Who Is Most at Risk and Who is Most Likely to Benefit from Using Social Media Long-Term? A Differential Susceptibility Approach

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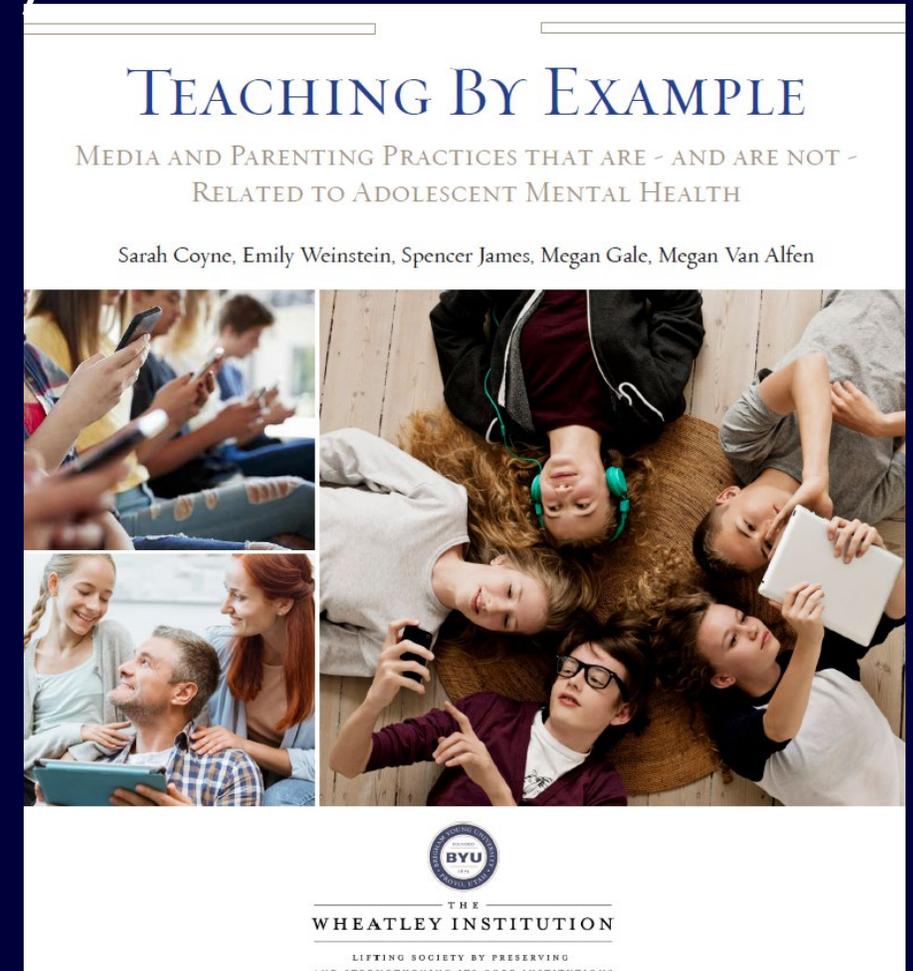
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Problems with the literature

- 1. Cross sectional, self report

- 2. Ignores content and context

- 3. Doesn't take teen voices into account

- 4. Poor measurement

- 5. Moderators not accounted for

- 6. Individual susceptibility not examined

- 7. Ignores within person effects
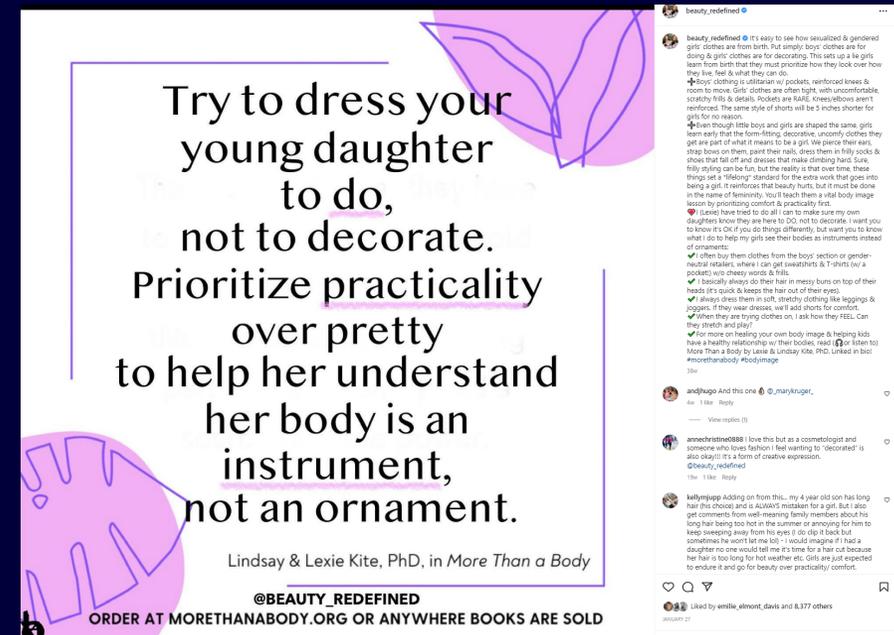
Study 1 (context): Social media and mental health: A National Study (Coyne, et al., 2022)

- 1231 adolescents (ages 10-17)
- National quota sample from across the USA
- 57% white
- Avg income $50-60k

TEACHING BY EXAMPLE

MEDIA AND PARENTING PRACTICES THAT ARE - AND ARE NOT - RELATED TO ADOLESCENT MENTAL HEALTH

Sarah Coyne, Emily Weinstein, Spencer James, Megan Gale, Megan Van Alfen

THE WHEATLEY INSTITUTION

LIFTING SOCIETY BY PRESERVING AND STRENGTHENING ITS CORE INSTITUTIONS

Media context

- What didn't matter?
  - Time spent on social media
  - Age at first smart phone

