

The Distracted Participant?

Experience sampling response behavior and participant burden in social settings

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Self-report data

Experience Sampling/
Ecological Momentary Assessment/
Ambulatory Assessment







Concerns on using mobile devices in survey science

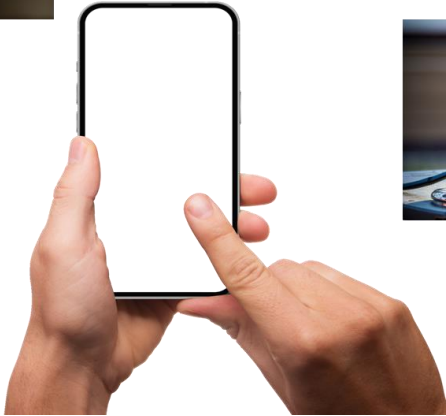
- Some studies have documented lower data quality on mobile devices (Struminskaya et al., 2015)
- Recommendation to limit responding to non-mobile devices to safeguard data quality (Blazek & Siegel, 2023)



Experience sampling methodology = sampling *on purpose* in distracting environments



Do environmental distractions impair data quality?



?



Data quality



Social distractions

Social environment can impair data quality (Hardré et al., 2012; Zwarun & Hall, 2014)

- Distraction
- Multitasking
- Responding to sensitive questions
- Help-seeking
- ...

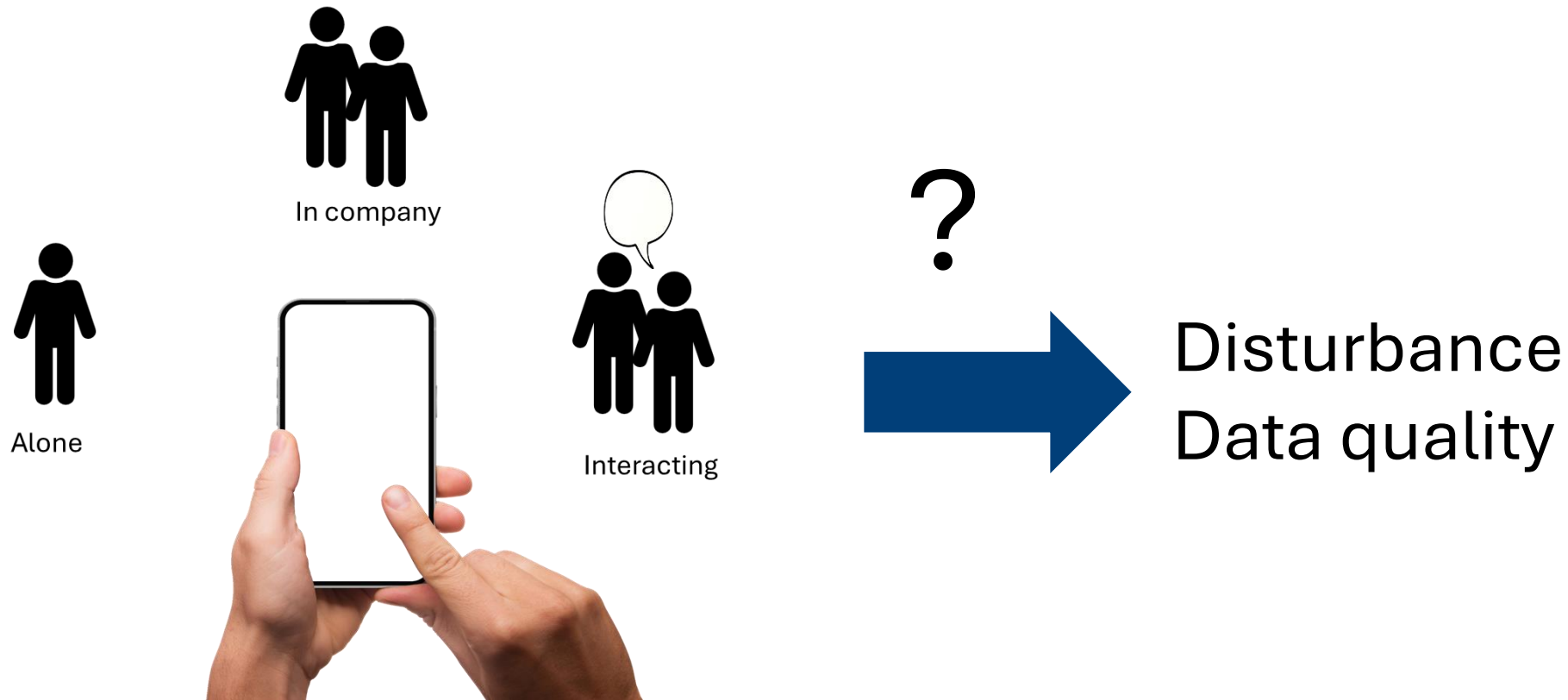


ESM in social settings: What do we know?

