

Effects of Parental Technoference on Parent-Child Relationships and Children's Health & Development: Scoping Review Results



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Background

- **Parental technoference** refers to parental technology utilization during parent-child interactions (1)
- Parental technoference has been associated with lower parental sensitivity, responsiveness, and attentiveness (2, 3), children's internalizing (e.g., sulking) and externalizing (e.g., temper tantrum) problems (4), and adolescent mental health concerns (5)
- However, no review has systematically and comprehensively investigated the effects of parental technoference on parent-child relationships, and children's health and development

Research Questions

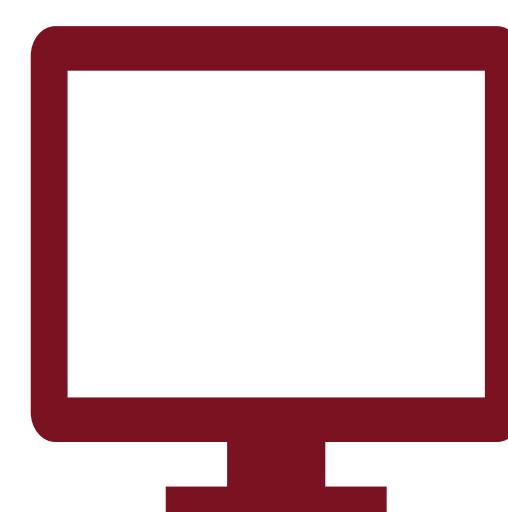


Primary Question: What is the effect of parental technoference on parent-child relationships and children's health and development?

Secondary Questions: How is parental technoference measured and defined? What methodologies are employed to research parental technoference? What are the research gaps?