- What was risky?
  - Social comparisons
  - Problematic media use
  - Parent social media time
  - Parental technoference

- What was protective?
  - Active social media use
  - Attending a school with a strong digital literacy program
  - Parent active mediation
  - Warm and responsive parenting

Warm parenting and adolescent mental health
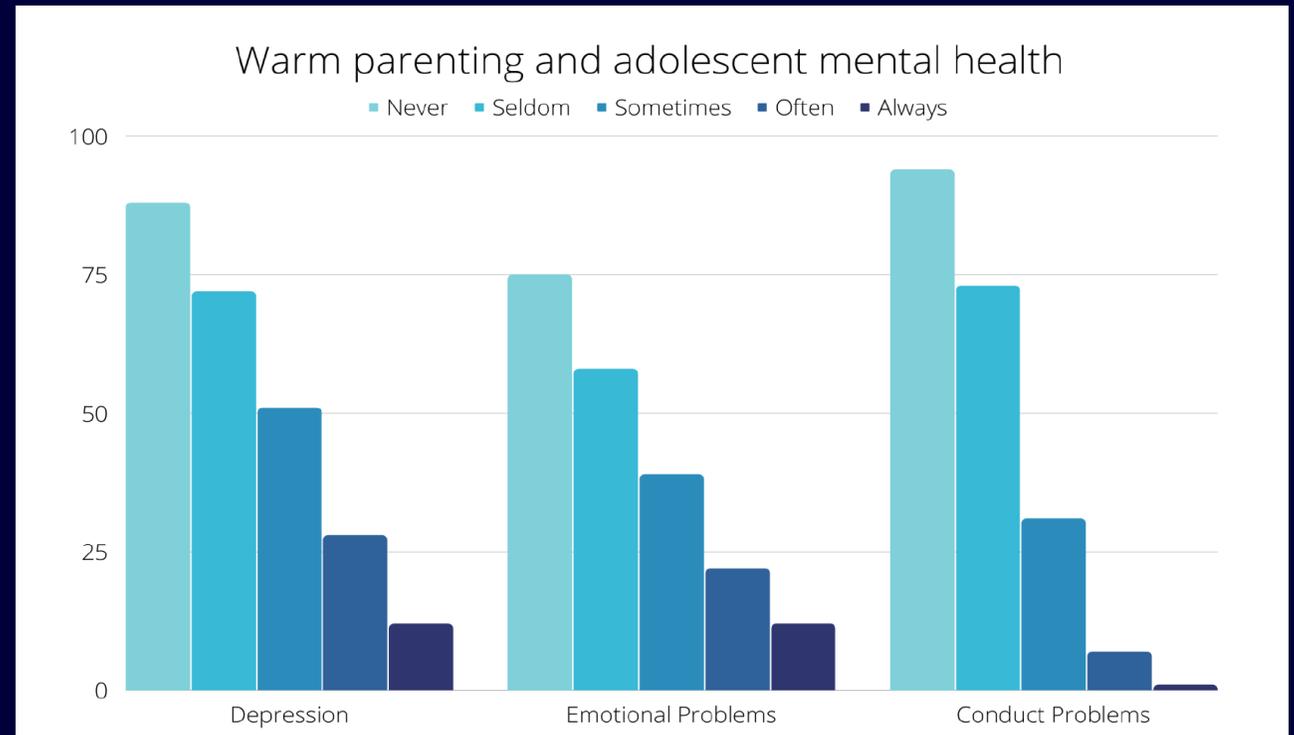
Study 2 (longitudinal and within subjects):

8-year longitudinal study on social media and mental health (Coyne, Rogers, Stockdale, Zurcher, Booth, 2019)

Method

- Flourishing Families Project

- 500 adolescents (47% male)

- 68% European American, 11% African American, 23% Multi-ethnic

- Tested at eight different time points approximately 1 year apart for each measurement (between 2009 and 2016, ages 13-20)

- 90% retention rate across all eight years

Figure #. *Within-person auto-regressive and cross-lagged associations between social networking and (a) depressive symptoms and (b) anxiety from ages 13 – 20.*

(a)

