Structures for Screens: Longitudinal Associations Between Parental Media Rules and Problematic Media Use in Early Childhood

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Media use is increasingly becoming an important facet of early childhood, and while professional organizations and researchers have attempted to present guidelines to parents to help them structure their children’s media use, many parents either are not aware of these guidelines or struggle to effectively implement them into their children’s daily routine. This research aimed to examine what rules parents of young children are implementing to structure their children’s media use and how specific media rules affect the development of children’s problematic media use (an early indicator of media dependence) longitudinally from ages 2 to 4 (three time points, each 1 year apart) in a sample of n = 435 children. We found that more parents have rules around their child’s TV use than tablet use when children are around age 2 1/2 years old, and that a sizable minority of parents (n = 45; 10.30%) do not allow their child to use tablets at this same age. There was no relationship between media rules and problematic media use at Time 2. However, parents who did not allow their child to use tablets at Time 1 had lower levels of child problematic media use at Time 3, implying that the rules parents set around young children’s use of tablets and other personal media devices may be impactful in protecting children from the development of problematic media use.

Keywords: child problematic media use, media parenting, restrictive media monitoring

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Structuring Young Children’s Media Use

In 2020, the American Association of Pediatrics (AAP) published updated recommendations to help doctors, educators, and parents...
understand how they could help structure children’s media use in a developmentally adaptive manner. Specifically, these guidelines recommended that parents of children 18 months or younger restrict media use to video-chatting only and limit screen time to 1 hr or less for children 2–5. The new AAP guidelines also recommended designating media-free times and spaces (such as 1 hr before bedtime, during dinnertime, or removing media from bedrooms), co-viewing media with children, avoiding fast-paced or violent media, and recommending that parents avoid media-emotion regulation practices (American Academy of Pediatrics, 2022).

While these guidelines are backed by research on the effects of media on child development, the translation process from research to parenting practices is still somewhat rocky (Kostyrka-Allchorne et al., 2017). In many ways, parents are placed at a disadvantage as they were not raised on the same media and technological landscape they are now navigating as parents themselves, leaving many parents without models of effective media parenting. As a result, researchers have documented a wide range in parents’ approach to media parenting (e.g., Collier et al., 2016). Some parents discuss media use often with their children, talking about content viewed in particular (Coyne et al., 2017; Hefner et al., 2019; Lee, 2013), termed active mediation, while other parents take a more hands-off approach. They may feel overwhelmed or are incredibly busy (Roberts & Foehr, 2004), and as a result may not have the time to create or enforce rules or expectations around children’s media usage (Hefner et al., 2019). Other parents take an approach to media that includes placing rules and expectations of media usage and content on their children, termed restrictive mediation (Coyne et al., 2017; Hefner et al., 2019). Previous research has found that most parents (88%) create rules about the media content their children can watch, and over half of the parents (67%) create rules around the amount of time their child is allowed to use media (Vandewater et al., 2005), although these figures are somewhat outdated. In addition, many parents who attempt to restrictively monitor their young children’s media use are likely met with resistance from their children who may not be thrilled by the idea of only an hour of media a day or are reluctant to give up their tablets. While much research has been done on restrictive mediation (with a focus on rule-setting) as associated with the time children spend viewing media, the content they are exposed to (e.g., Collier et al., 2016) and academic achievement (Cingel & Hargittai, 2018), there is little research on how restrictive mediation might be related to the development of problematic media use during early childhood.

