

# The Effect of Sleep Quality on Relationship Quality as Measured by Couple's Performance in Charades.

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## Background

- Increased fighting behaviors and lack of attachment issues are associated with poor sleep quality (Schlarb et. al, 2015).
- There is a need to understand how authentic connections of romantic couples (Xia et al., 2023) in real-world settings relates to sleep.

## Objective

We predicted that increased sleep duration would be relate to increased performance during a game of “Charades” in romantic couples.

## Method

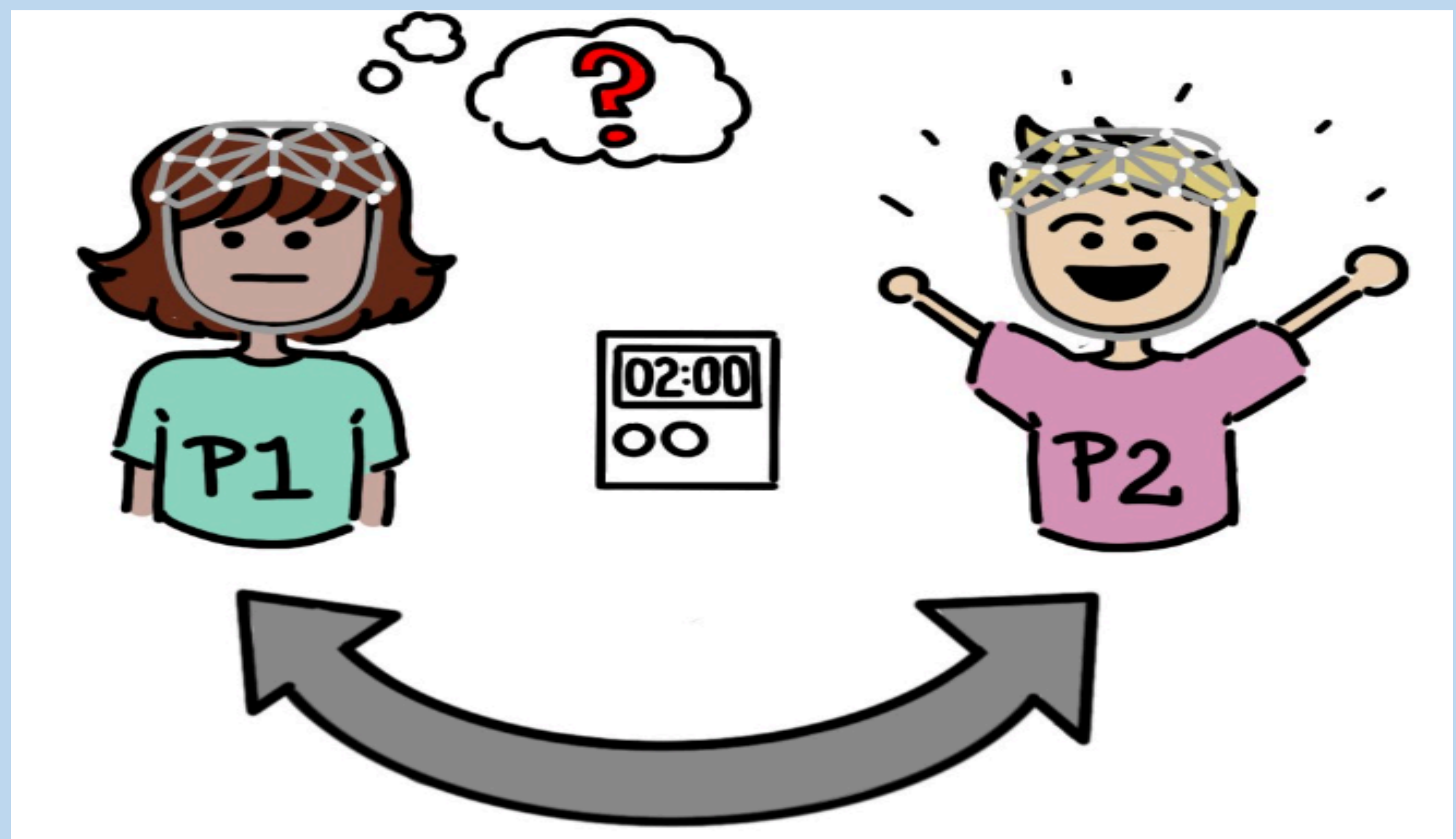
**Participants** were 30 adult participants (aged 18-40 years) in a self-affirmed romantic partnership.

- Here, we present data from 27 participants with complete sleep and performance data.