- Qualitative and quantitative findings: Participants feel disturbed by assessments in social situations (e.g., Eisele et al., 2023; Folkersma et al., 2021; Rintala et al., 2023) except youths (van Roekel et al., 2019)
- No link with compliance at next beep (Rintala et al., 2020; Silvia et al., 2013; Sokolovsky et al., 2014)
- Congruent data shows link between some social behaviors and compliance (Sun et al., 2021)



Current Study: Comparing social settings

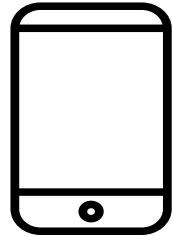


Data & protocol

4 ESM studies



Adults $N = 293$
Adolescents $N = 1913$



3-10 beeps per day for 6-14 days



Analytical strategy

Multilevel (logistic) regressions

1. Test overall effect of social setting
2. Test for effects of sample age group

Outcomes

Disturbance

Response behavior:

Response times (median & SD)

Inconsistent responding

Longstring

SD

Partial

Self-reported attention

Modified responses

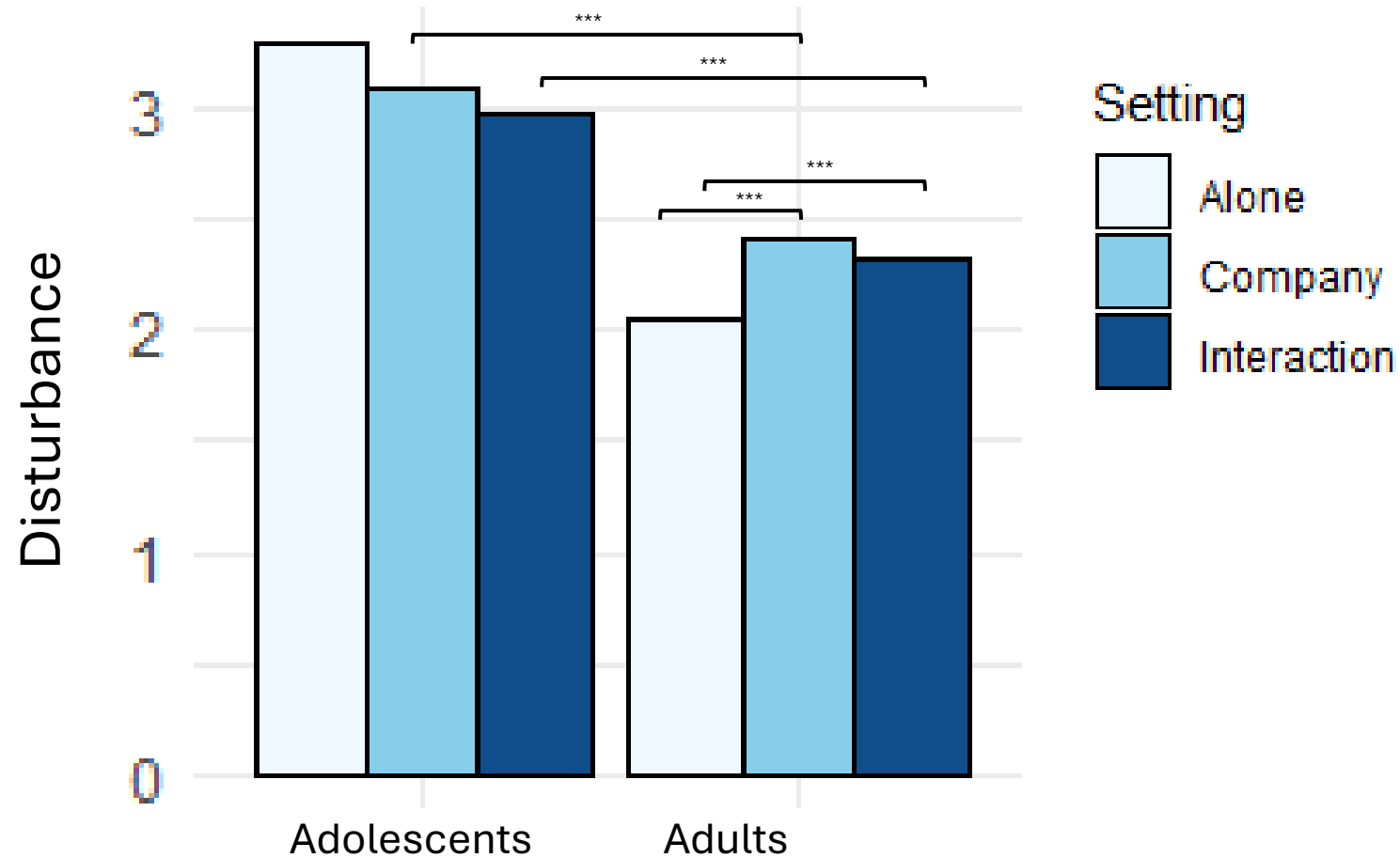


Disturbance

This beep disturbed me.