(b)
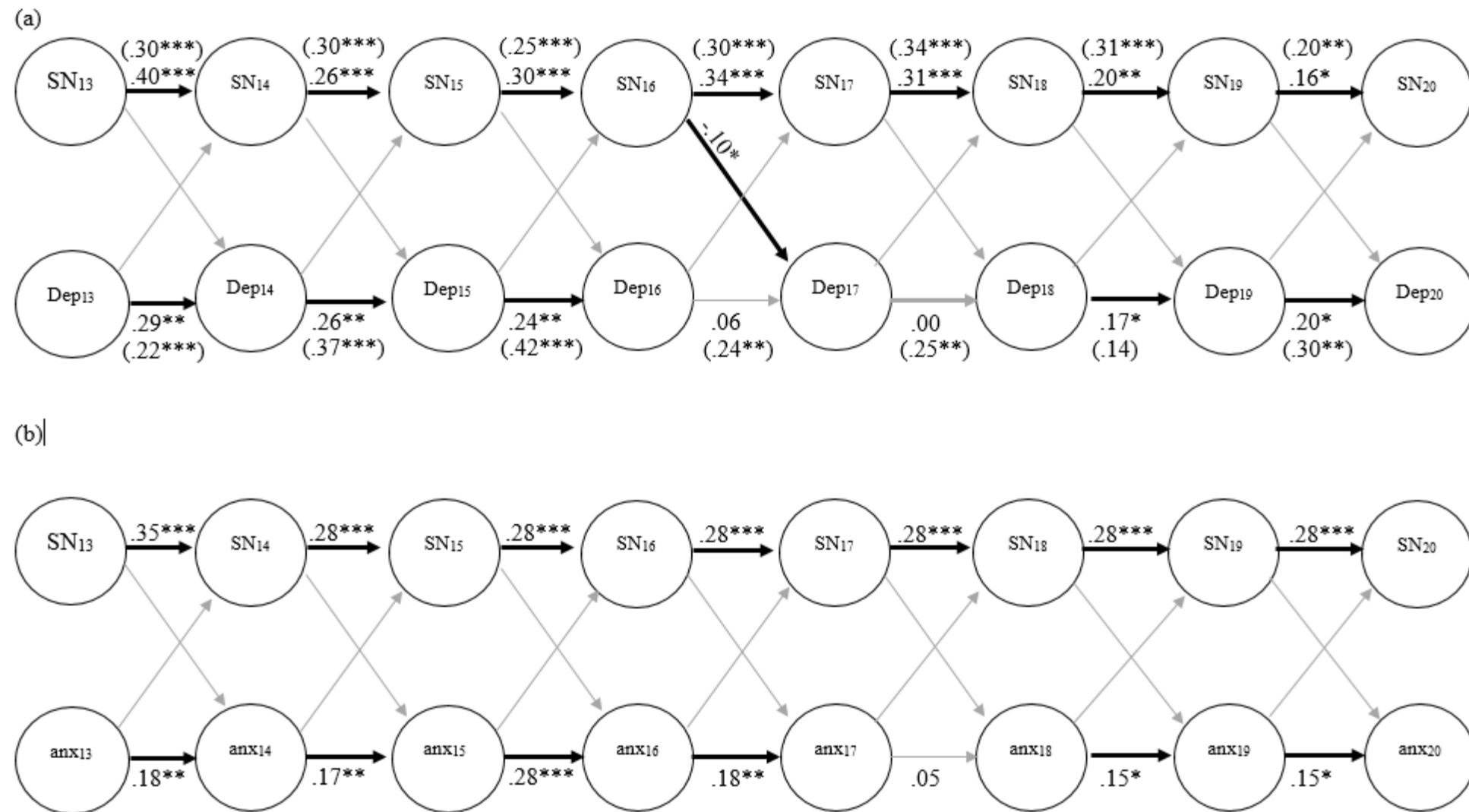
Note. Bolded paths represent significant associations. For simplicity, within-time residual covariances are not shown, nor are any between-person parameters (e.g., intercepts, slopes). When differing by sex, path estimates are displayed for girls (and boys).
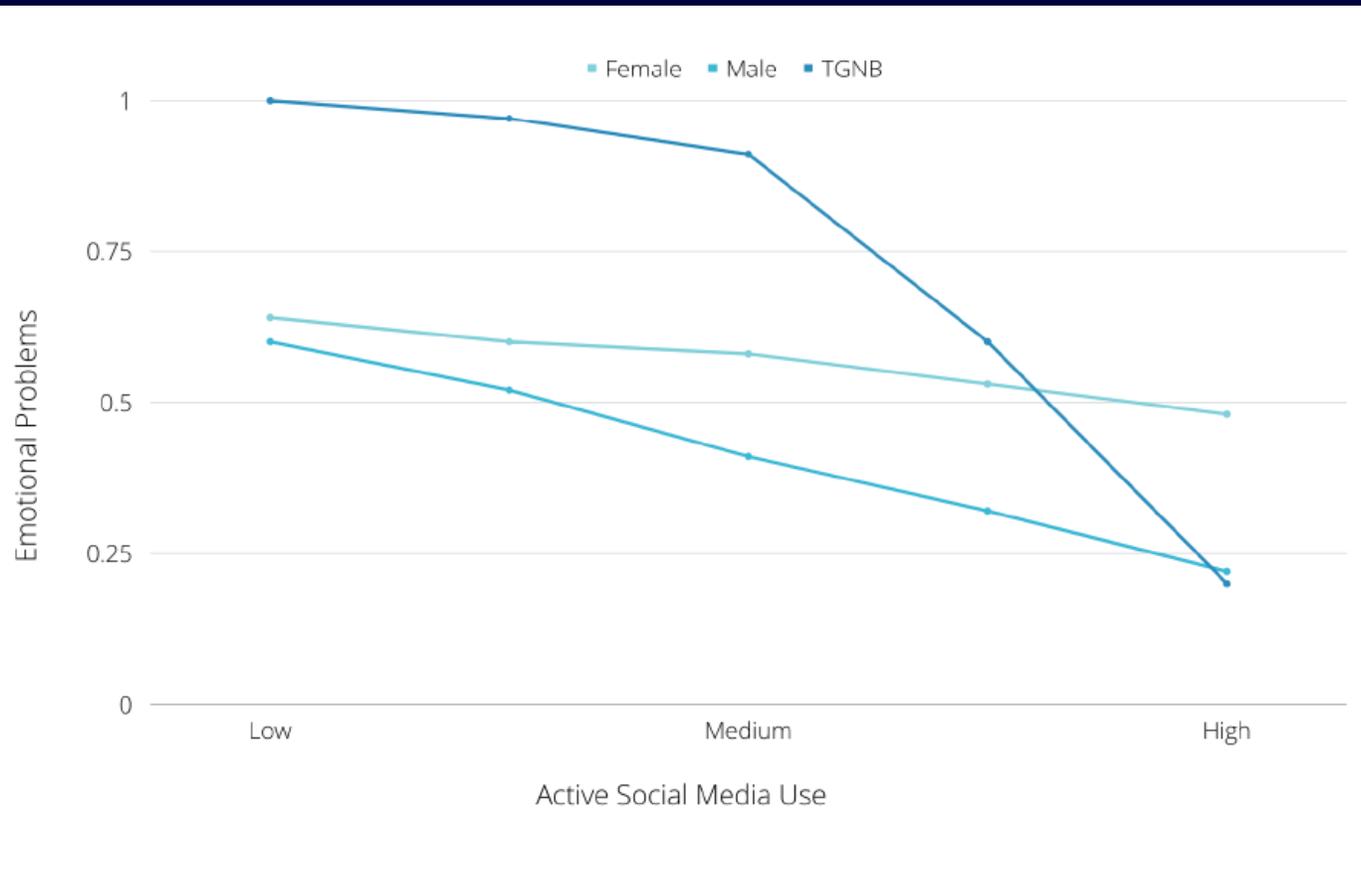
***$p < .001$, **$p < .01$, * $p < .01$

