

# The Negative Effects of Phones During In-person Interactions are Larger for Men

A Mega-Analysis of Nine Studies

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## Introduction:

Phones can interfere (Sbarra et al., 2019), displace (Kushlev & Leitao, 2020), and complement (Holtzman et al., 2017) a myriad of activities. With individual studies looking at how phones may narrowly impact wellbeing, a more comprehensive evaluation across studies may reveal more significant trends and potential interactions. This study sought to understand how situational context and gender may moderate the effect of phones on social connectedness and emotional well-being using a large multi-study dataset.

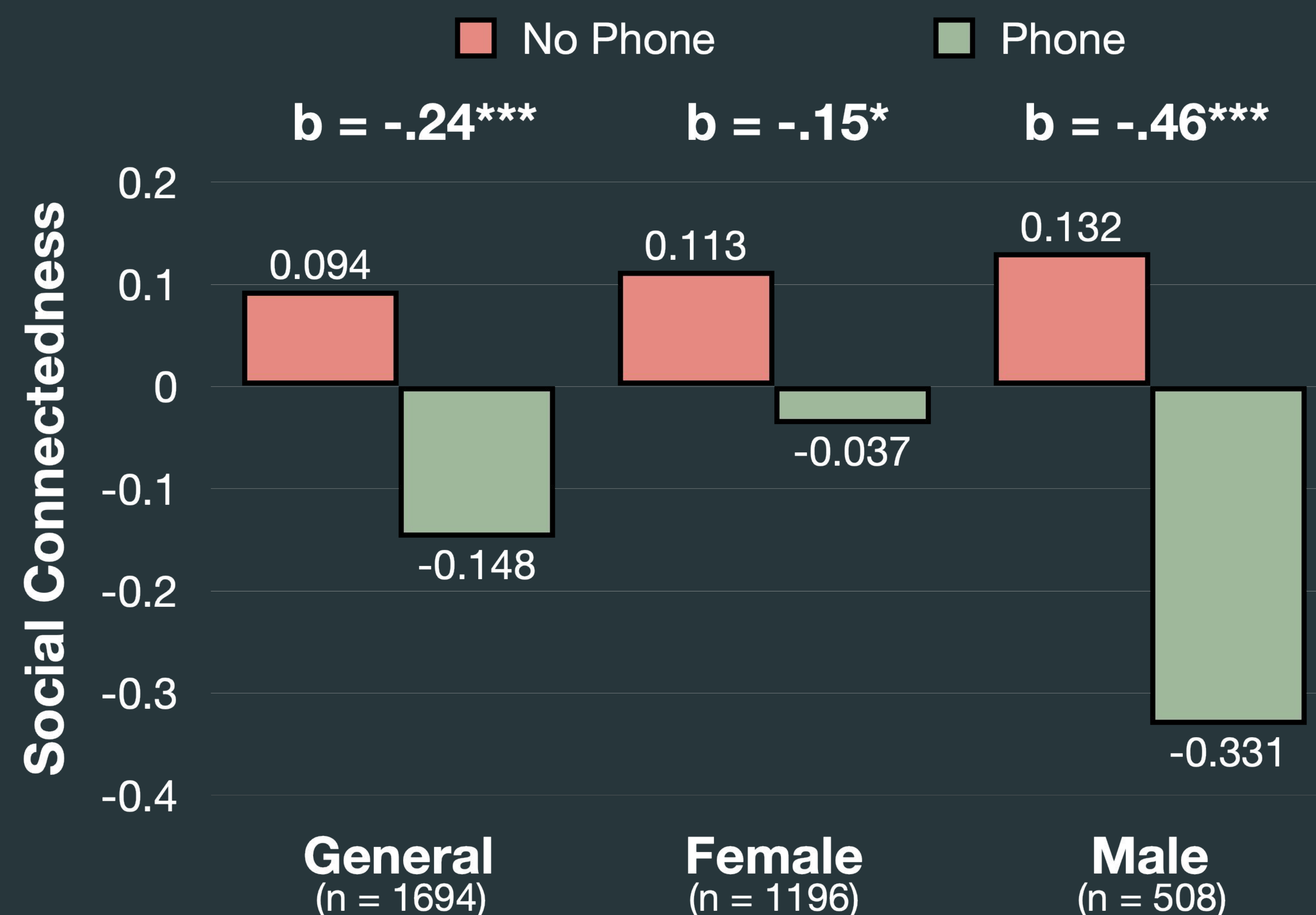
## Methods:

We compiled nine published & unpublished studies across six experimental paradigms that manipulated phone use (N=1754). These paradigms included: Parents out with their children, eating a meal with strangers, eating a meal with close others, sitting in a room alone, sitting in a room with a stranger, and looking for an unfamiliar building. The initial regression model determined if the paradigm moderated the effects of phones on social connectedness and emotional well-being. Subsequent multi-level models, nested within paradigm, were run to determine whether gender moderates phones' impact on social connectedness and emotional well-being.

## Results:

Participants with their phones reported lower levels of social connectedness than those without their phones,  $b = -.24$ ,  $p < .01$ . We found a significant gender x phone interaction on social connectedness,  $b = -.31$ ,  $p < .01$ , with men impacted more by phones than women. We found that paradigm moderated the effect of phones on emotional well-being, showing a significant negative effect when phones interfered with socializing,  $b = -.12$ ,  $p = .03$ . In contrast, when looking for directions to an unfamiliar building, phones did not significantly improve or hurt well-being,  $b = .16$ ,  $p = .17$ . Gender did not moderate these effects.

