Child development in the digital age: The new divide

Candice L. Odgers
Jacobs Center-CCWD Workshop

University of California, Irvine
In 2018, 95% of adolescents have access to a mobile phone (Pew, 2018)

Tweens, spend 4.36 hours on media screen time
Teens, spend 6.40 hours on media screen time

Common Sense Census, 2015
Access Begins Early (N = 2100 adolescents aged 10-15)

- Traditional digital divide is disappearing
- Few differences in mobile device access, by SES
- But, differences in social media access and experiences

George, Odgers et al, submitted
Bad Apple: shareholders call to end child smartphone addiction in open letter
Is this constant connection harming our kids?

Most research supports the “Goldilocks” hypothesis...
No association with moderate levels of screen time…

Negative correlation at “high” levels, BUT

Less than 1% of the variation explained, and

CORRELATIONAL!

- Przybylski et al, Psych Science
30 days, 3x per day via mobile phone

Real-life assessment (vs. lab)

RAISE Study

N = 2000 adolescents + Admin
n =400 BioBaseline + EMA
**Contextual triggers of health risk behaviors**

- Within individual (fixed effects)
- Wearables
- EMA, geo-stamp

**Perceived Social Status and Mental Health Among Young Adolescents: Evidence From Census Data to Cellphones**

Rivenbark, Odgers et al, in press
Ecological Momentary Assessment

RAISE
Multilevel
14 day EMA

Person 1

Day 1

AM PM NIGHT

... Day 14 ...

AM PM NIGHT

Person 387

Day 1

AM PM NIGHT

... Day 14 ...

AM PM NIGHT
Daily level, few associations between usage and mental health

N = 2000 adolescents + Admin Records
n = 400 BioBaseline + EMA

Ecological Momentary Assessment
Daily Goldilocks Effect?

For 99% of teens, small association; more time online, less depressive symptoms
Apple investors say iPhones cause teen depression. Science doesn't

Two major Apple investors have called on the company to address concerns around smartphones and teens' mental wellbeing – but the evidence linking phones and depression is less than conclusive

“In the most kind terms possible, the data isn’t there.”
- Andrew Przybylski
Seven Fears and the Science of How Mobile Technologies May Be Influencing Adolescents in the Digital Age

Madeleine J. George¹ and Candice L. Odgers¹,²
¹Department of Psychology and Neuroscience, Duke University, and ²Sanford School of Public Policy, Duke University

1. Safety, Who are they talking to?
2. Cyberbullying, new victims?
3. ‘Alone Together’, no social skills?
4. Being ‘someone else’ online?
5. Digital divide with parents?
6. Impaired cognitive performance?
7. Losing their sleep?
Does all this mean that we should *not* focus on digital tech usage among youth?
Growing divide in parental investments
In 2018, **95%** of adolescents have access to a mobile phone (Pew, 2018)

- **Tweens**, spend **4.36 hours** on media screen time
- **Teens**, spend **6.40 hours** on media screen time

**Teens in low-income households** spend, on average, **3 hrs more** per day on screens
Smartphones are bad for some teens, not all

Young people who are already struggling offline might experience greater negative effects of life online, writes Candice Odgers.

In Europe, smartphone ownership among young people aged 9 to 16 is 46%, according to a 2014 survey of 7 countries.

SOCIAL MEDIA SPILLOVER

In an unpublished survey of 2,100 US teens, those from low-income families are more likely than their affluent peers to report offline problems stemming from use of social media.

<table>
<thead>
<tr>
<th></th>
<th>Percentage of adolescents reporting problems</th>
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</thead>
<tbody>
<tr>
<td>Face-to-face argument</td>
<td>12</td>
</tr>
<tr>
<td>Trouble at school</td>
<td>8</td>
</tr>
<tr>
<td>Physical fight</td>
<td>4</td>
</tr>
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Disadvantaged Non-disadvantaged
What are the risks in blaming smartphones?

Missing real causes of increases in costly disorder like depression

Distracting attention from privacy, rights, and responsibilities

Missed opportunities for innovation and intervention
Contact & Funding Support

Candice L. Odgers, Ph.D

codgers@uci.edu
@candice.odgers
adaptlab.org