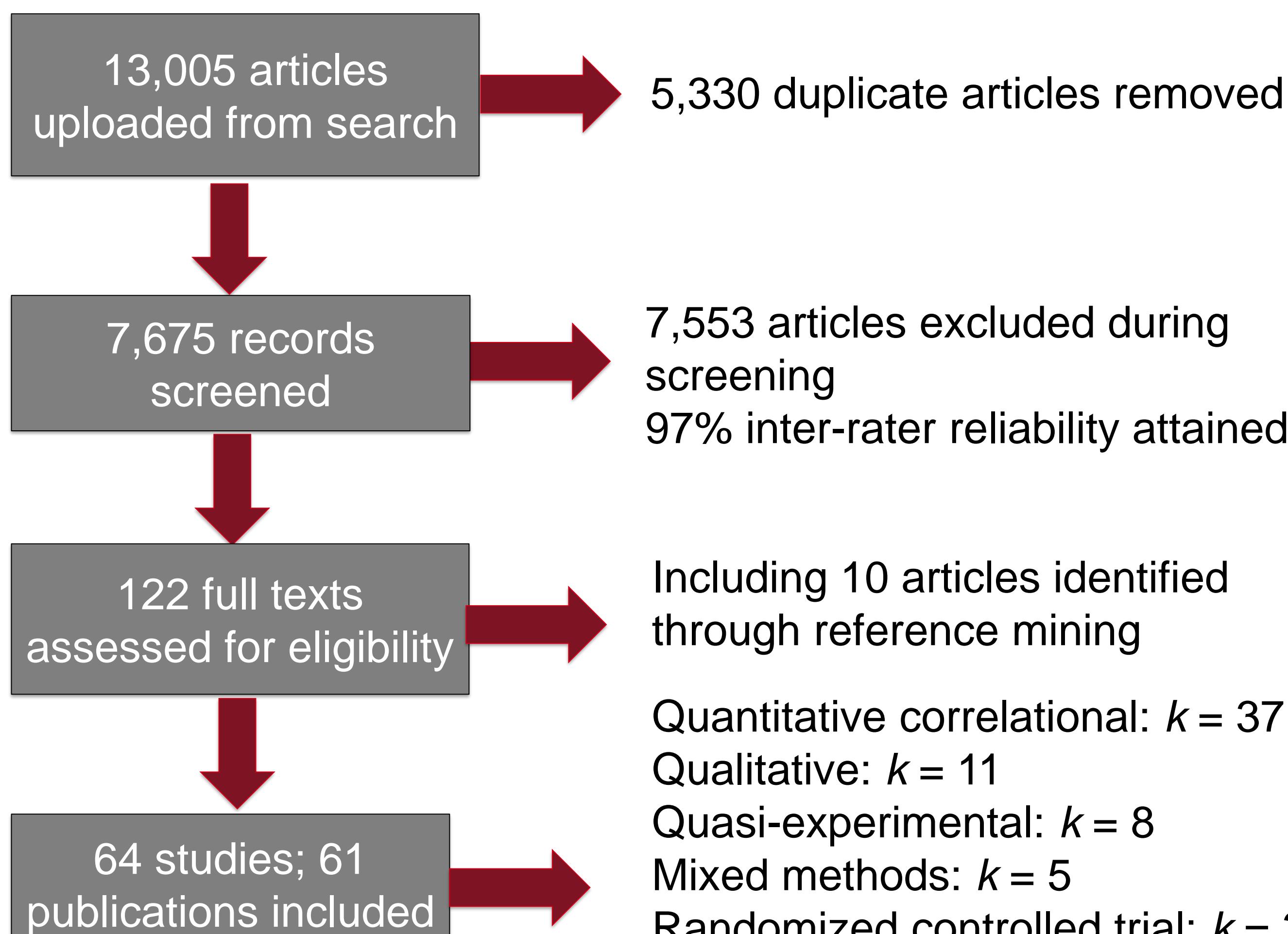
Methods

- We employed Joanna Briggs Institute scoping review methodology (6) and published a protocol (7)
- MEDLINE, APA PsycInfo, Cochrane Central Register of Controlled Trials, JBI EBP Database, Embase, CINAHL, and Scopus search focused on **parents, children, technoference**



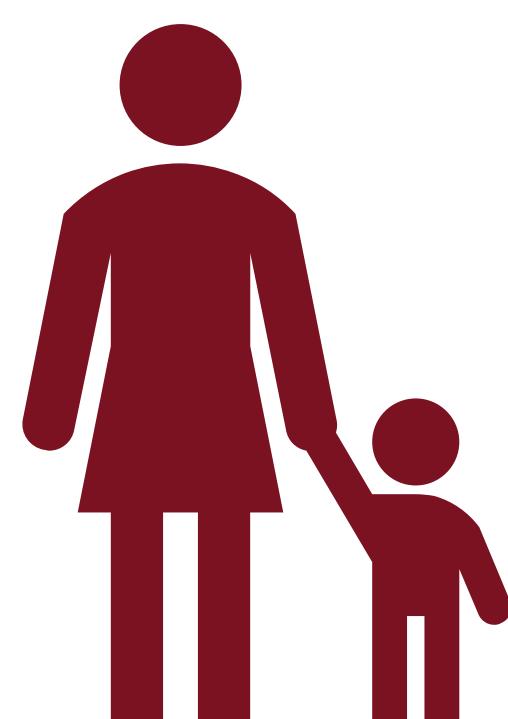
Inclusion criteria

- Parents (e.g., biological, adoptive) with children < 18 years
- Studies on parental technoference and parent-child relationships, child health, or development included globally



Study Characteristics

- Published from 2008 to 2021; 2 published before 2015
- Cross-sectional design: $k = 46$
- United States ($k = 32$) and China ($k = 17$) most studied
- 43/64 specified parental role: 36 solely or primarily included mothers



Primary Results

Parent-child relationships
 $k = 49$

- Behavior changes observed (e.g., still face, covert, and consented observations)
- Parent-adolescent relationship and attachment negatively influenced
- Parents reported changes in self (e.g., lower empathy) and child (e.g., pinching) during parental technoference

Child health
 $k = 28$

- Parental technoference associated with adolescent mental health (depression, anxiety) concerns
- Child safety concerns
- No significant associations with medical diagnoses or cortisol ($k = 2$)

Child technology use
 $k = 15$

- Linked with adolescent cyberbullying, technoference, gaming disorder, smartphone addiction, and screen time in 14/15 studies

Child development
 $k = 5$

- Children's learning affected in $\frac{1}{2}$ studies
- Children ran slower during parental technoference vs attentive group
- Language and motor delays

Secondary Results

Technoference measures

- Survey: Adolescent ($k = 19$) & parent report ($k = 15$)
- Simulated technoference: $k = 12$
- Interview: $k = 12$, diary: $k = 3$
- Naturalistic, covert ($k = 9$) & consented observations ($k = 5$)

Technoference definitions

Research gaps

- Technoference ($k = 19$)
- Phubbing (portmanteau of phone and snubbing) ($k = 17$)
- Limited adolescent observational data and no studies on attachment with preschool-aged children
- Limited research on medical health and development
- No interventions to decrease technoference

Conclusions and Future Directions

- Parental technoference is associated with less optimal parent-child relationships, children's health (mental, behavioral) and safety, and adolescent maladaptive technology use
- Additional research is needed on parental technoference and child development and physical/physiological health
- Educational parenting programs needed to mitigate technoference harms
- This research will inform Dr. Letourneau's new research program centered on parental technoference. Research findings and resources will be available on future Technoference Information for Parents (TIPP) website

References

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*See handout for reference list of included publications