“We are well into screen OVERLOAD!”
Child Problematic Media Use and Parent Psychological Distress During COVID-19

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COVID-19 pandemic → many changes to family life\(^1,2\), disruptions in family system\(^3\)

Familial stressors → increased risk for mental health concerns for children and adults\(^4\)

Media is both a benefit and challenge for parents during the pandemic
+ social interaction\(^5,6\)
+ mental health services offered online\(^5\)
  - sleep\(^5,7\)
  - self-regulation\(^6,8\)
  - problematic media use\(^9\)

\(^1\)U.S. Census Bureau, 2020; \(^1\)Smith, 2020; \(^3\)Prime et al., 2020; \(^4\)Pfefferbaum & North, 2020; \(^5\)Nagata et al., 2020; \(^6\)Goldschmidt, 2020; \(^7\)Dutta et al., 2020; \(^8\)Radesky, 2020; \(^9\)Domoff et al., 2019; 2020
parenting and media

Prior to the pandemic: parents believed parenting is more difficult today *because* of technology\(^1\)

Now, during the pandemic, a child’s potentially problematic media use is seemingly a new stressor for parents!

The importance of moving beyond screen media use as a measurement tool\(^2\)

\(^1\)Auxier et al., 2020; \(^2\)Orben et al., 2020
Screen Time During the Coronavirus Crisis

What limits are appropriate when kids are stuck at home?

Hannah Sheldon-Dean
Aim 1:
Describe parent perceptions of child media use during the COVID-19 pandemic

Hypothesis: Parents will have largely negative views about media and host of concerns about child media use

Aim 2:
Examine how problematic media use and screen media use are related to parent psychological distress

Hypothesis: Problematic media use will be associated with higher parental distress above and beyond screen media use and daily COVID-19 impact
methods
methods

Mixed methods approach harnesses strengths of quantitative and qualitative analyses\(^1\)

**Quantitative**: large sample, objective methods, generalizability

**Qualitative**: depth of description, nuanced and subjective interpretation

**Convergent design (questionnaire variant)\(^1\)**:
- qualitative and quantitative data collected simultaneously in an online questionnaire
- quantitative and qualitative analyses were performed separately
- then the results from each were triangulated (i.e., compared, contrasted, synthesized) during the interpretation process

\(^1\)Creswell & Plano-Clark, 2018
methods

Final N: 466

456 mothers, 10 fathers
Parent Age: M = 38.22 (SD = 4.47), Range = 25 – 52

238 girls, 226 boys, 1 nonbinary, 1 prefer not to answer
Child Age: M = 5.44 (SD = 2.40), Range = 1.58 – 13

86.5%: both parent and child mono-ethnically White and non-Hispanic

Average yearly family income: $125,000 - $149,999
methods

Quantitative
Screen media-related items\(^1\): child media use as helping/hurting child, perceptions of screen media use, daily screen media use
Problematic media use\(^2\): Problematic Media Use Measure
COVID-19-related (Quantitative)\(^3\): Parent and child daily COVID-19 impact
Parent distress\(^4\): Parent mental health (PHQ-4)
Covariates: Racial/ethnic background, income, Marlow-Crowne Social Desirability Scale\(^5\), mention of community stress

Qualitative
Open-ended questions:
“Please describe anything else you would like to share about the impact of Coronavirus/COVID-19 on your child, whether positive impacts or concerns”

“If you have any final thoughts regarding your child’s media use or how the COVID-19 pandemic has impacted you, your child, or your family, please write them out here.”

\(^1\)Rideout, 2017; \(^2\)Domoff et al., 2019; \(^3\)Harkness, 2020; \(^4\)Kroenke et al., 2009; \(^5\)Reynolds et al., 1982
methods

Quantitative (N = 466):
- Aim 1: Descriptive statistics
- Aim 2: Hierarchical regressions

Qualitative (N = 302):
- Aim 1: Thematic analysis\(^1\) for 432 responses from 302 participants drawn from a larger study (Eales et al., under review).
  We focused on media-related themes and codes for this presentation
- Aim 2: Coding for “community stress” (1 = mention, 0 = no mention)

\(^1\)Braun & Clarke, 2006
results
### Aim 1 results: descriptives

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, do you think your child’s media helps, hurts, or makes no difference to their: (1 = <em>Helps</em> a lot, 5 = <em>Hurts</em> a lot)</td>
<td></td>
</tr>
<tr>
<td>Social skills</td>
<td>2.98 (0.85)</td>
</tr>
<tr>
<td>Learning</td>
<td>2.22 (0.88)</td>
</tr>
<tr>
<td>Ability to focus</td>
<td>3.41 (0.88)</td>
</tr>
<tr>
<td>Behavior</td>
<td>3.59 (0.84)</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>3.80 (0.82)</td>
</tr>
<tr>
<td>Creativity</td>
<td>2.72 (0.97)</td>
</tr>
</tbody>
</table>

