

# Does the neuropsychologist's presence affect performance during online psychological tests?

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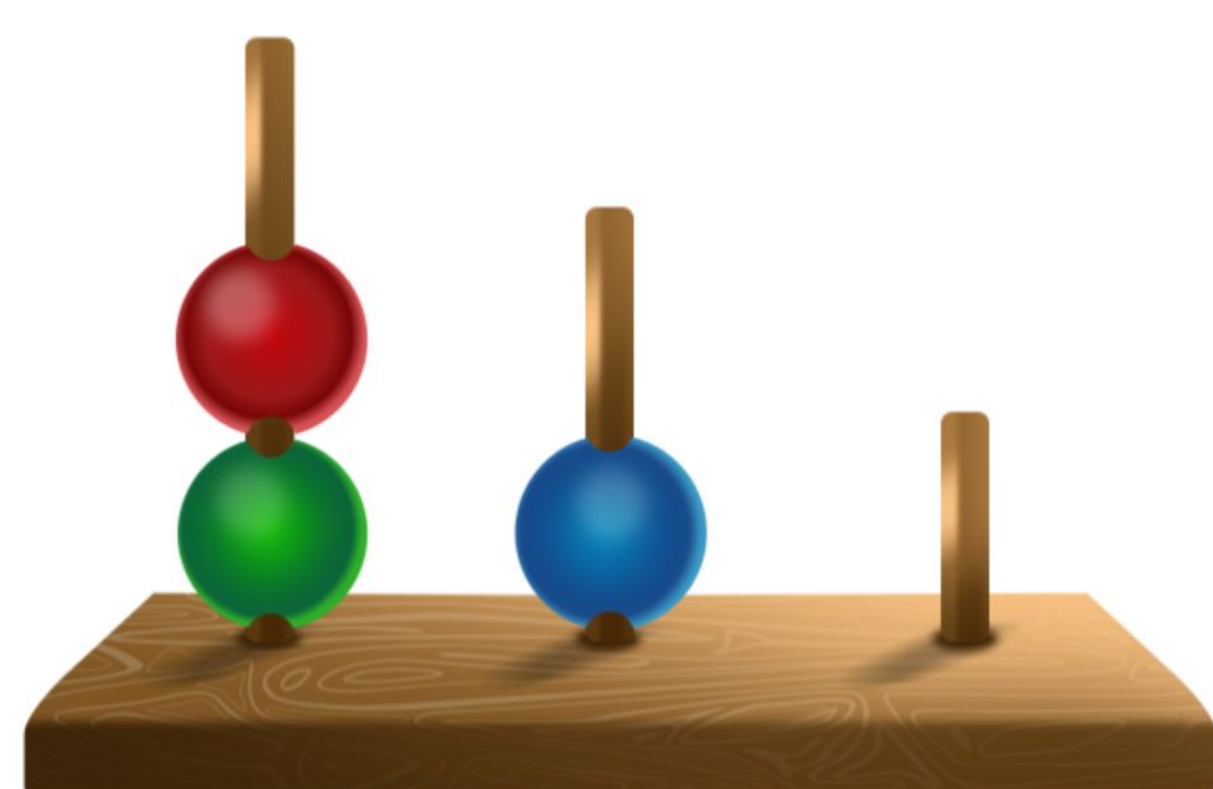
## INTRO

The field of Teleneuropsychology increased its popularity and relevance after social distancing policies during COVID-19 pandemics. Nonetheless, it is important to study potential extraneous factors which could affect the patient scores on virtual tasks, such as the mere presence effect.

The present work aims to investigate how much an evaluator's presence affects the subjects performance during online adapted Tower of London testing

## METHODS

- 60 Brazilians (56.7% females), were divided equally into two groups.
- One group undertook the adapted brazilian online version of the Tower of London test unsupervised, and the other supervised via synchronous video conference.
- Total scores and mean response times were collected and analysed afterwards.
- A Bayesian Mann-Whitney U test with Cauchy prior was employed to evaluate the hypothesis considering both the total score and the total response time. Data was analysed in Jamovi.



Data results support the hypothesis of **no influence** of the **mere presence effect** in performances **during online assessment** of the adapted Tower of London when in supervised synchronous video conference.

Figure 1.

Descriptive plot of total score means in the supervised and unsupervised groups with standard deviation in a 95% confidence interval.

