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### Impact of Cell Phone use During Face-to-Face Social Interaction

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# Impact of Cell Phone Use During Face-to-Face Social Interaction

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## INTRODUCTION

- Our topic is about how cell phone use decreases the enjoyment of people's social interaction while playing a game. We were interested in conducting this experiment because cell phone use is so common nowadays, thus it is important to examine possible negative effects that it could have on daily social activities.
- This study is a conceptual replication of Dwyer et al. (2017) study, where participants who used their cell phones during face-to-face social interaction experienced less interest and enjoyment in the conversation and higher levels of boredom.
- Results from experimental research has shown that the presence of mobile devices during face-to-face social interactions reduces relationship quality and satisfaction (Hong et al., 2019)
- In the study by Brown et al. (2016), participants who used their cell phones during a five minute social interaction with a friend reported high feelings of being strained and low levels of enjoyment.
- In a similar study, participants rated a conversation significantly more enjoyable when the confederate who they were conversing with did not use their phone, compared to participants who conversed with a confederate that used their cell phones during the interaction (Johnson et al., 2019).

## HYPOTHESIS

Does cell phone use affect enjoyment during face-to-face social interaction? We predict that the use of cell phones during face-to-face interactions will decrease the levels of enjoyment of the social interaction, compared to interactions without cell phone use where level of enjoyment will be higher.

## METHOD

- Participants**
- Eighty-three Longwood Students,  $N(\text{cell phone group}) = 43$ ,  $N(\text{non-cell phone group}) = 40$
  - 99% people of age between 18 and 24, and 1% people of age between 35-44
  - Male= 14.5%, Female = 83.1%, Other genders= 2.4%,
  - Participant were recruited via SONA System
- Materials and Procedure**
- IV: Cell phone use with 2 conditions
  - DV: Ratings of enjoyment
  - Demographic Survey
  - Playing Game and Enjoyment Survey
  - Enjoyment Questionnaire
  - Card game called *What Do You Meme?*
  - Random assignment to two groups: cell phone group and non-cell phone group.
  - Each group played a card game for 15 minutes. During the game, cell phone group was asked to fill out a short online survey as manipulation to use their phone, while the non-cell phone group was asked to fill out a hard copy of the same survey and was not allowed to use their phones.
  - After play time, participants in both groups completed Enjoyment Questionnaire and were debriefed.
  - The data analyzed was from the enjoyment questionnaire. Last two items of the questionnaire are the manipulation check

## MATERIALS

### Playing Game and Enjoyment Survey

-Have you ever played this card game before? Yes No Not Sure  
-How do you like this game so far? I dislike it Neutral I like it

### Enjoyment Questionnaire

For each following statements, please indicate how true it is for you with regards to your experience today.

	Not at all true			Somewhat true			Very true
1-I enjoyed this experience very much.	1	2	3	4	5	6	7
2-I would describe this experience as very interesting.	1	2	3	4	5	6	7
3-During this experience, I was thinking about how much I enjoyed it.	1	2	3	4	5	6	7
The questions below refer to your mobile phone use during the game experience at the study today.							
-While playing the card game today, how often did you use your phone?	Not at all						Constantly
	1	2	3	4	5	6	7
-While playing the card game today, how often were you interrupted by your phone?	1	2	3	4	5	6	7

## RESULTS

- An independent t-test was used to test the hypothesis. The hypothesis was not supported by our data.
- There was no significance difference of reported levels of enjoyment between cell phone group ( $M = 5.19$ ,  $SD = 1.29$ ) and non-cell phone group ( $M = 5.30$ ,  $SD = 1.47$ ),  $t(81) = -.38$ ,  $p = .708$ , Cohen's  $d = 0.083$  (See Figure 1).
- There was significant difference of frequency of cell phone use and cell phone distraction between cell phone group ( $M = 1.84$ ,  $SD = 1.02$ ) and non-cell phone group ( $M = 1.06$ ,  $SD = 0.26$ ),  $t(81) = 4.68$ ,  $p < .001$ , Cohen's  $d = 1.03$  (See Figure 2). Therefore, the cell phone group used significantly more their cell phones during the study compared to the non-cell phone group.