Adults feel more disturbed when with others, adolescents less



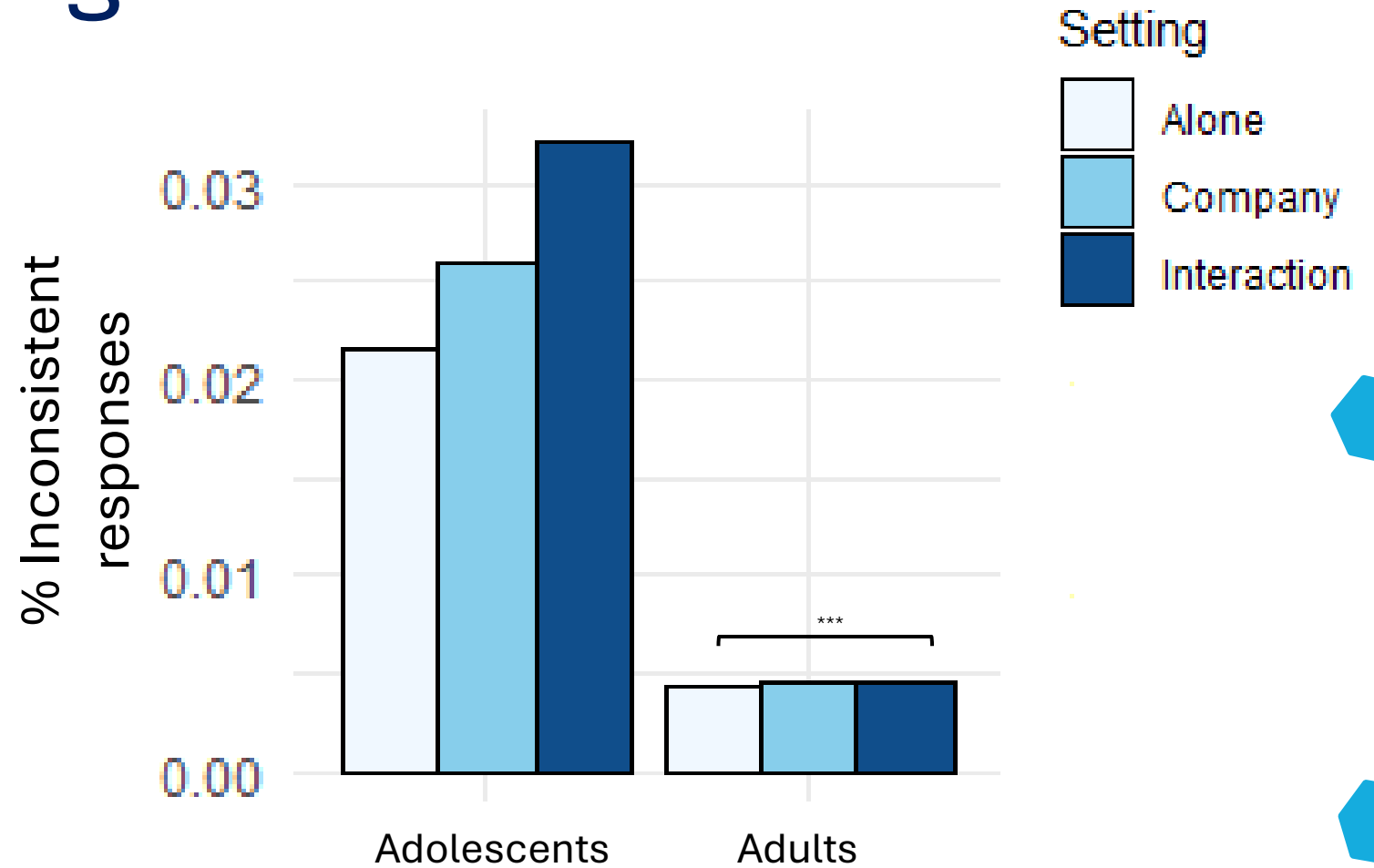
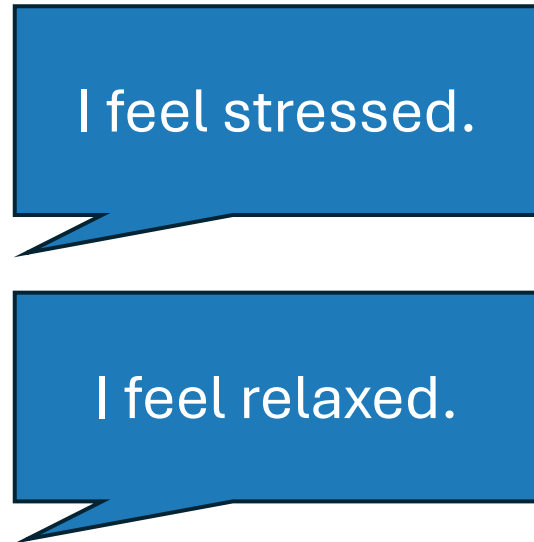
Inconsistent Responding

I feel stressed.

