶ Another study ($n=186$) focusing on low-income Latino parents of preschoolers reported that parental self-efficacy to limit child TV viewing was related to more restrictive parenting regarding TV viewing (time and content restriction combined) ($r=0.33$ [0.18–0.46]).⁷ Together, these studies further demonstrate that greater parental self-efficacy to restrict screen use is associated with more restrictive screen-related parenting practices in early childhood.

The above studies also highlight new developments in this field by advancing our understanding of the specific contributions of parents' own screen use,^{2–4,6} paternal parenting practices,³ and screen-related parenting practices aimed at managing child behavior.^{3,4} Three studies reported that greater parent screen use is associated with greater child screen use.^{2,4,6} Another study found no relationship, but the sample size was small ($n=39$ families).³ Such evidence further stresses the need to focus on screen use at the family level, even in very early childhood. Although many of the presented studies included fathers in their sample,^{2,4,7} Tang et al specifically evaluated the role of fathers in contributing to child screen use.³ Not unexpectedly, the authors concluded that paternal parenting practices should be considered in intervention designs.³ Finally, two studies further highlight parents' use of screens as a parenting tool or way to manage child behavior, which may be of particular relevance in this young age group.^{3,4} Together, these findings contribute new and more nuanced evidence that can inform intervention efforts to promote healthy screen use in early childhood.

An ongoing limitation of screen media research is the measurement of screen use. All of the studies mentioned^{2–6}, but one⁷, used parental global estimates of the time a child spent using screen devices (e.g. How many hours does your child spend on screens on an average weekday?).³ Global time estimates are easy to implement, and yet are only moderately

correlated with actual screen use.⁸ In contrast, screen use diaries are highly correlated (0.84) with actual use.⁸ Further advances in the measurement of screen use are needed.

Few studies focused on low-income Latino families have been published since November 2017, despite findings that unhealthy screen use is more common in Latino than in non-Latino white children and in low-income compared to higher income homes.⁹ A recent qualitative study with mainly low-income Brazilian immigrant mothers highlights possible socioecological contributors to child screen use. This study reported that social norms, daycare, adult family members, and friends all appeared to contribute to parenting practices and screen use behaviors in preschoolers.¹⁰ Understanding socioecological contributors to screen use is critical to informing intervention design.

With the increase in mobile devices and the now ubiquitous presence of screens, there is an urgent need to understand parental and socioecological contributors to screen use in early childhood so that we can better support parents in raising healthy children. Findings from the referenced studies should be considered in future efforts aiming to promote healthy screen use.

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What's New:

Recent evidence shows that parental self-efficacy, parental screen use, and screen-related parenting practices, including screen use to manage child behavior, are important contributors to screen use in early childhood.

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Table 1:

Types and descriptions of screen-related parenting practices in cited studies

Type of parenting practice	Description
Restriction of screen use ¹⁻³	Limiting the amount of time a child uses screen devices
Mealtime screen use ^{1,3}	Use of screen devices during mealtime
Use of screens to control child behavior ³ /Use as a reward ⁴	Use screens as a way to manage child behaviors such as using screen devices as a reward or taking away screens as a punishment
Use to regulate a child's schedule ⁴	Use screen devices to prepare child to transition between activities and maintain routine
Use as enrichment ⁴	Use of screen devices for educational value
Use for calming ⁴	Use screen devices to assist with mood regulation
Use as a babysitter ⁴	Keep child occupied with screen devices
Background screen use ⁴	Have a screen device on in the background (i.e. not as child's primary activity)
Co-viewing ^{4,5}	Parents and children using screen devices together