The Influence of Content and Context in Children’s Learning through Screen-Based Media

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Children’s screen time has nearly tripled in recent years (Rideout, 2017) and although many studies have found that excessive screen time is negatively associated with child academic skills (Domingues-Montanari, 2017), it is not an exclusively harmful activity. Experimental studies using educational screen-based media have found benefits for children’s math (Aladé et al., 2013) and literacy skills (Linebarger, 2015). While portraying the benefits of educational programs, these studies do not typically account for (1) the total screen time that children experience, (2) the simultaneous influence of home learning environment (HLE) activities, and (3) background selection characteristics related to screen time exposure like socioeconomic status (SES) and child age (Rideout, 2017).

Using time diary data of 178 4 year-olds from the Parents Promoting Early Learning Study, the aim of this work is to identify associations between minutes of educational and non-educational screen-based media and math, and literacy skills, controlling for minutes of HLE activities and background selection characteristics. Non-educational screen-based media was a significant negative predictor of children’s literacy skills, p < .01, and this association remained after accounting for HLE, SES, and child age, β = −.001, t(95) = -2.41, p = .02. Educational screen time did not predict academic skills, p’s > .2. This research extends past literature by examining the impact of the content of screen-based media on children’s academic skills within the larger context of home learning and screen exposure in preschoolers’ families. Future work will investigate the impacts of parental monitoring and device type during child screen time.