

THE NEED FOR TLC (Tender Loving Cellphone)

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BACKGROUND

- Cellphone usage has pervaded daily life in the United States, and the lives of university undergraduates in particular
- The existing literature points to an increasing human dependence on cellphones, but it has yet to be concluded whether or not cellphone dependence can be classified as an addiction
- Contagious cellphone use (Kruger & Finkel, 2012): individuals were more likely to use their phones when their partner used their phone first; female pairs used their phones more frequently than male or mixed gender pairs
- Phantom cellphone experiences and cellphone dependency (Kruger & Djerf, 2017): phantom experiences were strongly predicted by self-reported cellphone dependency symptoms, and higher amounts of cellphone dependency were reported by: a) women, b) younger individuals, and c) participants with lower emotional stability and conscientiousness
- Cellphone use latency (Kruger et al., 2017): in a natural waiting space, 62% of participants used their cellphones (32% upon arrival, 30% after arrival); 80% of those that used their cellphones did so within the first 20 seconds of entering the waiting space

Motivations

- While cellphones enable instantaneous communication and virtual connection, they also raise concerns regarding over-usage and impact on real-world socialization, as in the case of live, interpersonal conversations
- Access to cellphones is occurring within increasingly younger populations; these individuals are more at-risk for cellphone dependency for a variety of reasons, including (but not limited to) the complex developmental trajectory of cognitive control and the enhanced salience of potential rewards, which can lead to riskier choices that may impede goal-oriented behavior (Somerville & Casey, 2010)