Additionally, most research focuses on restrictive mediation in general (i.e., “do you have rules surrounding media use”) as opposed to specific types of rules. It is possible that specific rules and guidelines might be more effective in preventing problematic media use over time as opposed to others. Our supposition that restrictive media monitoring may be related to children’s development of problematic media use early in life rests on the way that these rules may help to give structure to children’s early relationship with media. While most children live in a world saturated with media to varying degrees (Rideout & Robb, 2020), research suggests that the context of this media use can have vastly differing effects on children’s development. Some contexts have been linked to negative developmental outcomes, such as media emotion regulation practices (Coyne et al., 2021) or using media before bedtime (Cain & Gradisar, 2010). Other contexts, such as using FaceTime to communicate with distant family, have been linked to positive social development (Myers et al., 2017). Through the creation of rules and restrictive structures, we posit that parents may create contexts of development for their children that maximize the positive and minimize the negative contexts of children’s media use.

**Problematic Media Use**

One reason that structure around children’s media use is important is that the rules parents create around their child’s media use may serve as a protective factor, or create a protective context, against the development of problematic media use in early childhood. Problematic media use in children is defined as excessive media use that interferes with child functioning and development (Domoff et al., 2020). Defined as such, problematic media use captures dysfunction across developmental domains, including social, behavioral, and emotional, due to excessive or maladaptive media use, exemplified in the following behaviors: loss of interest in other activities, preoccupation with media, withdrawal from others due to media use, high tolerance for media consumption, and deception surrounding media use (Domoff et al., 2019).

The long-term consequences of problematic media use are more thoroughly documented in adolescence through adulthood (termed internet gaming disorder or pathological media use), although more recent research has begun to examine the early roots of problematic media use in samples of children (e.g., Domoff et al., 2019).

**Interactional Theory of Childhood Problematic Media Use**

The relationship between the emergence of problematic media use in early childhood and the rules and structures parents create around their children’s media use is perhaps best viewed through the lens of the Interactional Theory of Childhood Problematic Media Use (IT-CPU; Domoff et al., 2020). Drawing from Bronfenbrenner’s bioecological framework, the IT-CPU conceptualizes problematic media use being developed over time through proximal processes, or continual processes of interaction between the child and media (Bronfenbrenner & Evans, 2000). These proximal processes are understood to be influenced by contextual factors, namely distal factors, proximal factors, and maintaining factors.

Distal factors comprise contextual factors that place children at heightened risk for the development of problematic media use, including low socioeconomic status (SES), household chaos, and parents/caregivers’ own problematic media use. It is important to note that distal factors are not conceptualized as directly influencing children’s problematic media use but rather create an environment in which media behaviors develop. Proximal factors are then perhaps best understood as the transformation of distal factors, such as household chaos, into processes, such as parent’s inconsistently limiting or allowing media use. Within the IT-CPU framework, proximal factors are broken up into three realms: the child, the parent/family, and social influences. All three of these realms may engage in processes that drive the development of problematic media use. For example, a parent may give their young child media to regulate their emotions, a process that has been linked to problematic media use (Coyne et al., 2021). Finally, child problematic media use is also influenced by maintaining factors, or the processes and contexts which reinforce (or maintain) patterns of
problematic media use, such as a child becoming more emotionally reactive as parents employ emotion regulation strategies more often (Coyne et al., 2021).

For this study, we conceptualize the rules that parents create around their children’s tablet and TV use as proximal factors, as they serve as proxy for media use processes such as restriction of media use both temporally and spatially. For example, if parents have a rule that their child is not allowed to watch any TV an hour before bedtime, this rule implies that those parents are actively restricting their child’s media use and provides evidence for specific media habits (namely, not using media before bed). Other rules could include using media as a reward, which suggests that parents require specific behaviors or tasks completed prior to the use of media. Thus, while rules that parents create around media use are structures, they are suggestive of processes a child regularly engages in.

The Present Study

Drawing from the IT-CPU framework and prior research examining the rules that parents create around children’s media use, we will explore the following research question.

**Research Question 1:** What rules do parents of 2-year-old children create around the use of tablets and television for their children?

As our theory and prior research suggest that having structure and healthy media habits will be protective against the development of problematic media use, this study will also explore the following research.

**Research Question 2:** What media rules around tablet and TV use are protective against the development of children’s problematic media use?