Study 3 (moderators and youth voices):

# TGNB youth and social media (Coyne, et al., 2022)

- Previous sample (same as Study 1)
- Focus on 75 Transgender or non-binary adolescents
- Teen advisory board (n = 8)

Active social media use

- "It's easier to feel validated if I find people going through the same things, even if they aren't in my area… 'Cause there's not a lot of kids like that in my neighborhood, so being able to find other people that share the same experiences; it's nice to know that there are other people that feel the same ways, that go through the same things"

Intentional breaks
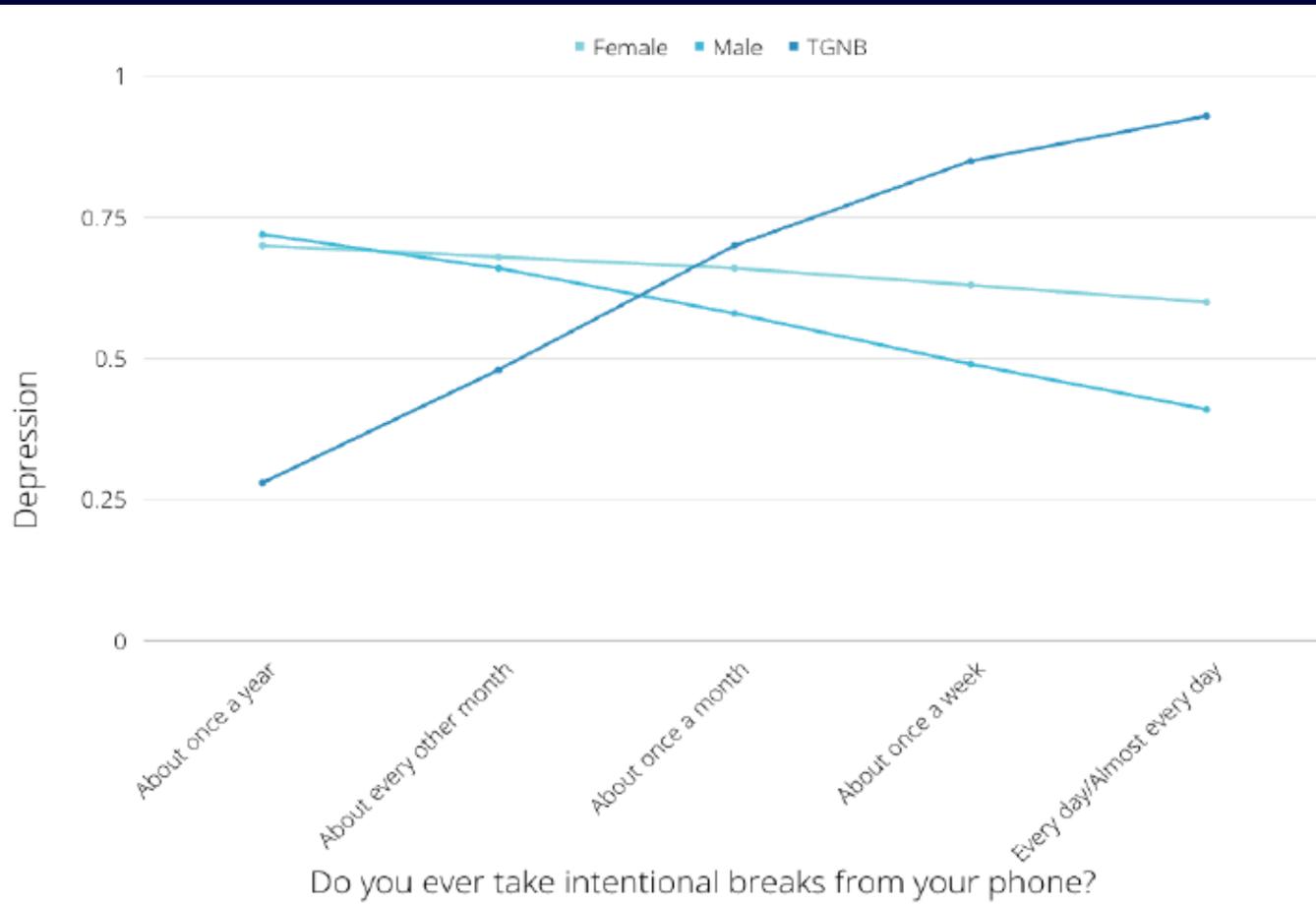
- "I feel safe in my house; I have supporters. I don't necessarily need that online community as much. It is nice to have, and helps me feel good. I am fine taking breaks because I already have a support group that is super nice to me. For others, when they delete it, their safe place; that's why they feel bad, because they don't have that community anymore... There are other people who have really bad families, or not actually trying to be allies, etc. So, it makes sense why they would see a difference in their mental health."

