Young Children's Tablet Use and Associations with Maternal Well-Being

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ABSTRACT

Research has documented a rapid increase in young children's use of new technologies such as touchscreen tablets,[1] yet little is known about how they use tablets and whether family factors predict early use. The current study addressed these questions with an online survey of mothers of children 12-48 months of age. The majority of mothers owned a tablet, and nearly half of children with access used a tablet daily. Frequency of use was positively predicted by child's age and mother's use and negatively predicted by mother's relational well-being. These findings suggest that it may be important to consider family factors when assessing outcomes of media use.

INTRODUCTION

- American Academy of Pediatrics (AAP) recommends that children younger than 24 months not be exposed to screen media[2]
- Yet, family ownership of tablets has rapidly increased, and use of such technology by young children is on the rise[1,3]
- This study tested several hypotheses and research questions to begin to addresses the dearth of research on this topic:
  - **H1:** Children will use tablets for 15 min. per day or less.
  - **H2:** Mothers experiencing more stressful personal and family situations will allow more frequent tablet use.
  - **Q1:** How often and in what ways do young children use tablets?

METHOD

Participants

- 358 mothers of children 12-48 months of age
  - Maternal age: M = 30.16 years (SD = 4.47)
  - Child age: M = 2.21 years (SD = 0.89)

Measures

- Child tablet use
  - Frequency of use, from 0 (*Never*) to 9 (*7+ hrs*)
  - Frequency of 13 activities on tablets, from 0 (*Never*) to 5 (*Very frequently*)
- Mothers' personal well-being
  - Frequency of 20 depressive symptoms (CES-D)[4]
  - Role overload (i.e., feeling overcommitted, stressed)[5]
- Mothers' relational well-being
  - Relationship satisfaction (QMI)[6]
  - Coparenting quality (CRS)[7]
  - Frequency of relationship conflict (RELATE)[8]
- Overall **personal** and **relational** well-being variables created
  - To reduce multicollinearity in regression model
  - Avg. of standardized scores (reversed if necessary)

Procedure

- Data drawn from a larger survey of women's media use
- Participants had to be currently married or living with a partner
- Completed informed consent; reported demographic info and frequency of media use; rated personal and relational well-being
- Women with a child 12-48 months were included in the current study (reported on youngest if they had more than one, 32%)
  - Responded to items regarding their child's tablet use

RESULTS

- 63% of mothers owned a tablet
- Mother and child tablet use were correlated (r = .29, p < .001)
- The majority of all mothers (69%; 54% in families with a tablet) reported that their child did ***not*** use a tablet in a typical day
- Most children (42%) who used tablets did so for 1-15 min/day, while about a quarter (28%) did so for 16-30 min/day
  - Children 25-48 months (n = 192) spent more time on tablets than 12-24 month-olds (n = 164), $\chi^2(4)$ = 15.37, p = .004
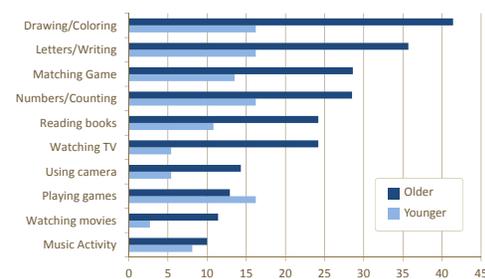

Figure 1. Percent of children who perform each activity "frequently" or "very frequently" on a 6-point scale from 0 (*Never*) to 5 (*Very frequently*)

- Children who used a tablet on a typical day (30%, n = 107) were included in analyses on the frequency of child app use (Figure 1).
- Child tablet use was positively predicted by child's age and mother's tablet use and negatively predicted by relational well-being (Table 1).

Table 1

Regression Predicting Frequency of Child's Tablet Use for Mothers who Own a Tablet (N = 225)

	B	SE B	β	t
STEP 1 (R^2 = 0.18; ΔR^2 = .16)				
Mother's age	0.01	0.02	0.03	0.47
Child's age	0.47	0.09	0.32	5.14
Number of children	-0.03	0.08	-0.02	-0.38
Mother's tablet use	0.20	0.05	0.27	4.43
Income	0.00	0.00	-0.08	-1.14
Education	-0.01	0.075	-0.01	-0.19
STEP 2 (R^2 = 0.22; ΔR^2 = .042)				
Personal well-being	-0.15	0.11	-0.09	-1.31
Relational well-being	-0.21	0.11	-0.14	-2.00

Note: Shaded cells indicate p < .05. Change in R^2 is significant for both steps (p < .001). All estimates are the final model estimates. $F(8, 216)$ = 7.705, p < .001, R^2 = .222.

CONCLUSIONS

- Despite AAP recommendation to avoid screen media exposure for children under 2,[2] even the youngest children in our sample used touchscreen devices.
- We found that tablet use was more frequent with age and with poorer maternal relational well-being.
- Given this, it may be that overarching media use recommendations for young children are inadequate for addressing differences in family circumstances.
- Future research should assess developmental outcomes of media use in relation to a variety of demographic and familial factors.
- With this information, recommendations could be developed for families with a variety of needs.

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