**Method**

**Procedure**

Data for this study came from Waves 3, 4, and 5 of Project M.E.D.I.A., an ongoing, longitudinal study of children’s development in the context of media and technology. At Wave 1 of Project M.E.D.I.A., 500 primary caregivers participated in this study (97% female). At Wave 2, 19 additional low-income primary caregiver–infant dyads (household income below $50,000) were recruited for participation in Project M.E.D.I.A. using mailers sent to the participant’s home through the Colorado Office of Health and Vital Records that identified anyone in the local area who had a child that was over one but under two for a final total sample of 519 infants. Retention between Waves 1 and 3 was 94.74%. Wave 3 will be referred to as Time 1, Wave 4 as Time 2, and Wave 5 as Time 3 for the remainder of the article. Time 1 data were collected in 2019, and at that and each subsequent year, participants were sent an online survey, which participants were compensated $50 in Visa or Amazon gift cards for completing. Each time point is approximately 12 months after the first. All participants were proficient in English. All procedures were approved by the Institutional Review Board of Brigham Young University, review application number F16089.

At Time 1, participants who did not provide data on the types of rules they had for their children’s media use were dropped from the sample, yielding a total sample of n = 435 for our analyses. Regression analyses revealed no differences in income, β = 0.001, SE = 0.001, p = .401, ethnicity, β = −0.002, SE = 0.01, p = .685, and children’s problematic media use at Time 1, β = 0.0004, SE = 0.004, p = .916, between participants who were dropped due to missing data and those who were not missing.

The majority of children in our final sample were male (n = 230; 52.87%) by a small margin, the rest being female. In addition, 70.57% were White-non-Hispanic, 6.90% African American, 14.48% Latin American, 2.76 Asian or Asian American, and 4.83% other. The average age of primary caregivers (predominantly female) was 30.54 years (SD = 5.56 years), and the average age of children being 29.68 months (SD = 3.73 months) at Time 1. In terms of income, 7.36% of our sample came from households with an annual income of less than $15,000, 6.90% had an annual income of $15,000–$24,999, 7.36% at $25,000–$34,999, 12.18% at $35–$49,999, 21.38% at $50,000–$74,999, 16.32% at $75,000–$99,999, 19.31% at $100,000–$149,999, and 8.97% at $150,000 or more.

**Measures**

**Child Problematic Media Use**

Using the nine-item Problematic Media Use Measure—short form (PMUM-SF), parents reported on children’s problematic media use (Domoff et al., 2019) at Times 1, 2, and 3. The PMUM is designed to evaluate multiple domains of media interference, mainly for children under 12. Some of these behaviors that are assessed include loss of interest in a variety of activities, preoccupation with media, withdrawal, tolerance, deception, and serious problems due to use. Parents use a 5-point Likert-type scale from 1 (never) to 5 (always) to answer. Example items include “When my child has had a bad day, screen media seems to be the only thing that helps him/her feel better” and “The amount of time my child wants to use screen media keeps increasing.” Items are averaged, and higher scores indicate increased problematic media use by young children. Reliability tests for this sample produced a Cronbach’s α of .76.

**Parental Media Rules—Tablets and TV**

To assess the rules around their child’s media use parents created, at Time 1 of our study, parents were asked, “Do you have rules about how long your child can watch TV each day?” and “Do you have rules regarding how long your child can play media games each day (e.g., on the iPad or phone)?” Parents could respond either “Yes” or “No.” Parents who responded “Yes” were then asked, “If so, what are your rules?”, and parents were given an open response box, where they recorded what their rules were.

