

Does Body Awareness Mediate the Relationship Between Anxiety and Nocebo?

Brinn Edgington^{1,2}, Ella Weik^{1,3}, Regula Neuenschwander⁵, Tim Oberlander^{1,4}, & Christine Tipper^{1,3}

¹BC Children's Hospital Research Institute, ²Department of Psychology, ³Department of Psychiatry, ⁴Department of Pediatrics, University of British Columbia, Vancouver, BC, Canada, ⁵Department of Psychology, University of Bern, Switzerland

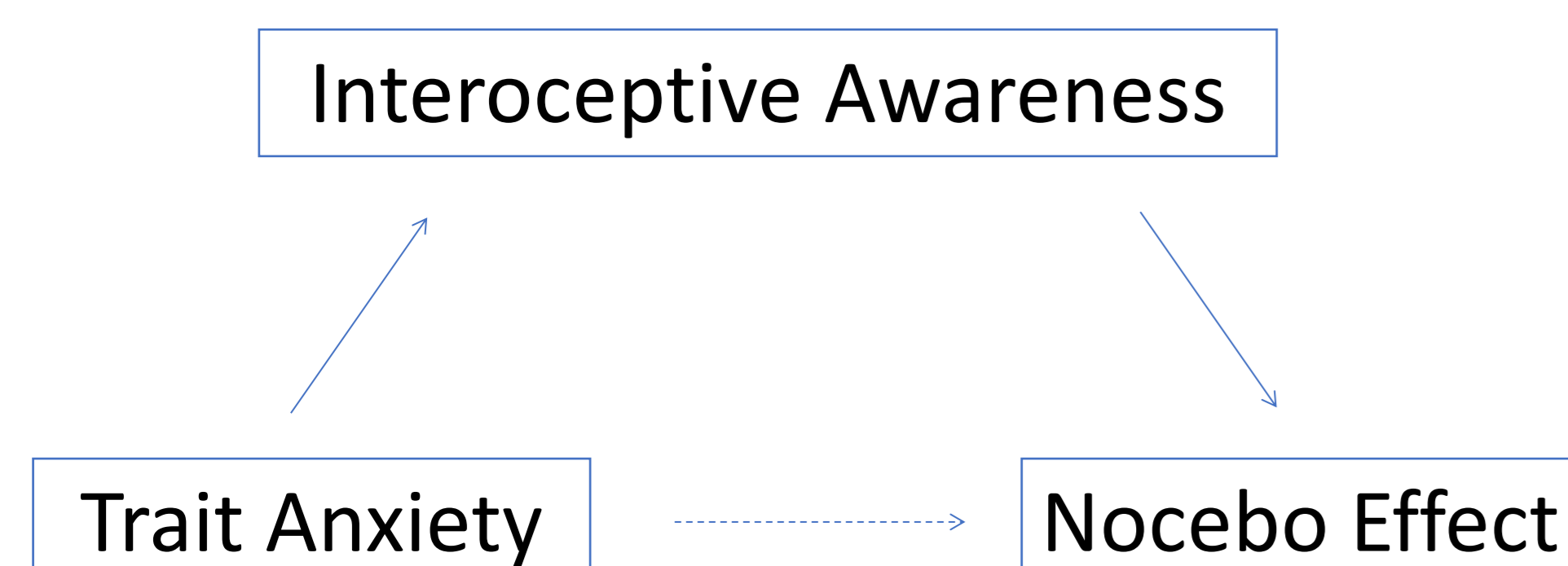
Introduction

- The nocebo effect is defined as negative outcomes produced by negative expectations¹
- People with higher rates of trait anxiety experience a larger magnitude of the nocebo effect.²
- Higher rates of anxiety are also related to a higher awareness of one's bodily functions, also known as interoceptive awareness.^{3,4}
- There is little research looking at a potential relationship between interoceptive awareness, anxiety, and the nocebo effect.

Research Question

Is interoceptive awareness an underlying mechanism for the relationship between anxiety and the nocebo effect?