## Sleep measure

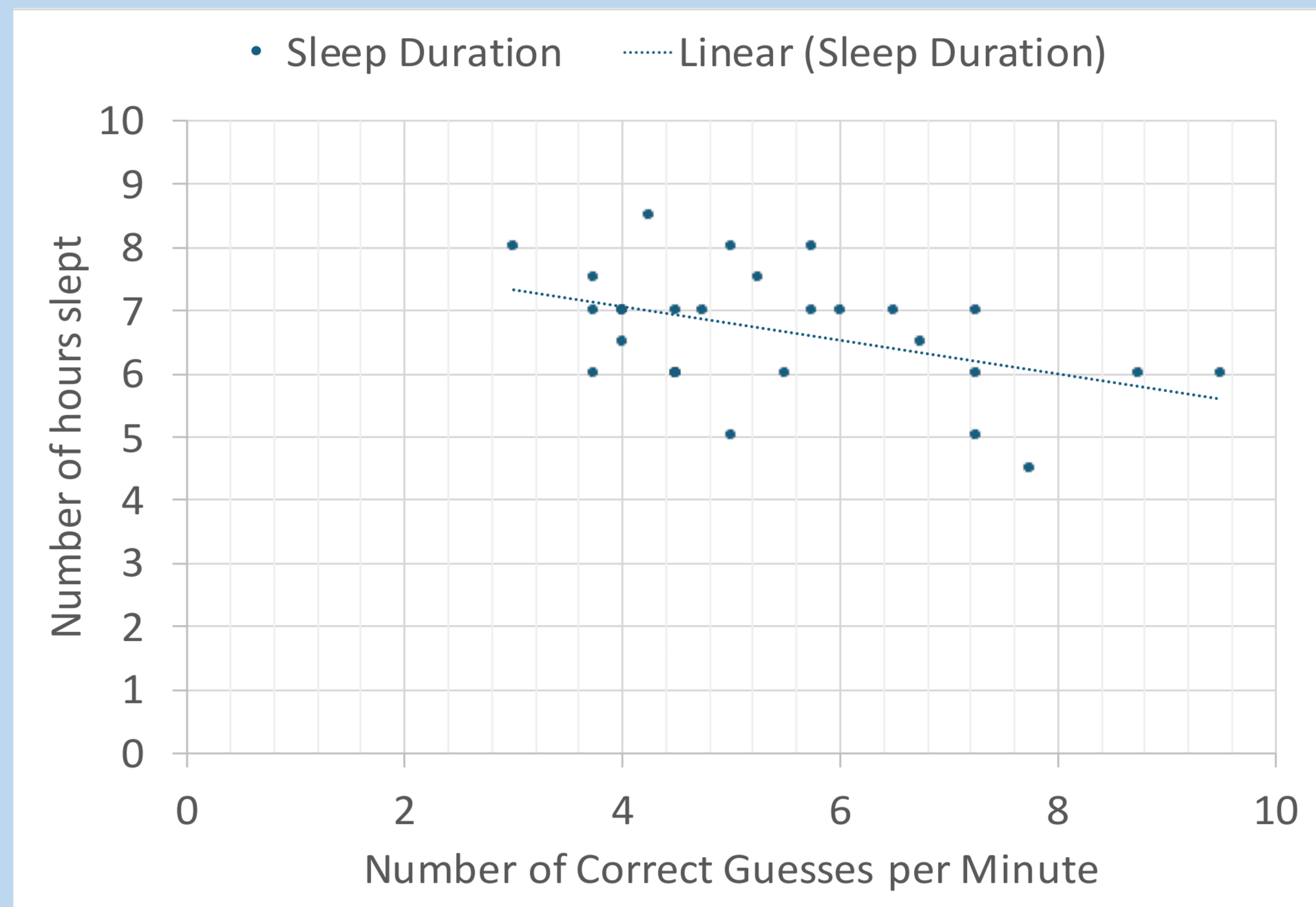
Pittsburgh Sleep Quality Index (PSQI; Schlarb et al., 2015) - Asked questions about sleep habits and concerns about sleep.

**Charades performance**, see Figure 1



**Figure 1. Visual Representation of Charades Task.**

Participants took a turns (2 minutes each turn) either either guessing or reenacting actions while performance and brain activity were recorded.



**Figure 2. Relationship between Sleep Duration and Number of Correct Guesses per Minute.**

Pearson's  $r$  indicated that participants who reported lower sleep duration had more correct guesses per minute,  $r(27) = -.45, p = .02$ .

## MAIN TAKEAWAY

Contrary to our prediction, participants who slept less performed better during Charades. Considerations for how sleep may affect social behavior may help us learn how to improve relationships.

Brain Research Across  
Development Laboratory

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