Two undergraduate research assistants coded these responses. Using a grounded theory approach (Walker & Myrick, 2006), coders and the primary investigator read all parent responses and then met to discuss common themes they observed for both tablets and television. The themes identified were “Has no rules,” which was coded when parents responded “No” to the first question about media rules; “Uses media as a reward,” when parents discussed using media as a reward for completing a household chore, good
behavior, or as a reward for playing outside. The next rule, “No use of this type of media before bedtime” was coded when parents reported their child was not allowed to use that type of media, either TV or tablets, before going to bed. Next, “Only can use this type of media at specific times of day” referred to when parents talked about only allowing media use at specific times, such as right after school or after lunch. “Only use this type of media on weekends” referred to parents talking about only allowing their child to watch TV or play with tablets on Saturdays and Sundays. Next, “Only 1 hour or less of this type of media each day” referred to parents limiting their child’s media use based on the amount of time they spent. It is important to note that many parents conceptualized this time limit in terms of episodes (e.g., watch two 20-min episodes) instead of simply as a function of time. “Rules around this type of media use are ambiguous” referred to when the rules parents explained were contradictory or unclear. Finally, “This type of media use is not allowed” referred to when parents talked about now allowing their child to use any of this type of media. Overall, codes were not mutually exclusive, apart from “No Rules” and “This type of media use is not allowed,” and participants could receive multiple codes for media rules.

After meeting to develop the codes, each individual research assistant coded all of the parent responses for both television and tablets. After coding all the responses, the two research assistants met with the primary investigator to reconcile any discrepancies in coding, reaching 100% agreement. Prior to reconciliation, discrepancies existed in only 29 out of 870 total observations (an agreement rate of 96.67%). These codes were used as binary variables in the analyses (0 = do not have that rule; 1 = has that rule).

Child Media Use (Frequency)

Participants were asked to note the daily frequency of media use among various types of media, to determine the frequency at which their child engaged in media at Time 1. Participants answered on a 6-point Likert scale from 1 (not used) to 6 (more than 4 hr). Participants recorded their daily use for a variety of media including television, using the computer, reading books or magazines, playing video games, using apps, listening to music, and using social media. For this study, we only used measures of how much time children spent using tablets and television. Child media use was included in the analyses as a covariate.

Analysis Plan

Prior to examining our research questions, we will present descriptive statistics pertaining to the mean levels of problematic media use within our sample at each time point. As media rules for tablets and TV are all presented as dichotomous, point biserial correlations were used, and bivariate correlations were used for continuous variables. To examine the rules around media use—specifically television and tablets—that parents create for young children, we first presented frequencies of each type of media rule coded for in the study. We then examined bivariate correlations between children’s problematic media use, time spent using both tablets and television, and rules parents created around their child’s media use. Using an ordinary least squares (OLS) regression framework in Stata 17, we constructed four separate models, one set predicting child problematic media use at Time 2 by media rules for both tablets and TV (two separate models), and a second set predicting children’s problematic media use at Time 3 by media rules (again as two separate models for tablets and TV). Due to low frequency of some of the specific media rules coded for, only rules for either tablets or TV where 10 or more participants said they had that rule were included as covariates in either of the regression analyses. In each of the four models, time spent watching TV and playing with tablets, family income, and ethnicity were included as covariates. Media rules were included in the model as dummy variables, with 0 = does not have this rule and 1 = has this rule. No rules about this type of media use (either tablets or TV) were the comparison group. Ethnicity was used as a binary variable, with 1 = White non-Hispanic. The variance inflation factor was checked after running each regression, with values below 20 indicating no collinearity. Syntax is available upon request from the corresponding author.

Results

Descriptive Statistics

Mean levels of children’s problematic media use at all three time points in our sample were at or below 2.00 (see Figure 1), indicating that on average, parents reported children engaged in problematic media use behaviors relatively infrequently. Looking at the frequencies of media rules parents create around their children’s tablet and TV use, more parents do not have rules for their child’s tablet use ($n = 251$) than TV ($n = 156$; see Table 1). In contrast, however, more parents do not allow tablet use at all ($n = 45$) than TV ($n = 4$). Overall, parents seem to report higher frequencies of creating rules around their children’s TV use than tablet use.