Curating social media feeds
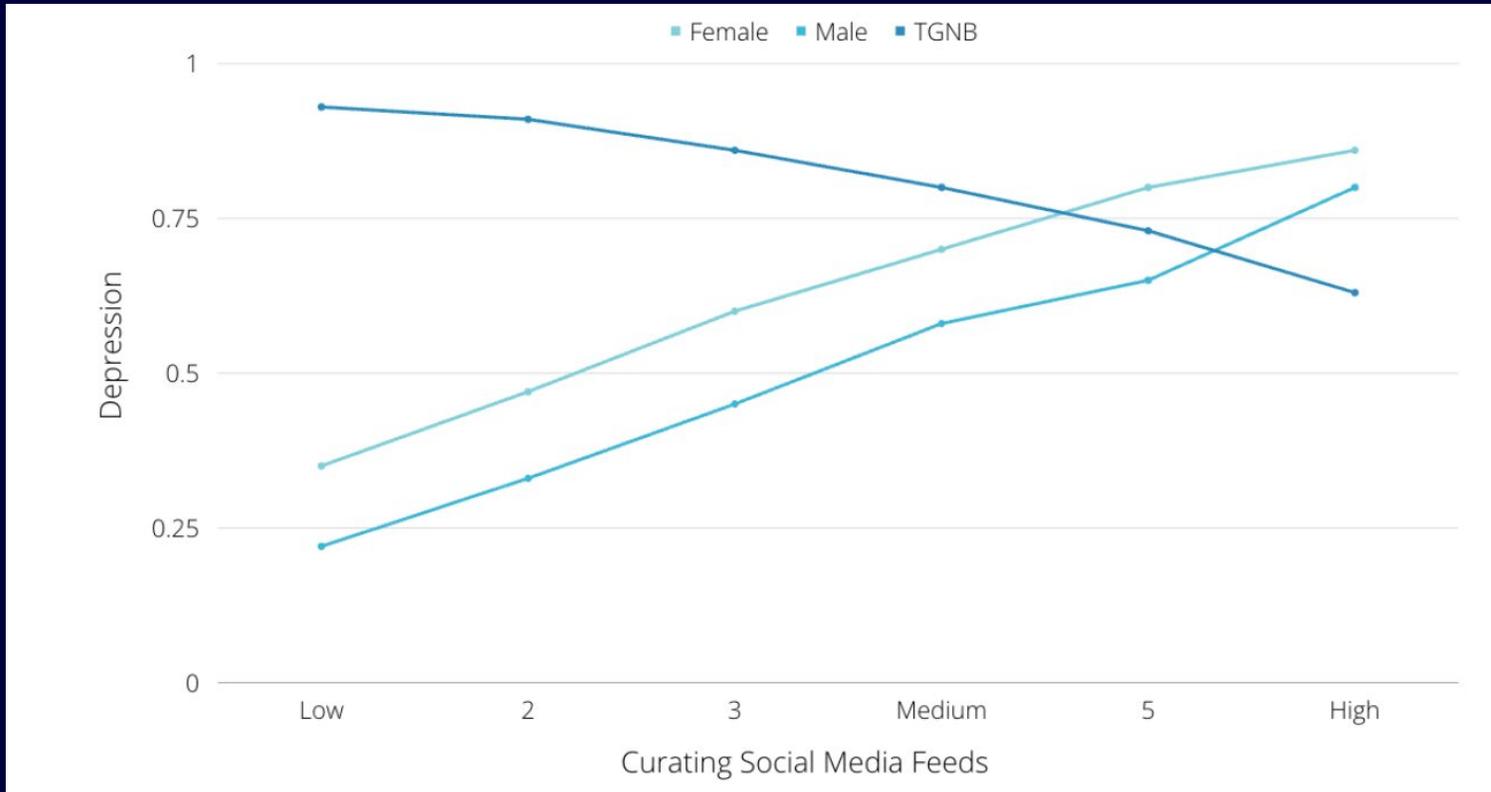
- "[Social media] has helped me to question the way that I view the world. See all these things that I was taught were good that weren't actually very good for me, very harmful to my mental health, in opposition to my identity. So, I was able to create a place where I can have my thoughts challenged"

- "I never would have thought to advocate for myself before social media. Then I learned I needed to advocate for myself. Social media taught me what I needed to advocate for; that I was able to learn where I specifically needed help, and how to ask for that"

Study 4 (differential susceptibility): Who is most at risk? And who benefits most?

- Flourishing Families
- Multiple indicators over an 8-10 year period (depression, anxiety, hope, prosocial behavior, empathy)
- Today
  - Problematic media on depression (Ages 18-20)
  - Social media time and hope (Ages 13-17)

Mixture regression (Latent Gold)

- Previous differential susceptibility would examine potential moderators and interaction terms

- Mixture Regression: Identifies latent classes that vary effects independent of whether a specific moderator variable relates to that varying effect.

- Allows users to fully identity unobserved heterogeneity in a sample of individuals by predicting latent class variables

- Also allows us to better test higher order and multiple interactions at both a group and individual level.

# Who is most at risk from using social media in problematic ways?

- Class 3 (yellow)
  - 40% have high problematic social media use
  - Non-white girls
  - Bullied
  - Low self regulation
- Class 2 (blue)
  - Low PSM in general
  - BUT if you are high AND in this group then you tend to start higher and your depression increases over time
  - Low parental warmth
  - Bullied
  - Low self-regulation
- Class 4 (dark green) – Opposite pattern
  - High family stress
  - High shy
  - Low parental media monitoring
  - Problematic social media DECREASES the slope and intercept for this group

Depression (ages 18-20)