I feel relaxed.



Slight increases in inconsistent responding when interacting

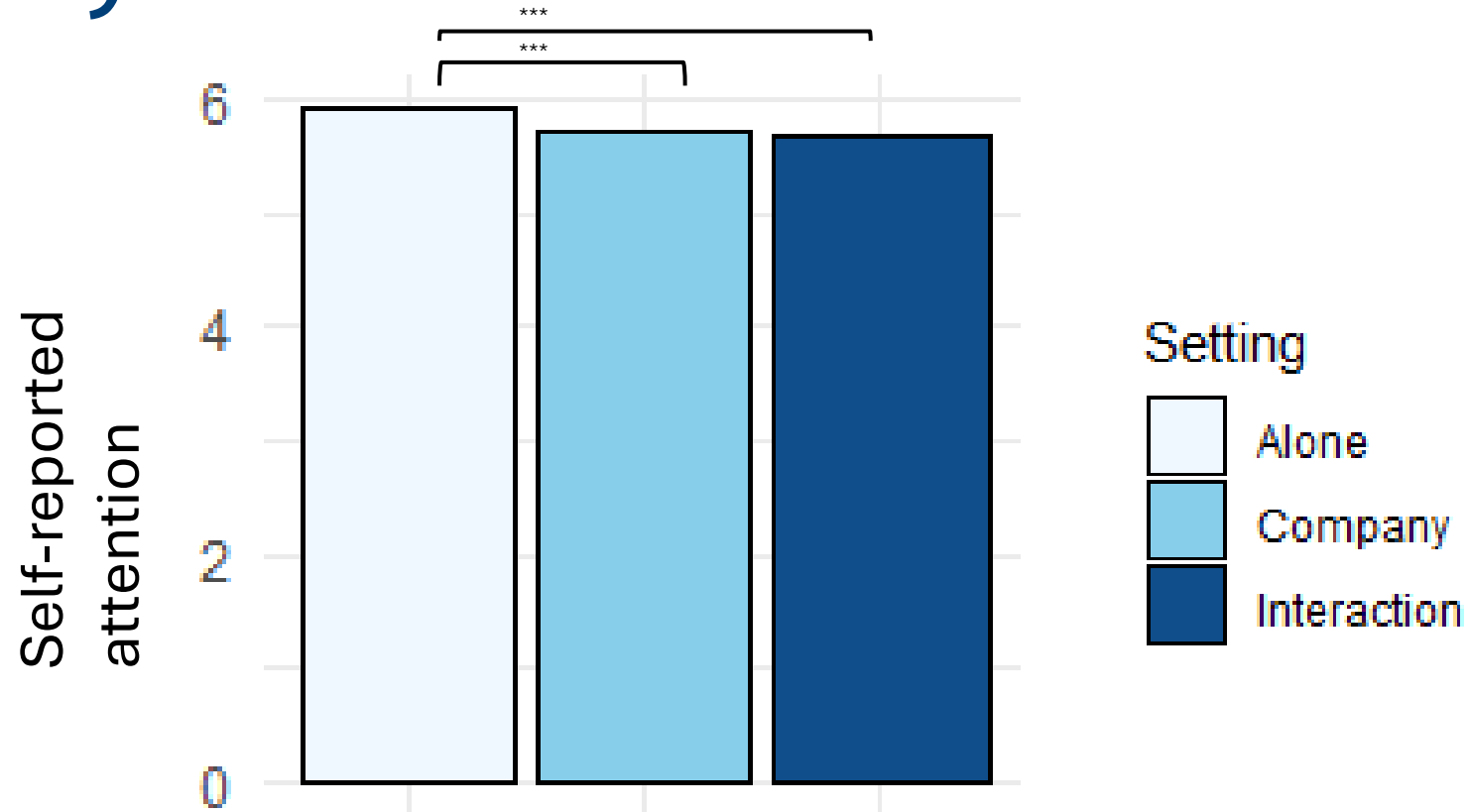


Self-reported attention

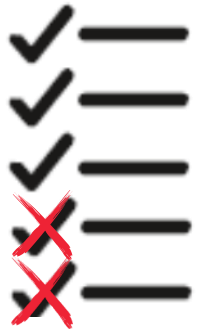
I responded attentively.