Bivariate correlations reveal small correlations between children’s problematic media use at Times 1, 2, and 3 and various media rules for both tablets and TV (see Table 2). Specifically, having no rules around tablet use was negatively correlated with children’s problematic media use at each of the three time points, and having no rules around children’s TV use was positively correlated with children’s PMU at Times 2 and 3.

Child Problematic Media Use and Rules Around TV

Overall fit for our OLS regression predicting child problematic media use at Time 2 by media rules around TV was good, with an $R^2$ value of 0.36. Overall, there were no significant associations between media rules for TV and children’s problematic media use at Time 2 (see Table 3). Time spent watching TV significantly predicted children’s problematic media use, $\beta = 0.06, SE = 0.02, p = .002$, with children who watched more TV reporting slightly higher levels of problematic media use a year later. Income and ethnicity were not significantly associated with child problematic media use. Children’s problematic media use at Time 1 was significantly associated with problematic media use at Time 2, $\beta = 0.58, SE = 0.04, p < .001$.

When predicting children’s problematic media use at Time 3 by media rules around TV at Time 1, the overall model fit was good, with an $R^2$ value of 0.20. Again, there were no associations between rules around TV use and children’s problematic media use at Time 3 (see Table 4). Time spent watching TV at Time 1, as well as income and race/ethnicity, were likewise not associated with children’s problematic media use at Time 3, although children’s problematic
media use at Time 1 was associated with Time 3 PMU, $\beta = 0.44$, $SE = 0.05$, $p < .001$.

**Child Problematic Media Use and Rules Around Tablets**

Overall fit for our OLS regression predicting child problematic media use at Time 2 by media rules around tablets was good, with an $R^2$ value of 0.34. Of the media rules examined, none were significantly associated with children’s PMU at Time 2 (see Table 3). While time spent using tablets, race/ethnicity, and household income was not associated with children’s T2 problematic media use, children’s problematic media use at Time 1 was, $\beta = 0.60$, $SE = 0.05$, $p < .001$.

Our final regression model predicted children’s problematic media use at Time 3 by rules around children’s tablet use at Time 1 (see Table 4). Overall fit was good, with an $R^2$ value of 0.20. Of the tablet rules examined, children of parents who did not allow their children to use tablets at Time 1 had significantly lower levels of problematic media use at Time 3 than children who were allowed to use tablets in any capacity at Time 1, $\beta = -0.24$, $SE = 0.09$, $p < .012$ (see Figure 2). Again, our demographic covariates were not significantly associated with children’s problematic media use at Time 3, although initial levels of problematic media use were, $\beta = 0.44$, $SE = 0.05$, $p < .001$.

**Discussion**

Overall, the purpose of this article was to first examine what rules parents of young children are implementing to structure their children’s media use and second to examine the relationship between specific media rules that parents are implementing and the development of children’s problematic media use longitudinally over a 2- and 3-year period during early childhood. We found that more parents have rules around their child’s TV use than tablet use.

### Table 1

**Frequency of Parent’s Media Rule at Time 1**

<table>
<thead>
<tr>
<th>Rules about child media use</th>
<th>Tablet</th>
<th></th>
<th>TV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>No rules about this type of media</td>
<td>251</td>
<td>57.44</td>
<td>186</td>
<td>42.56</td>
</tr>
<tr>
<td>Using this media is a reward (e.g., after cleaning up or helping</td>
<td>7</td>
<td>1.60</td>
<td>430</td>
<td>98.40</td>
</tr>
<tr>
<td>around the house)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No use of this type of media before bedtime</td>
<td>1</td>
<td>0.23</td>
<td>436</td>
<td>99.77</td>
</tr>
<tr>
<td>Only can use this type of media at specific times of day</td>
<td>8</td>
<td>1.83</td>
<td>429</td>
<td>98.17</td>
</tr>
<tr>
<td>(e.g., after school)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only 1 hr or less of this type of media each day</td>
<td>65</td>
<td>14.87</td>
<td>372</td>
<td>85.13</td>
</tr>
<tr>
<td>Only use of this type of media on the weekends</td>
<td>4</td>
<td>0.92</td>
<td>433</td>
<td>99.08</td>
</tr>
<tr>
<td>Rules around this type of media use are ambiguous (cannot be</td>
<td>66</td>
<td>15.10</td>
<td>371</td>
<td>84.93</td>
</tr>
<tr>
<td>clearly articulated or seem contradictory)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This type of media use is not allowed</td>
<td>45</td>
<td>10.30</td>
<td>392</td>
<td>89.70</td>
</tr>
</tbody>
</table>