Class 1 — Class 2 — Class 3 — Class 4
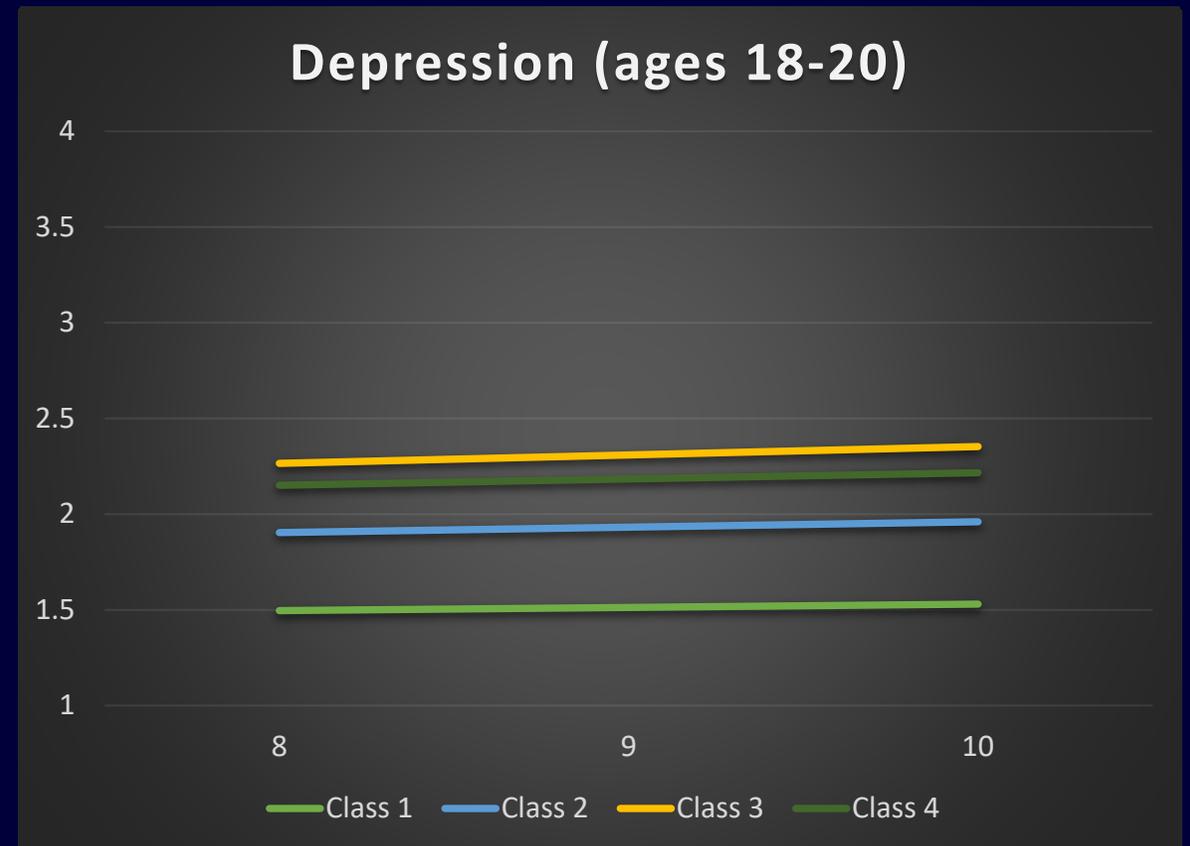
Who most benefits from using social media?
Two groups that particularly benefit from time on social media

- Group 4 (16%) – more hope over time if 2-3 hours a day
  - Girls from low income families
  - High depression
  - High SR and adaptive physiological reactivity
  - High media monitoring
- Group 3 (20%) – more hope over time if 1 hour a day
  - White kids from chaotic households (low maternal warmth, high family stress)
  - High SR and adaptive physiological reactivity
  - High media monitoring