![Bar charts for each variable](images)
aim 1 results: descriptives

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree or disagree with the following statements about screen media? (1 = Strongly agree, 4 = Strongly disagree)</td>
<td></td>
</tr>
<tr>
<td>1. In general, the less time kids spend with screen media the better off they are.</td>
<td>1.67 (0.65)</td>
</tr>
<tr>
<td>2. My child benefits from the screen media they use.</td>
<td>2.28 (0.61)</td>
</tr>
<tr>
<td>3. It is difficult to get my child to stop using screen media when I ask.</td>
<td>2.37 (1.00)</td>
</tr>
<tr>
<td>4. My child spends the right amount of time with screen media.</td>
<td>2.54 (0.83)</td>
</tr>
<tr>
<td>5. I spend the right amount of time with my own screen media.</td>
<td>2.86 (0.78)</td>
</tr>
</tbody>
</table>
Aim 1 results: thematic analyses

Six themes

**Media use**
- Restrict/allow more media
- Concern about rising screen time
- Media as the new babysitter
- Media as good/necessary evil

**Family routines**
- Many functions of media
- Family glued to devices
- Watch media together

**Child routines**
- Distance learning challenges
- Many functions of media
- More regular media use

**Changes in behaviors**
- Media self-regulation difficulties

**Social distancing**
- Socializing virtually is hard

**Weather**
- Weather affects media use
Aim 1: Qualitative Analyses

Theme: Media use

Codes:

Restrict/allow more media
Concern about rising screen time
Media as the new babysitter
Media as good/necessary evil

Quotes:

“My child is spending more time in front of a screen due to the presence of the school iPad at home. We are considering restricting use of that device in order to decrease the amount of time spent in front of screens.” - ID #170, mother of 8 yo

“I am concerned with how much screen time my child has and am worried that he will expect it to remain the same as we slowly get back to our normal lives.” - ID #428, mother of 3 yo

“Child’s media use is directly correlated to the need to keep occupied while parents are working from home.” - ID #191, mother of 7 yo

“We don’t like the additional screen time but it’s necessary for my husband to continue to work and take care of the kids while i’m working” - ID #336, mother of 4 yo
**Theme:** Media use

**Codes:**
- Restrict/allow more media
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**Quotes:**
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- "Child's media use is directly correlated to the need to keep occupied while parents are working from home." - ID #191, mother of 7 yo
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**Aim 1: Qualitative Analyses**
Media use

**Theme:**

- Restrict/allow more media
- Concern about rising screen time
- Media as the new babysitter
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Aim 1: Qualitative Analyses
Family routines

Theme:

Codes:
- Many functions of media
- Family glued to devices
- Watch media together

Quotes:
- "We had no screen media use for [child] prior to COVID. Now we use it to stay connected to high-risk family members."
  - ID #551, father of 2 yo
- "...we are well into screen OVERLOAD!"
  - ID #405, mother of 4 yo
- "...with fewer evening activities, we've been spending more family time watching TV (mostly educational documentaries and mini-series, since we all like them)..."
  - ID #110, mother of 10 yo

Aim 1: Qualitative Analyses
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<th>Theme:</th>
<th>Codes:</th>
<th>Quotes:</th>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>Codes:</td>
<td>Quotes:</td>
</tr>
<tr>
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<td>Distance learning challenges</td>
<td>Many functions of media</td>
<td>More regular media use</td>
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<tr>
<td></td>
<td>“Online schooling was incredibly difficult. We made it 3 days before contacting the school and requesting accommodations.” – ID #311, mother of 5 yo</td>
<td>“We do let the kids spend more time on screens than before - kids can play Roblox or FaceTime with friends.” – ID #146, mother of 9 yo</td>
<td>“Screentime has SKYROCKETED, never in a million years would I imagine we would be using screens this much (pre covid-19 we only used ipads on plane rides... now they are used daily)...” – ID #348, mother of 4 yo</td>
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Aim 1: Qualitative Analyses
**Theme:**

**Child routines**

**Codes:**
- Distance learning challenges
- Many functions of media
- More regular media use

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**Aim 1: Qualitative Analyses**
### Changes in behaviors

#### Media self-regulation difficulties

“…she would sneak her school tablet to also have [more] screen time. She [is] not able to self regulate screen time and stay focused on school materials” – ID #514, mother of 8 yo

#### Socializing virtually is hard

“It's been very hard on [child’s] social life as he had a lot of friendships at his school and doesn’t engage with his friends virtually very well” – ID #323, mother of 4 yo