**Note.** Percentages were taken out of the total participants ($n = 437$).
## Table 2

**Bivariate Correlations**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>7</th>
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<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CPMU T1</td>
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<td>2. CPMU T2</td>
<td>.55***</td>
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<tr>
<td>3. CPMU T3</td>
<td>.42***</td>
<td>.61***</td>
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<tr>
<td>4. Income</td>
<td>.04</td>
<td>-.01</td>
<td>.02</td>
<td></td>
<td></td>
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<tr>
<td>5. Non-White</td>
<td>.05</td>
<td>.03</td>
<td>-.04</td>
<td>-.25***</td>
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<tr>
<td>6. Tablet time T1</td>
<td>.16**</td>
<td>.03</td>
<td>.01</td>
<td>-.13**</td>
<td>.22***</td>
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<tr>
<td>7. TV time T1</td>
<td>.13**</td>
<td>.21***</td>
<td>.13*</td>
<td>-.26***</td>
<td>.15***</td>
<td>.28***</td>
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<tr>
<td>8. No tablet rules</td>
<td>.001</td>
<td>.08</td>
<td>.06</td>
<td>-.04</td>
<td>-.04</td>
<td>.001</td>
<td>.04</td>
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<tr>
<td>9. 1 hr or less tablet</td>
<td>-.02</td>
<td>-.04</td>
<td>-.06</td>
<td>.08</td>
<td>.01</td>
<td>.02</td>
<td>-.02</td>
<td>-.48***</td>
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</tr>
<tr>
<td>10. Ambiguous tablet rules</td>
<td>.11*</td>
<td>.02</td>
<td>.06</td>
<td>.03</td>
<td>.001</td>
<td>.04</td>
<td>-.02</td>
<td>-.48***</td>
<td>-.12*</td>
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<td>.05</td>
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<td>.14**</td>
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<td>-.04</td>
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<td>-.07</td>
<td>-.24***</td>
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</table>

M  | 1.70 | 1.91 | 1.99  
SD | .56  | .62  | .61   

**Note.** Point biserial correlations were used for binary variables. Bivariate correlations were used for continuous variables. CPMU = Childhood Problematic Media Use.  
* $p < .05$. ** $p < .01$. *** $p < .001$.  

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when children are around age 2 and half years old, and that a sizable minority of parents ($n = 45; 10.30\%) do not allow their child to use tablets at this same age. Furthermore, we found that while there are overall themes in the rules parents create around their young children’s media use, there is also diversity, with our analyses identifying seven different media rules.

While there was no relationship between media rules and problematic media use at Time 2, parents who did not allow their child to use tablets at Time 1 had lower levels of child problematic media use at Time 3. These findings provide several insights into how the rules that parents create around their children’s media use may influence the development of media dependence over time and should be interpreted in the context of our sample.