Hope Waves 3-7
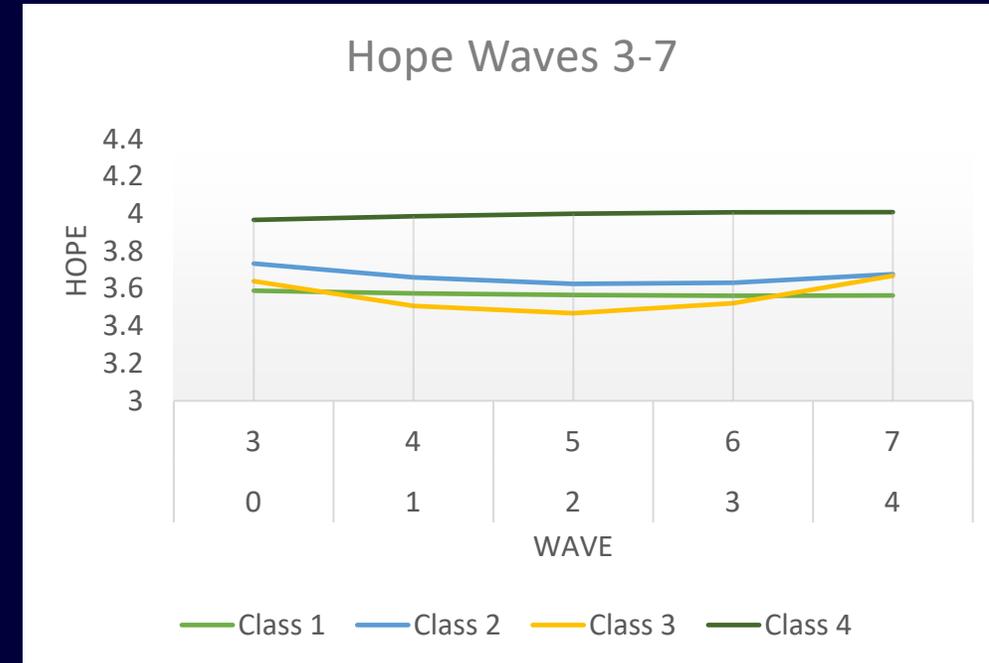
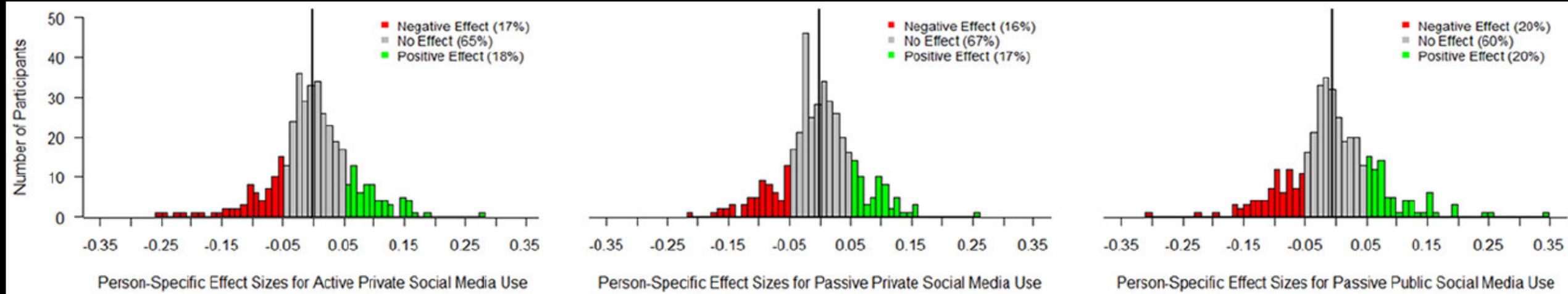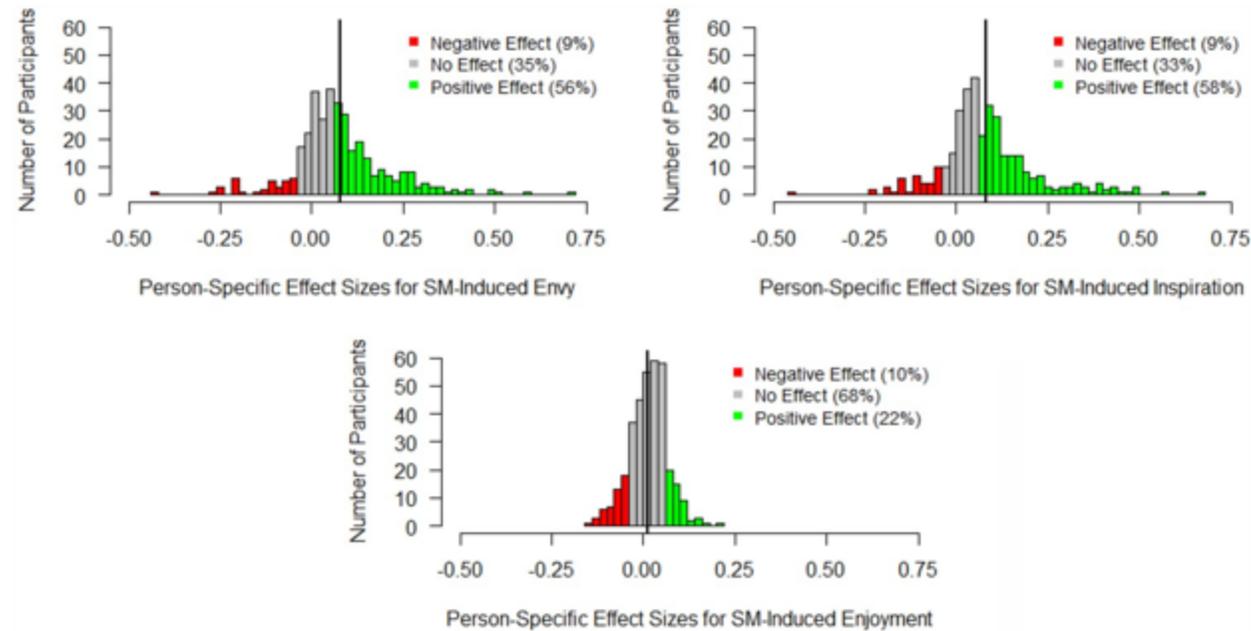# Not my study, but still pretty awesome (Project AWESOME: Beyens, et al, 2022; Valkenburg, et al., 2022)

Figure 1 The ranges of the person-specific effect sizes of browsing on envy, inspiration, and enjoyment.
Notes. The ...

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What did we learn?

- At an individual level – FAR more adolescents have positive or neutral experiences on SM than negative.

- Those most at risk:
  - Bullied
  - Low Self-regulation

- Those who most benefit:
  - Chaotic family lives
  - High self-regulation
  - High media monitoring
  - Those who feel marginalized in some way
  - Often…those most at risk for mental health problems
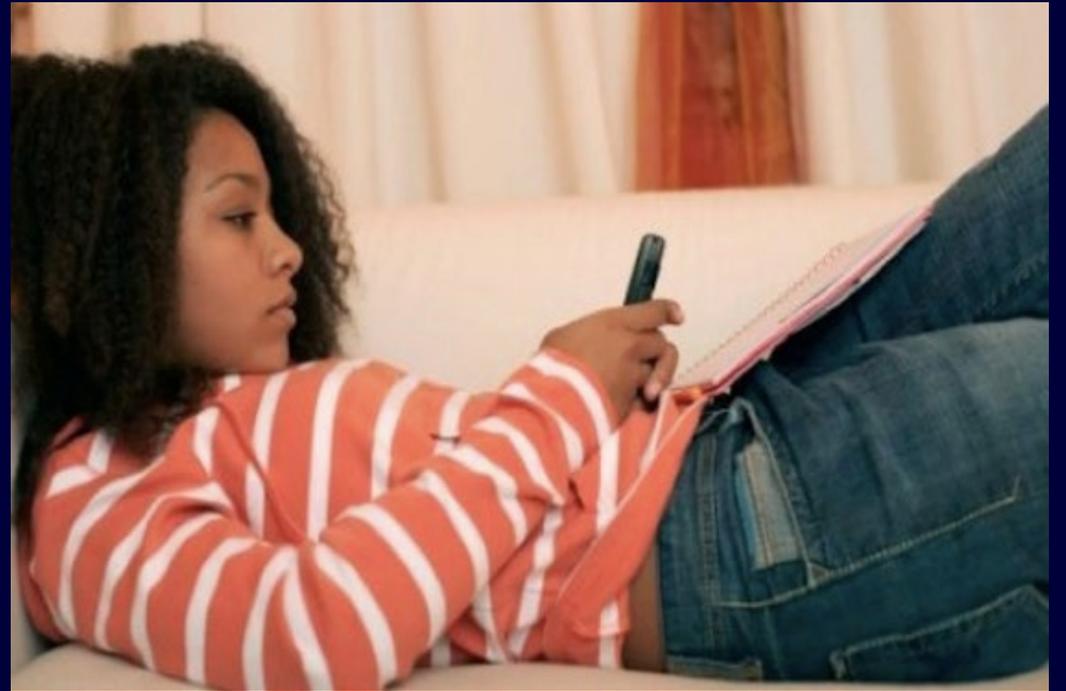
What can we do about it?