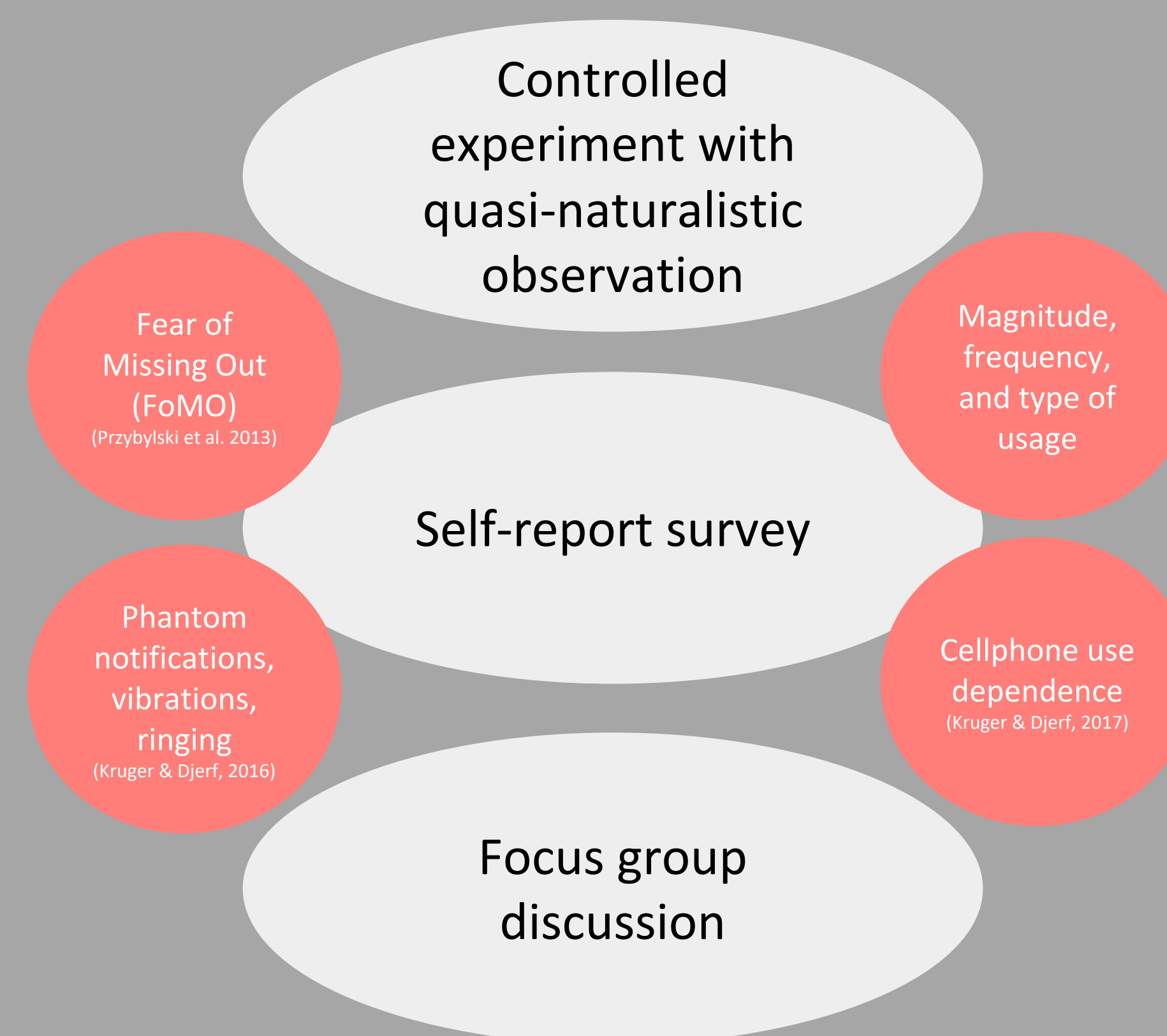
QUESTIONS

- Is addictive behavior related to cellphone use apparent?
- What does the influence that presence vs. absence of cellphones have on spontaneous social interactions?
- Are there gender differences associated with self-reported and observed cellphone usage?

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METHODS



Conditions

CELLPHONE	NO CELLPHONE
No explicit instructions restricting the use of cellphones	Cellphones confiscated upon entering the study room

Interpersonal Behaviors

- Initiates conversation (Y/N)
- Recipient of conversation (Y/N)
- Time until conversation (in seconds)
- Time in conversation (in seconds)
- Proportion of time in conversation

Cellphone Behaviors

- Initiates cellphone use (Y/N)
- Time until cellphone use (in seconds)
- Proportion of time in cellphone use

Participants (N= 353 surveys)

Gender identity: 62% females, 38% males
Academic year: 61% freshman, 27% sophomores, 6% juniors, 2% seniors, 1% > seniors