First, it is perhaps unsurprising that parents create more rules around their children’s TV use than their tablet use, as the most common form of media use for young children is TV (Rideout & Robb, 2020). As such, parents are likely more attuned to the need to create structures around their children’s TV use as this is a form of media their child is more readily engaged in (Rideout & Robb, 2020). Specifically, the most common rule parents created around children’s TV use was that children could only watch 1 hr or less of TV ($n = 96; 22.07\%$). This is encouraging, as the limit on early screen time is one of the primary guidelines from the AAP. In contrast, the most common rule around children’s tablet use was coded as “ambiguous,” indicating that the rules were either contradictory or unclear. It is possible that as children are not using tablets as frequently as they are watching TV, parents are still attempting to figure out the best types of rules and structure to create around tablet use and haven’t settled on exact rules for their children yet. It is also possible that parents are more consistent at creating rules around children’s TV use compared to tablets because tablets are a newer medium and one that parents did not themselves grow up with.

When considering the effect of media rules on the development of problematic media use over time, it is interesting none of the media rules coded for, either for tablets or TV, predicted child problematic

<table>
<thead>
<tr>
<th>Variable</th>
<th>Child problematic media use T2</th>
<th>Child problematic media use T3</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$SE$</td>
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<tr>
<td>Child problematic media use T1</td>
<td>0.58</td>
<td>0.04</td>
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<td>Household income T1</td>
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<td>Non-White</td>
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<td>Time spent watching TV T1</td>
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<td>0.02</td>
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<tr>
<td>TV rules</td>
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<tr>
<td>TV as a reward</td>
<td>−0.18</td>
<td>0.13</td>
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<tr>
<td>No TV before bedtime</td>
<td>−0.07</td>
<td>0.19</td>
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<td>TV use depends on time of day</td>
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<td>0.10</td>
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<tr>
<td>Only 1 hr or less of TV a day</td>
<td>−0.002</td>
<td>0.07</td>
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<td>Only TV on the weekend</td>
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<td>Rules about TV are ambiguous</td>
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<tr>
<td>$R^2$</td>
<td>0.36</td>
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Note. Non-White is compared to White. All TV rules are modeled as binary categorical variables, with 1 = yes and 0 = no, with the no rules category serving as the comparison group. OLS = ordinary least squares; VIF = variance inflation factor; $SE$ = standard error.
media use at Time 2. In contrast, not allowing tablets at Time 1 was related to lower levels of child problematic media use at Time 3. These findings have several implications for parents and researchers. First, many parents find parenting around their children’s media use difficult and challenging, especially as structuring children’s media use is often met with resistance from young children. As in many aspects of parenting, while creating rules around young children’s media use may not have immediate or even short-term effects, there are long-term payouts. It is possible as well that because of the lower mean levels of problematic media use in our overall sample, the effects of specific media rules (such as not allowing tablets) may not manifest in our analyses until there is more variability in children’s levels of problematic media use. As such, researchers should continue to examine children’s problematic media use in the context of specific media rules over longer spans of time, as children’s problematic media use continues to develop and become more variable. It is also possible that our lack of findings was driven by the between-person analyses used in this study. Future researchers would do well to consider the effect of specific media rules on children’s problematic media use using person-centered analytic strategies (Beyens et al., 2021).

While it may have seemed intuitive that more specific rule may have been protective against the development of problematic media use, this was not the case, as our analyses suggest that children who were not allowed to use tablets at all displayed lower levels of problematic media use 2 years later, but no other rules were associated with children’s problematic media use. As our analyses controlled for initial levels of children’s problematic media use at Time 1, our analyses suggest that children whose parents allowed them to use tablets at Time 1 not only had higher levels of problematic media use at Time 3 but were also experiencing higher rates of change, or development, of problematic media use. In this light, we propose that tablets may create a “poor get poorer” context regarding children’s maladaptive dependence on media. Specifically, we suggest that using tablets and other handheld, personal devices may not only heighten children’s problematic media use but may place them on different developmental trajectories, as suggested by the differing rates of change in children’s problematic media use and the significant associations found in our point biserial correlations. It is possible that children who are more digitally dependent are given more media to use, for example, during proximal processes such as media emotion regulation (Coyne et al., 2021), which then exacerbates their already maladaptive relationship with media, thus yielding in a greater rate of uptake of problematic media habits and processes.