1. Stop telling teens to simply "put down your phones"

2. Invest in digital literacy programs

3. Promote positive uses of social media

4. Know who is most at risk – screen and tailor intervention strategies to these teens

5. Parent education

6. Listen to teens

7. Focus on promoting self-regulation and anti-bullying policies

What comes next?

- 520 children

- Denver, CO area, diverse population

- 7th year of data collection this summer

- What predicts healthy and problematic media use during adolescence?

- Media emotion regulation (Coyne, et al., 2022)

- Early Problematic Media (Coyne, et al., 2022)

PROJECT
M.e.d.i.a.
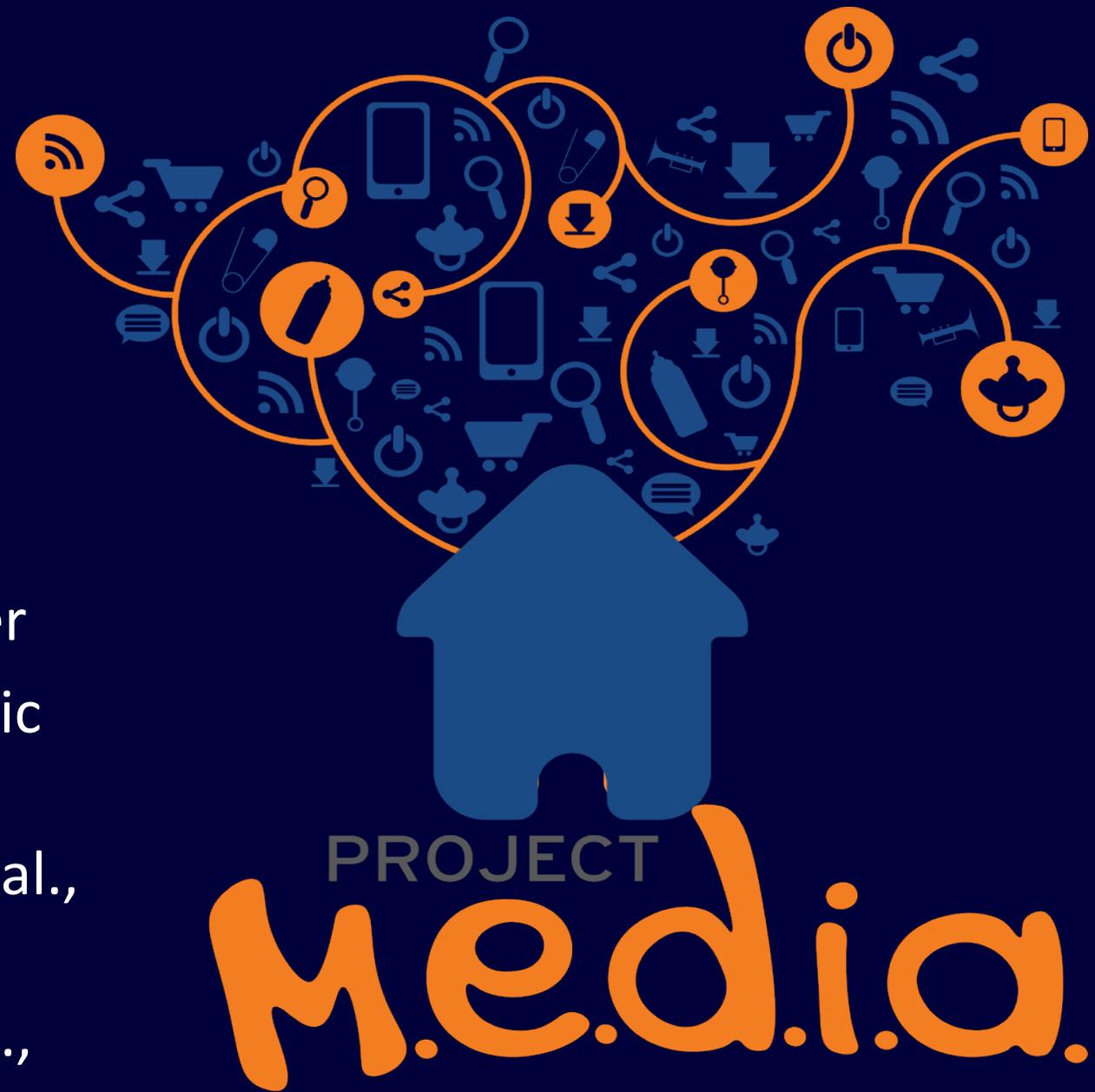
DAUGHTER USES SOCIAL MEDIA TO FIND MOM WHOSE HOME FLOODED IN HURRICANE IAN

tanksgoodnews ✓ Social media is a net positive

"A woman from Naples, Florida named Beth Booker saw a photo of her mother's house submerged in Hurricane Ian.

When she was unable to reach her, Beth turned to Twitter and used the hashtag #GetCaroleHome.

A few hours later, with the help of Twitter users and first responders, her mother was found.

After the storm, the mom and daughter were reunited."

2w

batmanrealaccount ✓ 🙌🙌🙌
2w   10 likes   Reply

batmanrealaccount ✓ 😮😮😮😮😮😮
2w   7 likes   Reply

schickie_schickler A complete stranger from a Facebook group went to my uncle's house and made sure he was alive and safe in Fr Myers this past weekend.
Maybe social media can be used for good?
2w   34 likes   Reply

View replies (5)

17,788 likes

OCTOBER 5

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