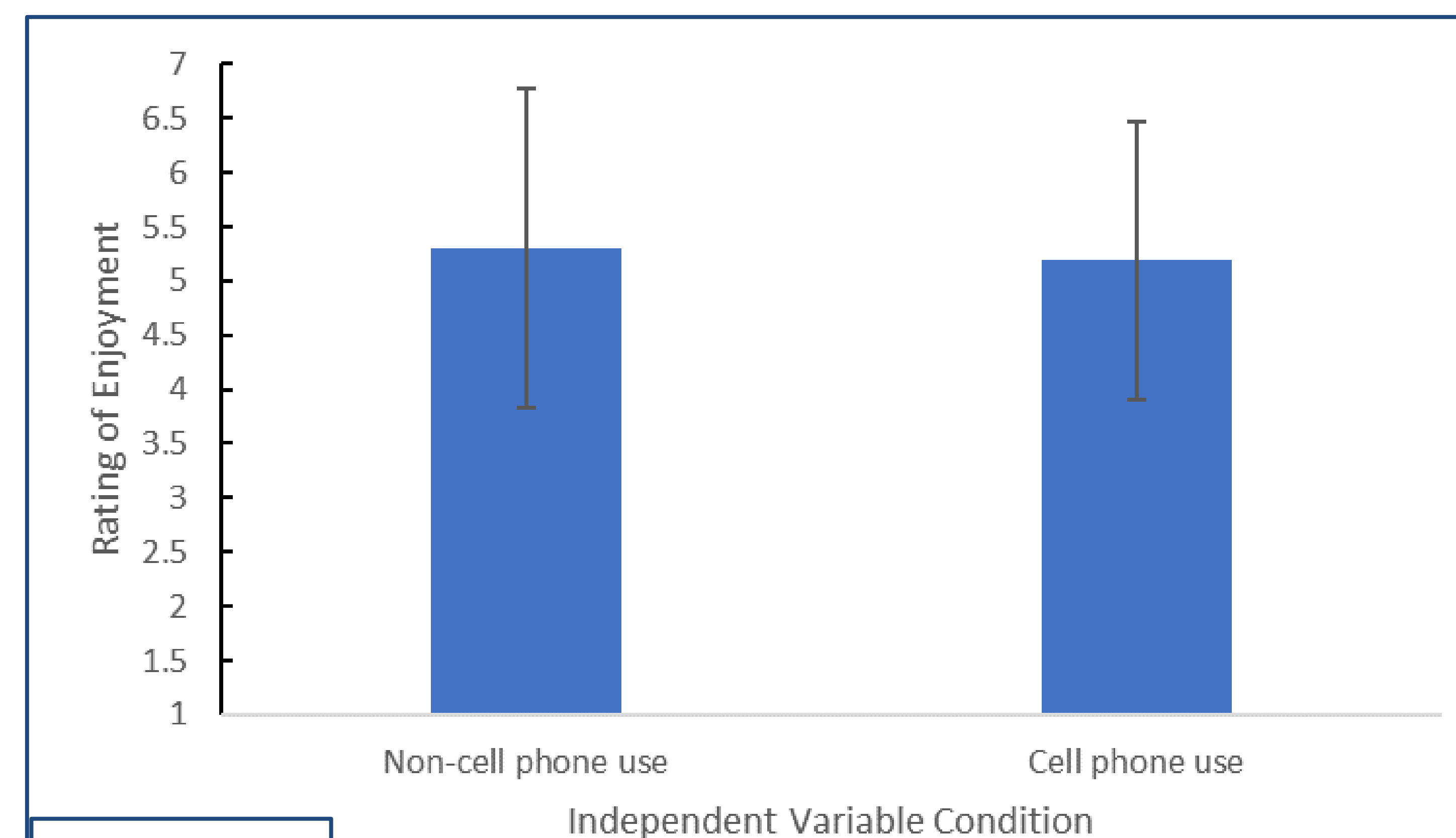


FIGURE 1

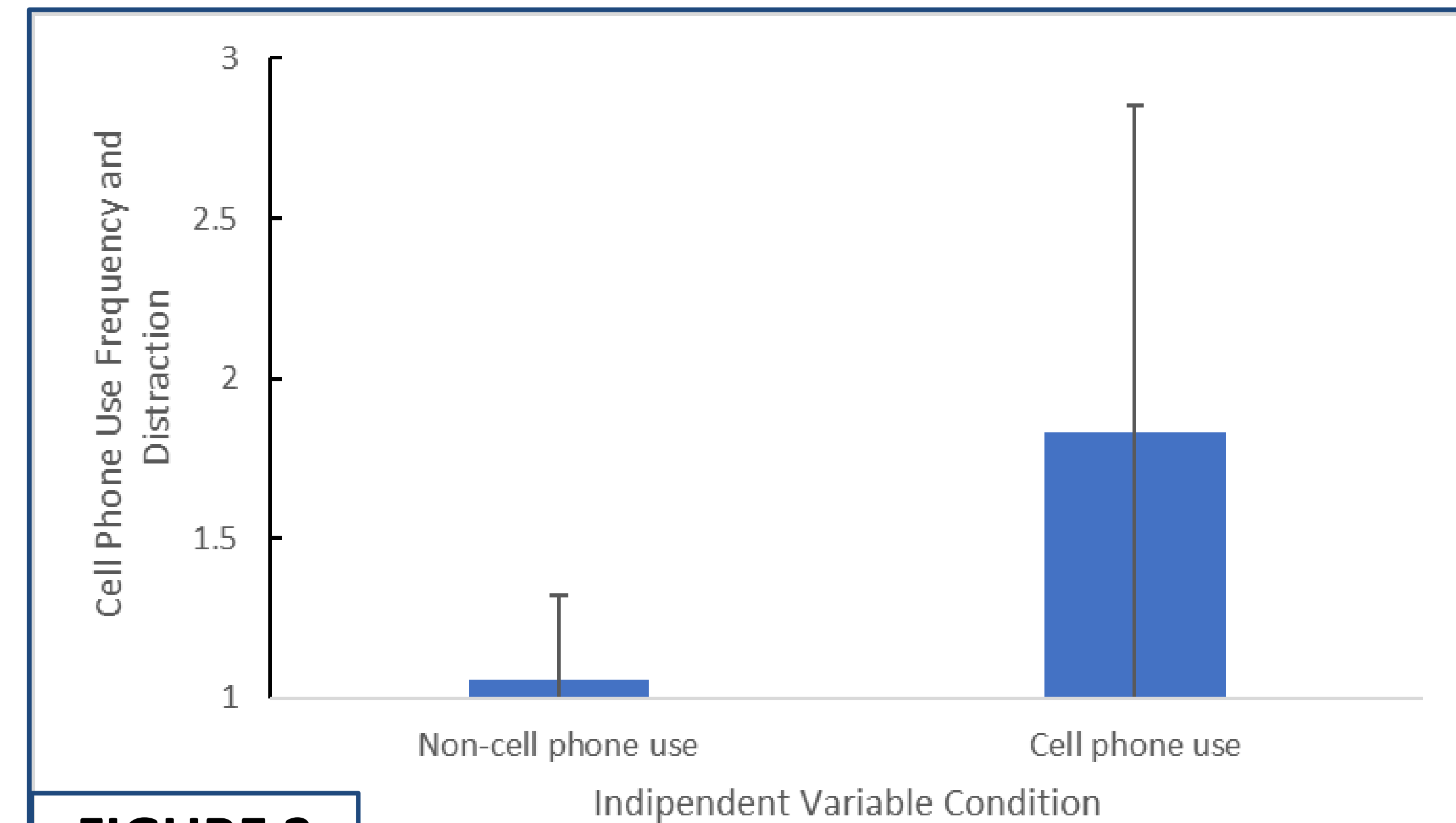


FIGURE 2

## DISCUSSION

- Our results show that cell phone use did not decrease levels of enjoyment during the social interaction, thus it had no effect.
- Limitation include not enough play time, weak manipulation of cell phone use, small group size and not considering body behavior as measure of enjoyment
- Cell phone use might have no impact on enjoyment during interactions

### Future Directions:

- Different location other than standard university classroom
- Use sample from different type of population, such as teenagers
- Future research is needed to explore effects of cell phone use, we suggest to add a confederate that will use their phones during the social interaction

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