Effects of pandemic school and care disruptions on child and family well-being

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July 30, 2021
Motivation

This fall, it looks like:

1) Most employers will have resumed in-person work
2) All kids <12 will be unvaccinated
3) Many kids 12+ will be unvaccinated
4) Variants will be circulating

→ Classroom/school closures due to positive cases will be likely, with disruptive implications for families

Can we use evidence from last school year on disruptions by mode, parent/child mental health, and perceived learning loss to inform school and public health policy?
We draw from our ongoing surveys of vulnerable families

• Sample of ~1,000 hourly service workers with young children in Philadelphia, recruited in late summer-fall, 2019

• Originally focused on work schedule unpredictability and worker and family well-being

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
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<tbody>
<tr>
<td>Race/ethnicity (%)</td>
<td></td>
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<tr>
<td>African-American</td>
<td>49.5%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>18.2%</td>
<td></td>
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<tr>
<td>Asian</td>
<td>3.3%</td>
<td></td>
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<tr>
<td>Multi-racial</td>
<td>2.3%</td>
<td></td>
</tr>
<tr>
<td>Hispanic (of any race)</td>
<td>22.5%</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>31.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Female (%)</td>
<td>83.1%</td>
<td></td>
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<tr>
<td>Education (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a high school education</td>
<td>26.3%</td>
<td></td>
</tr>
<tr>
<td>Exactly a high school education</td>
<td>44.3%</td>
<td></td>
</tr>
<tr>
<td>Monthly household income</td>
<td>$2,239</td>
<td>$1,672</td>
</tr>
<tr>
<td>Child characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>4.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Female (%)</td>
<td>50.0%</td>
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Approach

• Ask parents about their work and home experiences and well-being via basic SMS text message every day for 1 month

• Latest wave of daily data collection was in Fall 2020, added questions about school/care disruption

• Context: Philadelphia public schools all-virtual in Fall 2020; some charters, privates & day care centers in-person over this period
Percent of families experiencing at least 1 disruption during the Fall 2020 sample month

- Overall: 77.3%
- Remote only: 78.2%
- In-person only: 69.4%
Share of days over the sample month with a disruption

- Overall: 24.4%
- Remote only: 23.9%
- In-person only: 17.6%
Family well-being is worse on days with disruption to school or child care

- Child uncooperative (externalizing behavior): 9.2%***
- Child sad/worried (internalizing behavior): 6.0%***
- Parent lost temper with child: 5.6%***
- Parent anxious/depressed: 12.7%***

Overall: 41.6%

Increase when school is disrupted: 14.1%

*** p < .001
Fall disruptions predict reported parent concerns in Spring

<table>
<thead>
<tr>
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<th>P(parent wants a change in mode)</th>
<th>P(parent reports learning less than usual)</th>
</tr>
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<tbody>
<tr>
<td>Share of days disrupted in Fall</td>
<td>.304*** (0.053)</td>
<td>.164** (0.062)</td>
</tr>
<tr>
<td>Base rate</td>
<td>0.398 (0.015)</td>
<td>0.724 (0.018)</td>
</tr>
</tbody>
</table>
Results

• school/care instability was common and frequent last fall
  – Even higher in remote, so moving away from in-person doesn’t reduce
  – But still quite high in-person

• (w/family FE) instability on a given day harms family well-being, across modes
  – Worse child internalizing & externalizing symptoms
  – Worse parent mood & harsh parenting behavior

• extent of Fall disruptions predicts:
  – parents’ Spring perceptions of learning: more disruptions, less learning
  – parents’ dissatisfaction with their mode, as proxied by wanting to switch modes (except among those using in-person)
Considerations for Policymaking

- Instability in care and school is harmful to children and families
- Other modes even worse, but in-person still has high levels
- Steps that reduce cases and therefore school closures can improve child and family well-being
Funding for this work provided by:

- Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health (#1R21HD100893-01)
- National Science Foundation (# SES-1921190)
- Russell Sage Foundation (#1811-10382)
- Washington Center for Equitable Growth
- W. T. Grant Foundation

Thank you!
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