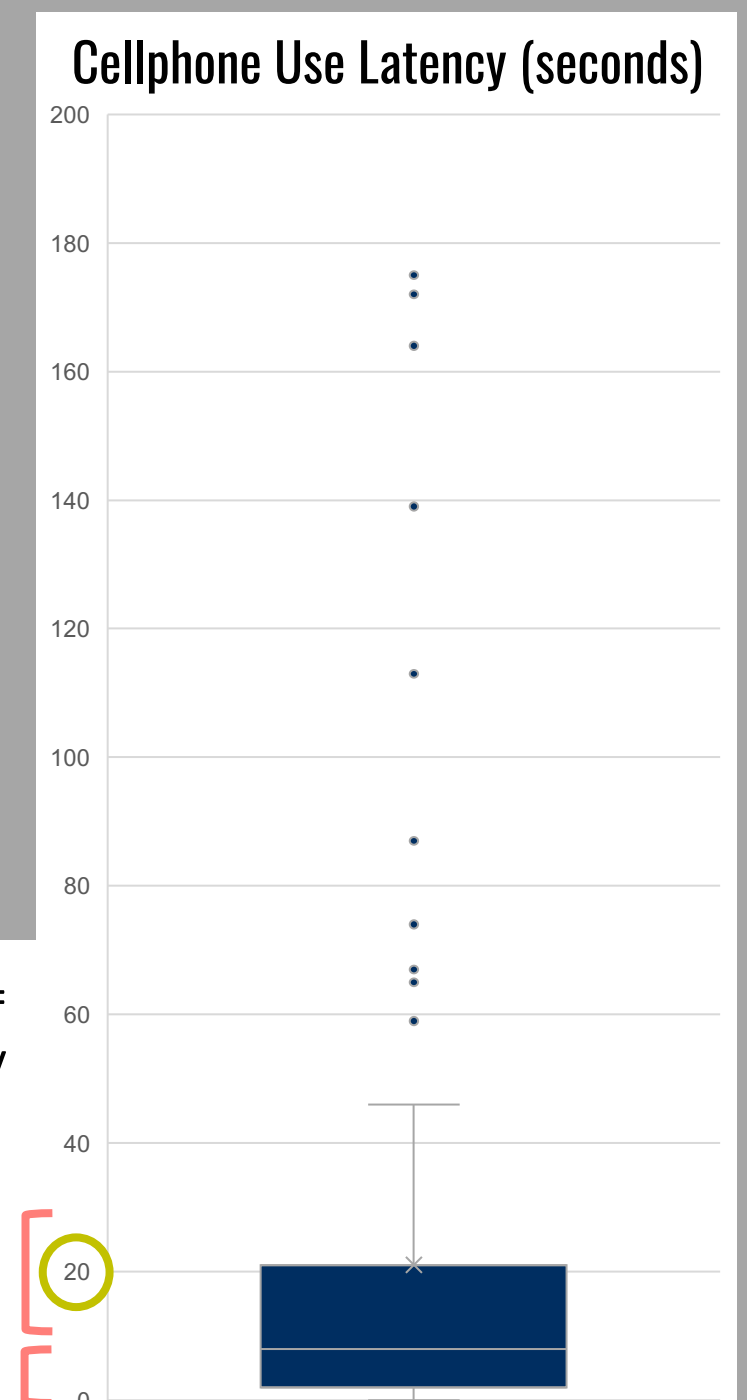
RESULTS

Observations

	CELLPHONE GROUPS	NO CELLPHONE GROUPS	DIFFERENCE IN MEANS
Engagement in Live Conversation	52% of participants	78% of participants	$t(232) = 4.26$, $p < .001$, $d = 0.56$
Conversation Latency	$M = 74$ seconds	$M = 42$ seconds	$t(232) = -2.96$, $p = .004$, $d = 0.47$
Proportion of Time in Conversation	27% of total time	58% of total time	$t(232) = 6.93$, $p < .001$, $d = 0.91$

The majority of participants in the cellphone group engaged in use ($M = 0.75$, $Med = 1.00$), and their latencies (though more dramatic) generally corroborate the results reported previously by Kruger et al. (2017) and presently by the self-report surveys

$M = 21$ seconds, $Std = 37$ seconds
 $Min = 0.0$, $Q1 = 2.5$, $Med = 8.0$, $Q3 = 20.0$, $Max = 175.0$



Surveys

- Females report higher levels of FoMO* and cellphone use dependence* than males
- Females and males report similar amounts of phantom cellphone experiences
- Females report greater number of minutes using phone** and number of times 'checking' phone** than males
- Females report greater lengths of cellphone latency than males**
- 50% of participants report using their phones within 30 seconds of entering a waiting space (21% within 10 seconds, 29% within 10-30 seconds)

* $p < .05$ ** $p < .005$

Focus Group Discussions

"Everyone that has a cellphone is somewhat addicted to it"

"It's literally like everything in one device, so it's hard to not be addicted to it I guess"

DISCUSSION

- Addictive behavior related to cellphone use were identified by all 3 methodological modalities.
- The presence of cellphones reduces spontaneous interactions in a social setting.
- Undergraduates display several gender differences in cellphone behaviors.

Future directions: Do survey measures related to cellphone use and dependency predict observed and reported cellphone related behaviors?

Conclusions: Measures should be taken to address the psychological, health, and behavioral correlates of cellphone abuse, especially in younger populations