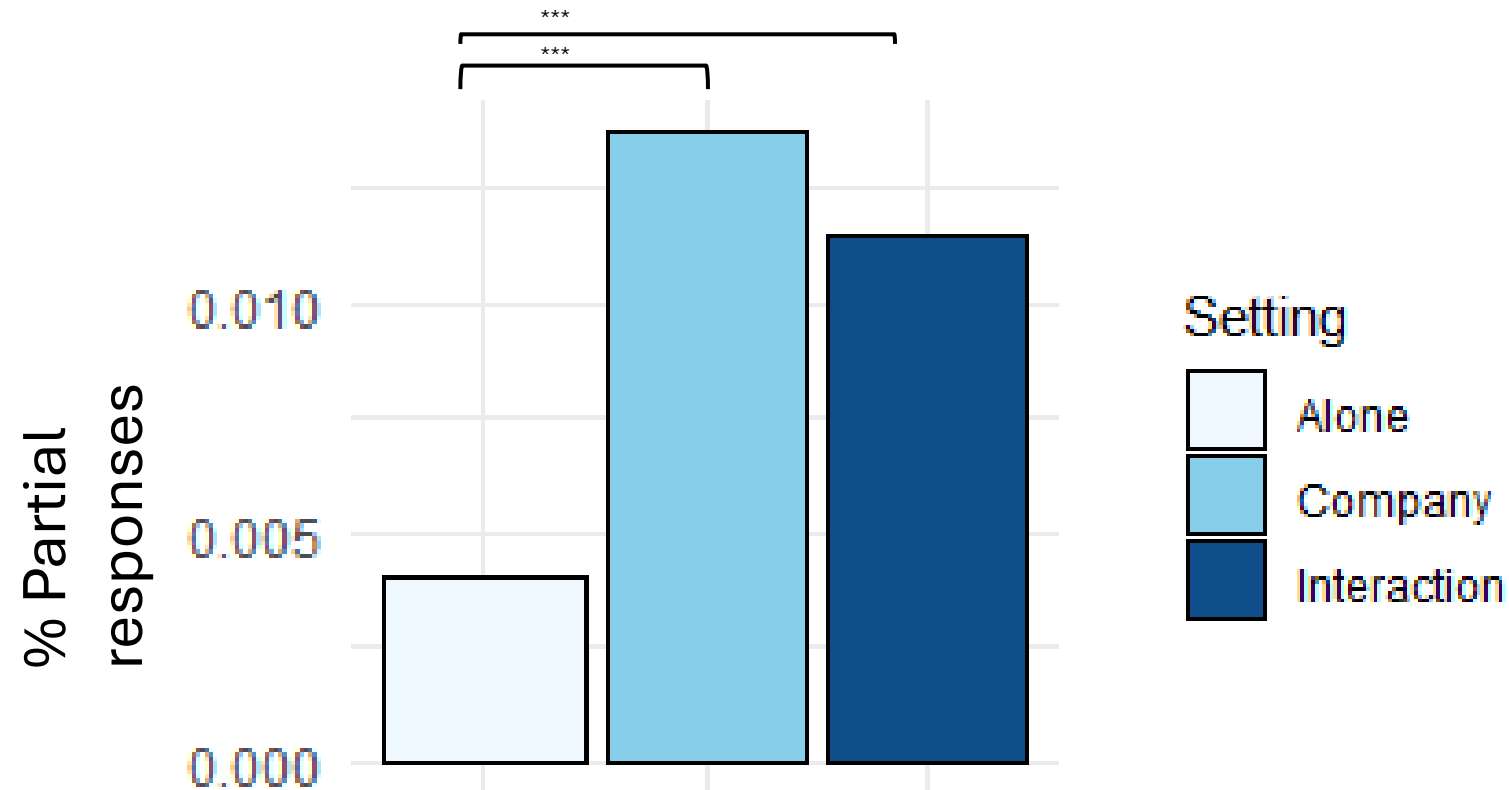
Adults report paying less attention in company