# People with their phones report feeling less connected than those without their phones. This effect was moderated by gender, with men reporting feeling less connected than women.

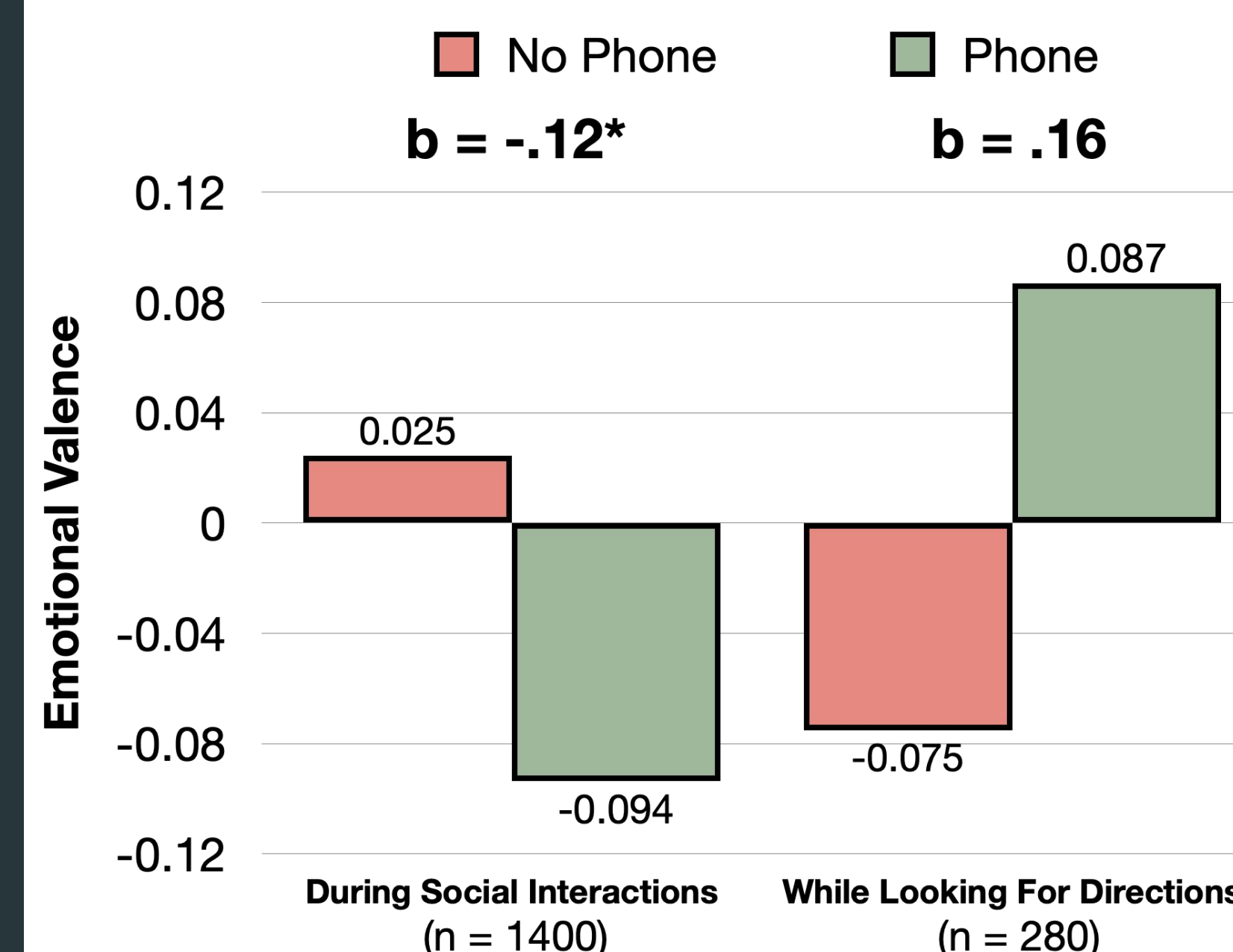


## Discussion:

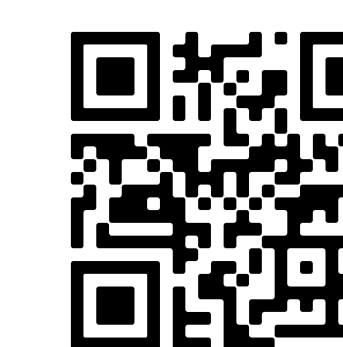
We found that phones negatively impacted both social connectedness and emotional valence during in-person social interactions. This, however, changed when phone use could be viewed as complementary, with a negative impact phones on social connectedness but no impact on emotional valence.

We found that gender moderates the effects of phones on social connection, though more research will need to be done to evaluate why this may occur.

## Situational Moderators



## Supplemental Information



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## References:

Holtzman, S., DeClerck, D., Turcotte, K., Lisi, D., & Woodworth, M. (2017). Emotional support during times of stress: Can text messaging compete with in-person interactions? *Computers in Human Behavior*, 71, 130–139. <https://doi.org/10.1016/j.chb.2017.01.043>  
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Sbarra, D. A., Briskin, J. L., & Slatcher, R. B. (2019). Smartphones and Close Relationships: The Case for an Evolutionary Mismatch. *Perspectives on Psychological Science*, 14(4), 596–618. <https://doi.org/10.1177/1745691619826535>