This is not to say that occasionally using a tablet when in a unique situation such as a flight or long road trip will place children at a heightened risk for the development of problematic media use, but rather, when possible, consistent tablet use should be avoided when children are very young (ages 2 and under). As the proximal processes that guide the development of problematic media use over time must be consistent in order to influence children’s development (Domoff et al., 2020), parents should focus on limiting tablet use so that they are not a consistent part of their children’s daily routines. This is challenging, as tablets may be used more often in unplanned situations, such as to calm a tantrum in the grocery store or to distract a child at a restaurant.

For researchers, our findings present evidence that the relationship between specific proximal processes between children and media takes some time to solidify and affect development, especially as outcome between children become more variable. This heightens the need for continual longitudinal research. Based on our findings, it is possible that over time, specific rules around media use such as limits on screen time may prove to be protective contexts for

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**Figure 2**

Mean Levels of Child Problematic Media Use (T3) by Media Rules; No Tablet Use

![Graph showing mean levels of child problematic media use (T3) by media rules.](image)

*Note.* Difference between PMU (T3) for children with no tablet use (T1) and tablets allowed is −0.24, SE = 0.09, *p* = .012. SE = standard error; PMU = problematic media use.
development. Furthermore, while much research pertaining to restrictive monitoring of media, or the creation of rules around children’s media use by parents, has largely focused on if parents create rules at all, these data suggest that additional nuance is needed. Specifically, researchers should consider what rules parents are creating, as our analyses suggest that the way parents chose to structure children’s media use is both widely varied and may have differential implications for children’s development. For practitioners and interventions, it may be important to encourage parents to implement not only rules around children’s viewing of television, as many parents in these data reported doing, but also around children’s use of tablets. This is especially important as rules around tablet use was less common in this sample but found to be more important for the development of children’s problematic media use over time.

Limitations and Future Research

While this study has several strengths, namely a longitudinal design and large sample size, there are also several limitations. First, although we attempted to gather a diverse sample in terms of SES and race/ethnicity, our sample is still somewhat limited by being primarily White middle-to-upper SES, with low SES families and Black, Indigenous, People of Color families being under-represented. These are significant limitations as the way that parents structure may vary considerably based on work situations (e.g., shift work vs. 9–5 jobs) and family cultures around media use. Future research should examine the effects of media rules on young children’s development in more diverse samples. Concerning our analyses, we did not assess if children had siblings or their birth order, which may influence how parents structure children’s media use via rules. In addition, we only examined parents’ rules around tablets and TV, as these are the two most common types of media used by young children, and smartphone use and rules were not included in our analysis. Additionally, we were unable to assess if these rules were followed or if children were aware of the rules around their media use, and media rules at Time 1 were the only rules included in the analyses. Future research should assess how children perceive media rules and if child perception and understanding play a meaningful role in the development of problematic media use. Furthermore, we assessed media rules by asking parents specifically about their rules around the amount of screen time their children had. While many parents responded by talking about the context they limited media use to, it is nonetheless important to acknowledge that future research should more broadly examine the rules around media use parents create for their children. In addition, while we were unable to assess how media rules shift and change over time as children age or the longevity of media rules, these nuances to how parents approach creating rules for their children’s media over time should be empirically examined, especially in conjunction with the development of children’s problematic media use.

Conclusion

Although media is becoming increasingly ubiquitous with childhood (Rideout & Robb, 2020), this article suggests that parents can meaningfully structure their children’s media use in a way that helps to protect their children from developing a maladaptive relationship with media, specifically by limiting their children’s use of tablets at a young age. While this can often feel like a daunting or overwhelming task for parents with little reward, the long-term benefits may be meaningful. Our hope is that this research can help parents recognize the most important places to focus their efforts and provide additional support in their efforts to help their young children learn how to navigate our digital world.

References


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