Partial responses



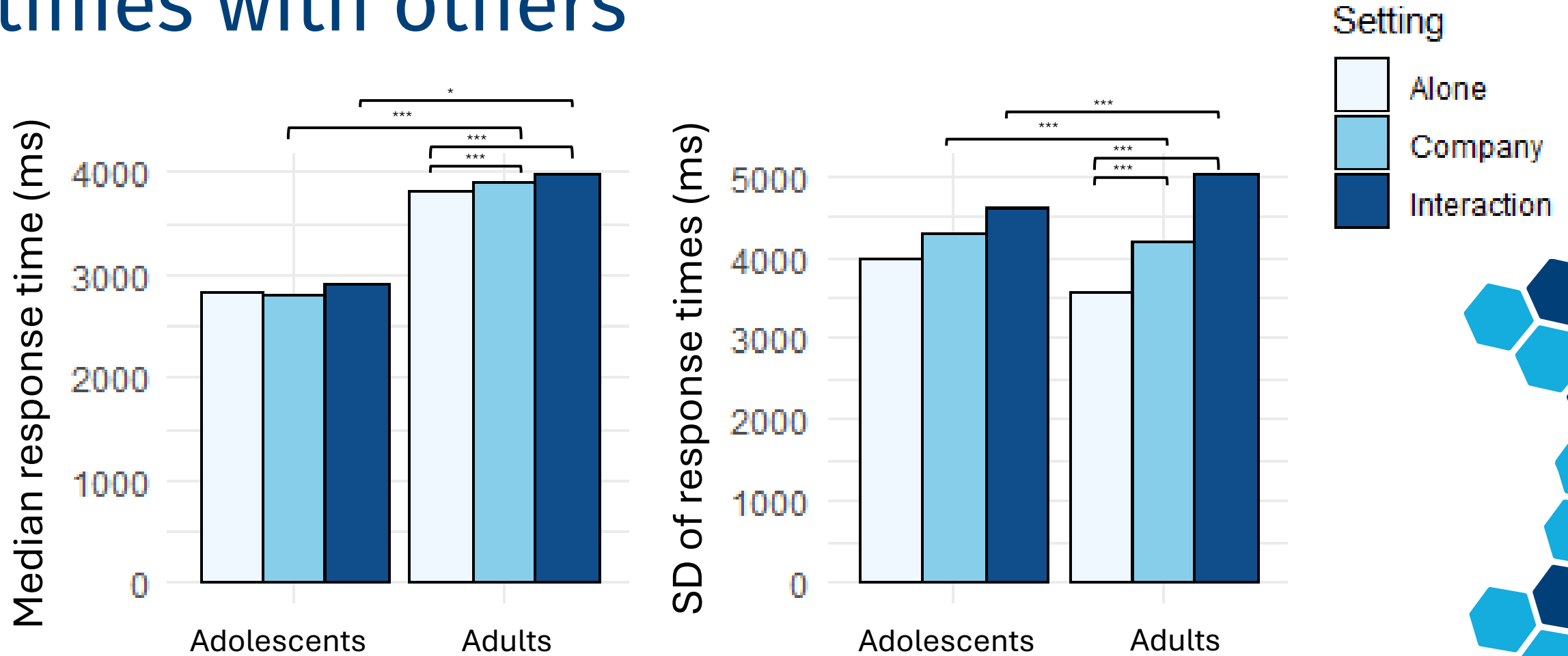
Adults more likely to quit questionnaires when with others



Response times



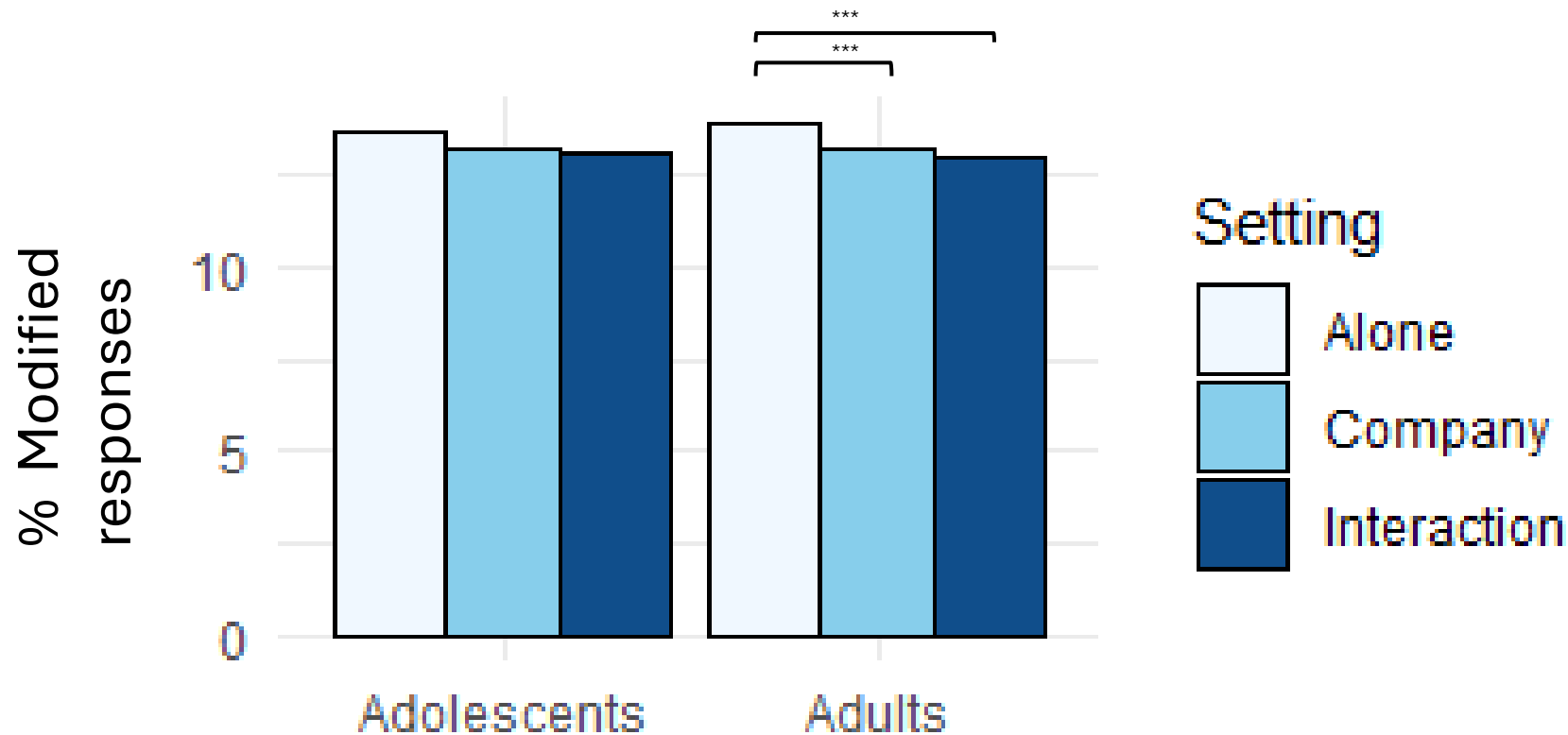
Longer and more variable response times with others