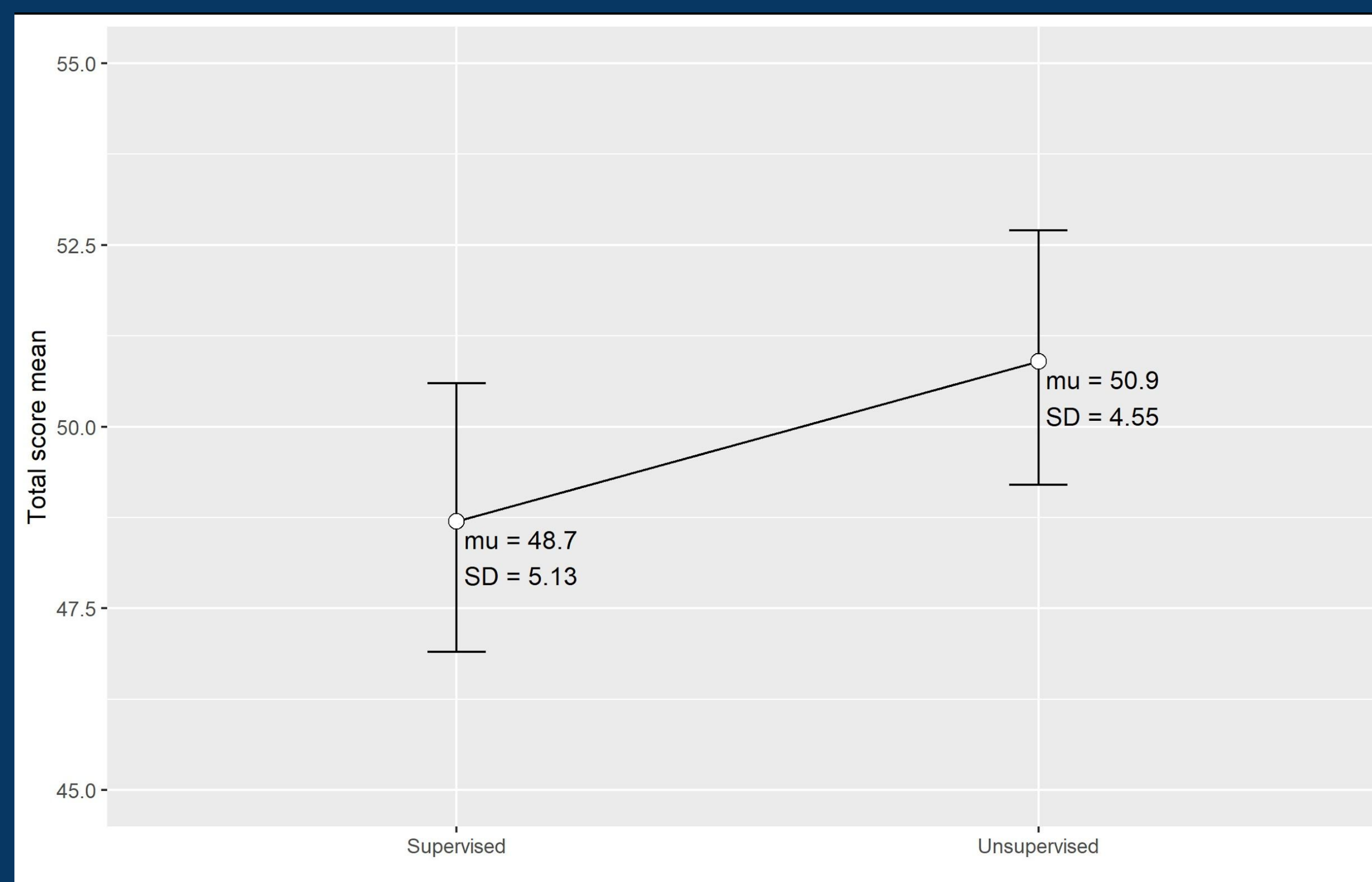
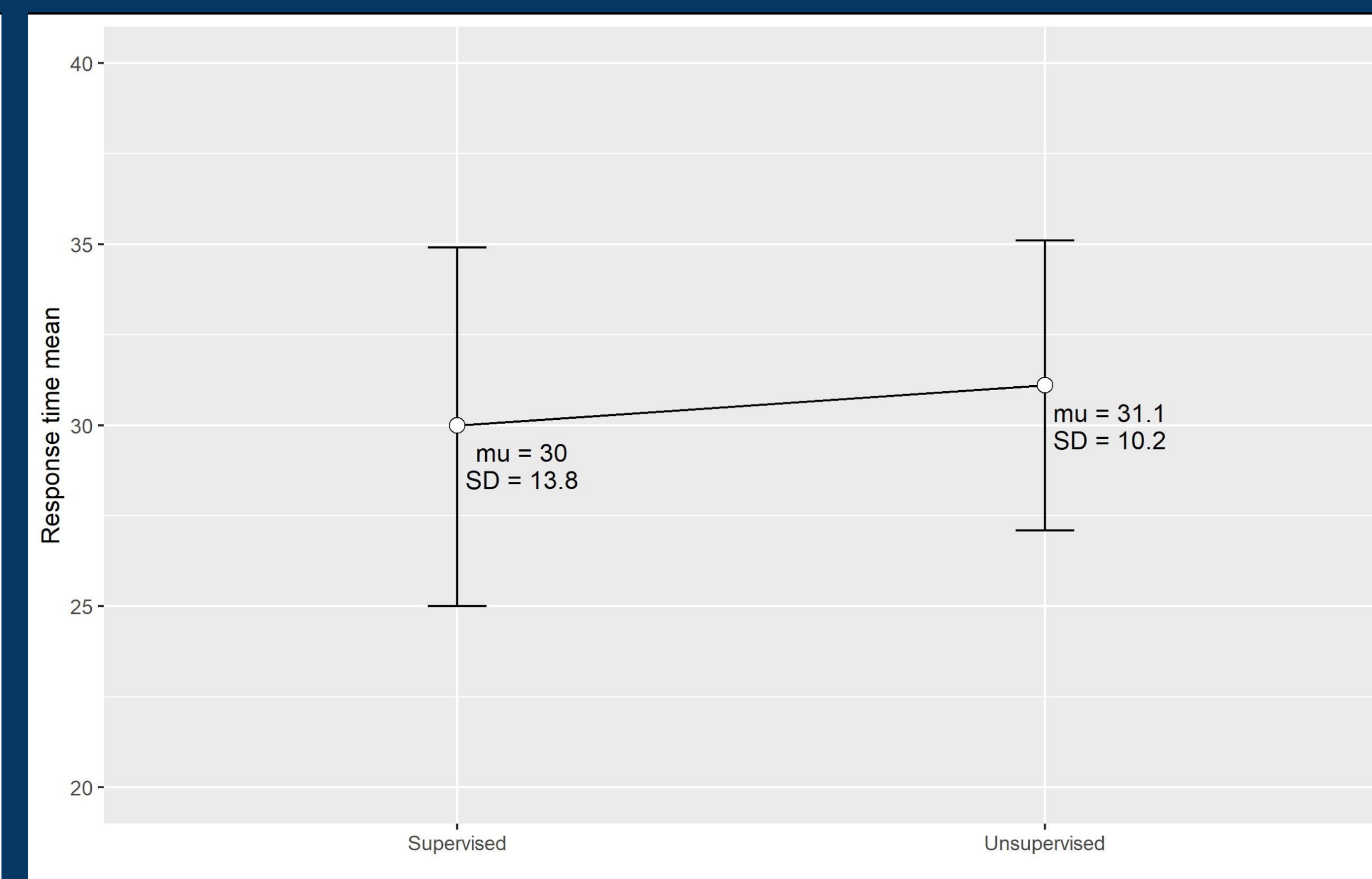


Figure 2.

Descriptive plot of mean response times in the supervised and unsupervised groups with standard deviation in a 95% confidence interval.



## DISCUSSION

- $H_0$ ; no difference between groups
- $H_1$ ; difference between groups

- For the total score, the results indicate an equal support both for null and alternative hypotheses ( $BF_{01} = 1.086$ ;  $BF_{10} = .921$ )
- For the mean response time ( $BF_{01} = 2.122$ ;  $BF_{10} = .471$ ) data also supports the hypothesis of no difference between groups.
- There was no video interaction during the task. Therefore, further studies including this variable should be constructed.

## References

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