#### Weather affects media use

“More screen time in the colder months. More outside play now.” – ID #504, mother of 3 yo

### Social distancing

### Weather

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**Aim 1: Qualitative Analyses**
Themes:

Changes in behaviors

Social distancing

Weather

Codes:

Media self-regulation difficulties

Socializing virtually is hard

Weather affects media use

Quotes:

“…she would sneak her school tablet to also have [more] screen time. She [is] not able to self regulate screen time and stay focused on school materials” – ID #514, mother of 8 yo

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### aim 2 results: predicting parent distress

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD) or %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental psychological distress (^a)</td>
<td>3.00 (2.67)</td>
</tr>
<tr>
<td>Family income (^b)</td>
<td>5.80 (2.19)</td>
</tr>
<tr>
<td>Social desirability (^c)</td>
<td>1.55 (1.03)</td>
</tr>
<tr>
<td>White/non-White</td>
<td>86.5%</td>
</tr>
<tr>
<td>Community stress mentioned (Y/N) (^d)</td>
<td>46.8%</td>
</tr>
<tr>
<td>Parent daily COVID-19 impact (^e)</td>
<td>3.77 (1.04)</td>
</tr>
<tr>
<td>Child daily COVID-19 impact (^e)</td>
<td>3.45 (1.11)</td>
</tr>
<tr>
<td>Screen media use (in minutes per day)</td>
<td>237.24 (121.27)</td>
</tr>
<tr>
<td>Problematic media use (^e)</td>
<td>2.19 (0.90)</td>
</tr>
</tbody>
</table>

Note. \(^a\) Possible range: 0 – 12. \(^b\) Family income: 1 = Less than $25,000; 2 = $25,000-$49,999; 3 = $50,000-$74,999; 4 = $75,000-$99,000; 5 = $100,000-$124,999; 6 = $125,000-$149,999; 7 = $150,000-$174,999; 8 = $175,000-$199,999; 9 = $200,000 or more. \(^c\) Possible range: 0 – 3. \(^d\) Data were collected right after the killing of Mr. George Floyd in Minneapolis, MN. We coded open-ended responses for whether or not participants mentioned his killing and/or the events surrounding his killing as a potential extra stressor. \(^e\) Possible range: 1 – 5.
### Aim 2 results: predicting parent distress

#### Unstandardized coefficients and confidence intervals

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family income</td>
<td>-0.15** (-0.26, -0.04)</td>
</tr>
<tr>
<td>Socially desirable responses</td>
<td>-0.29* (-0.51, -0.06)</td>
</tr>
<tr>
<td>White</td>
<td>-0.18 (-0.87, 0.51)</td>
</tr>
<tr>
<td>Community stress mention</td>
<td>0.56* (0.09, 1.03)</td>
</tr>
<tr>
<td><strong>Parent: COVID-19 impact</strong></td>
<td><em><em>0.35</em> (0.07, 0.64)</em>*</td>
</tr>
<tr>
<td>Child: COVID-19 impact</td>
<td>0.14 (-0.14, 0.41)</td>
</tr>
<tr>
<td><strong>Screen media use time</strong></td>
<td><strong>-0.0006 (-0.003, 0.001)</strong></td>
</tr>
<tr>
<td><strong>Problematic media use</strong></td>
<td><strong>0.44</strong> (0.16, 0.72)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.59* (0.18, 3.00)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.13</td>
</tr>
<tr>
<td>F Statistic</td>
<td>8.22**</td>
</tr>
</tbody>
</table>

* $p < 0.05$; ** $p < 0.01$

**Problematic media use predicted increased parent distress**

**Screen media use did not predict parent distress**
discussion
aim 1: perceptions of media during the pandemic

- Parents are seeing some benefits to screen media, but also have concerns
  ◦ Benefits: creativity, parent ability to work, learning, connection with family and friends
  ◦ Concerns: physical activity, ability to focus, behavior changes, screen “overload”

- Parents are aware of their own media use

- Media use as good/necessary evil
aim 2: child media use and parent distress

- Problematic media use is contributing something *different* to parent psychological distress than screen media use

- Problematic media use predicted distress, even with daily COVID-19 impact in the model

- Concern about post-COVID child media use
limitations

- Parent-reported data
- Directionality of distress-problematic media use relation
- Self-selected participant pool
- Predominately White, middle-to-high-income sample
Thank you to Dr. Sarah Domoff for organizing this symposium

Thank you to the rest of the Culture & Family Life Lab at the University of Minnesota
  ◦ Especially Reece Alstat!

Thank you to our participants!

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https://osf.io/pcv9w/