Modified responses



Less likely to modify responses when with others

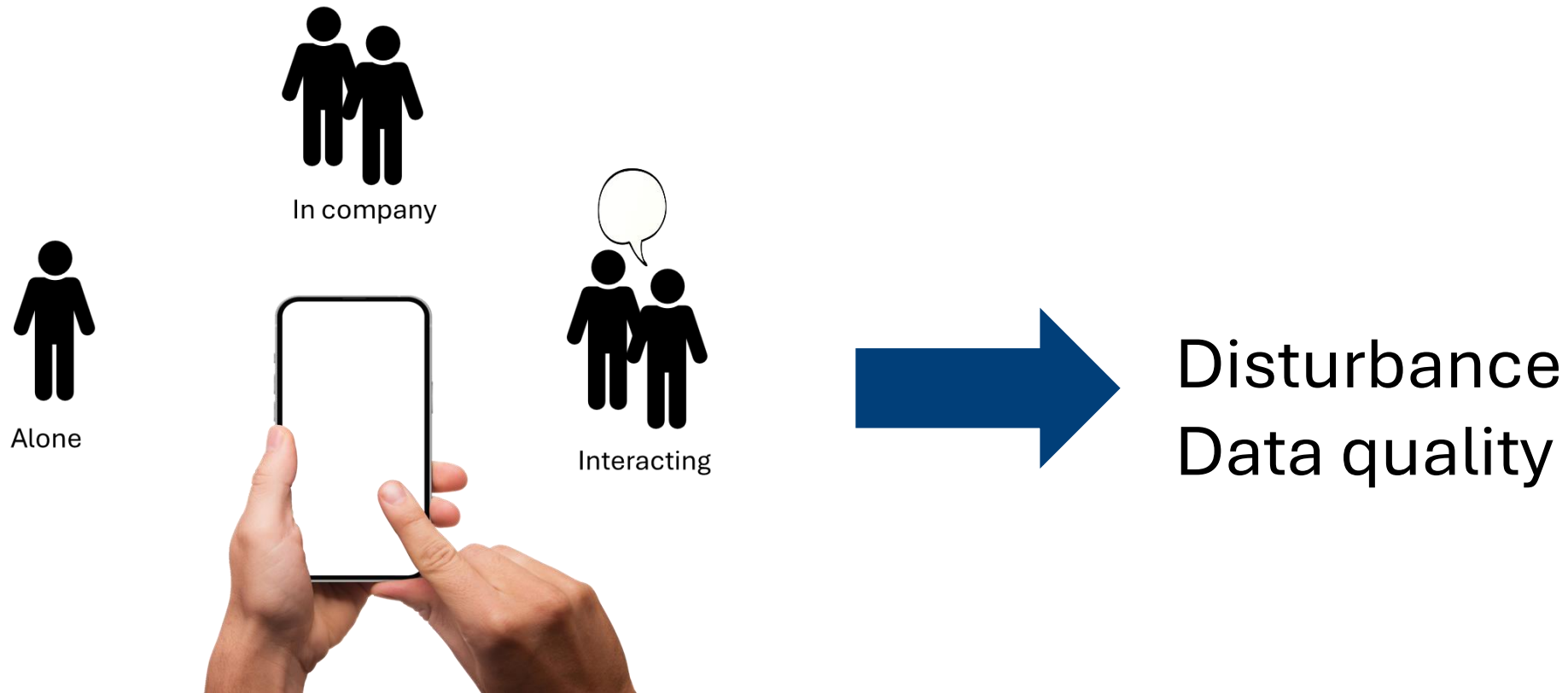


Inconclusive changes for pattern-based indicators of data quality

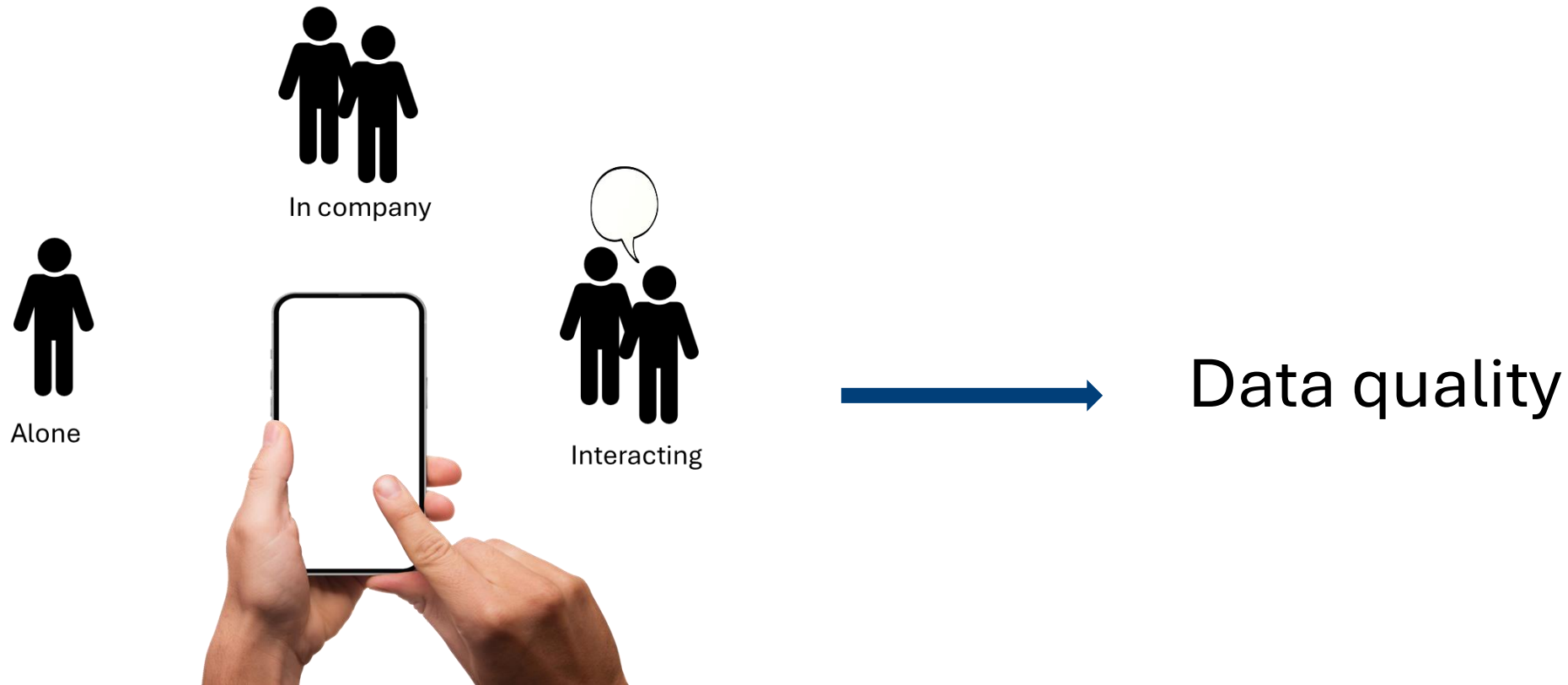
- Longstring (% of responses at the mode)
- Within-beep SD



Link between social context and disturbance and data quality



Small link between social context and data quality



Type of company? No clear effects



More familiar

=



Less familiar

School: A special environment?



School: A special environment?



Disturbance



Outside school:



Adolescents

=



Adults

School: A special environment?

Same schedule
for whole class



Disturbance



Outside school:



Adolescents

=



Adults



Key findings

Adults: More disturbance and indications of lower data quality when with others

Adolescents: Less (!) disturbance but indications of lower data quality when with others

School setting matters

But also:

- Small effects
- Link with data quality not always clear
- Possible confounding



Implications & future research

1. Prepare participants during briefing sessions

2. Use objective measures of context

?

Data quality

3. Explore other effects, e.g. help-seeking





Thank you!

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