Hypothesis



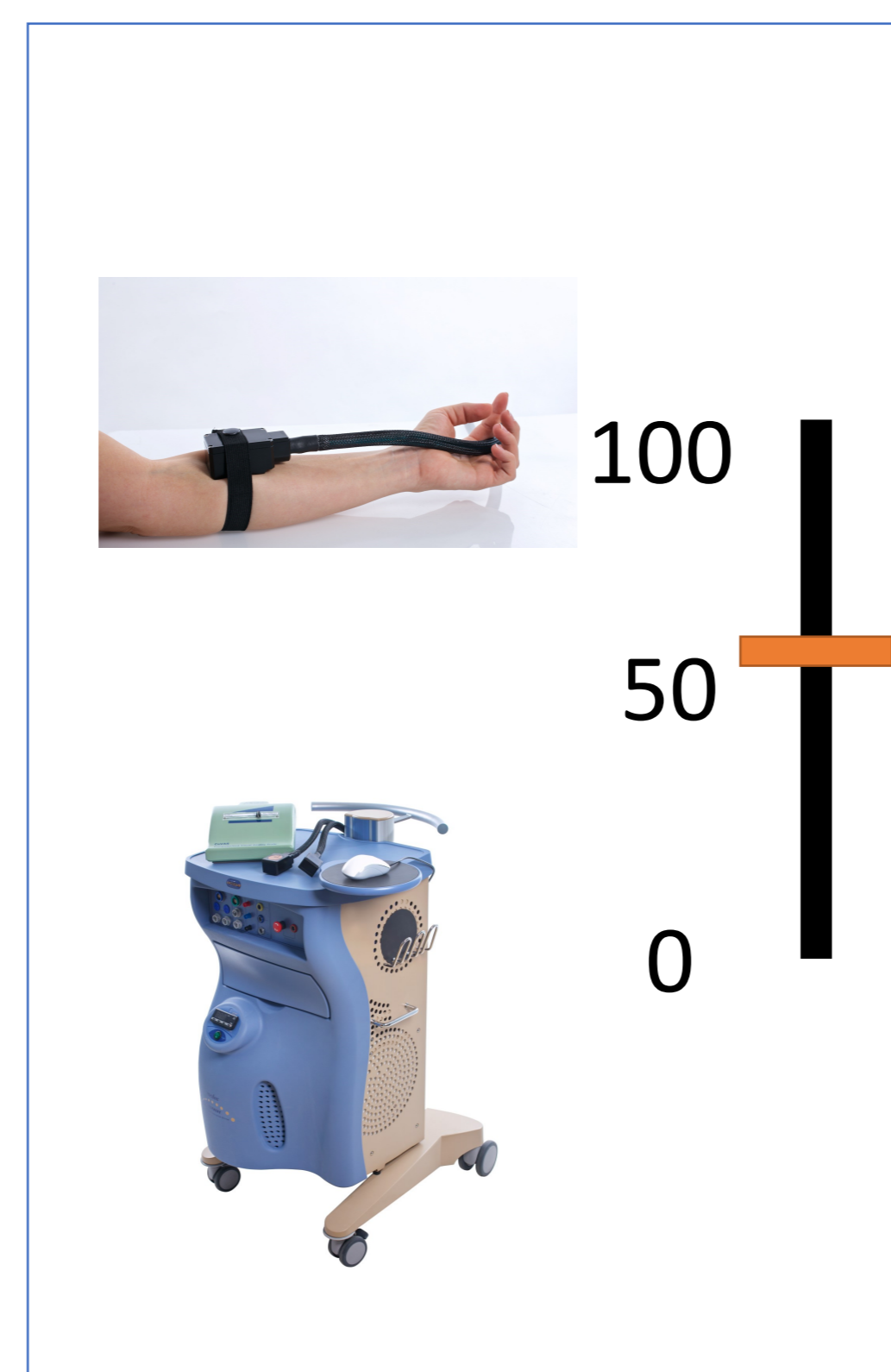
Methods

Participants: $n = 43$, range: 13 – 40, $M = 21$, ($SD = 6.52$)

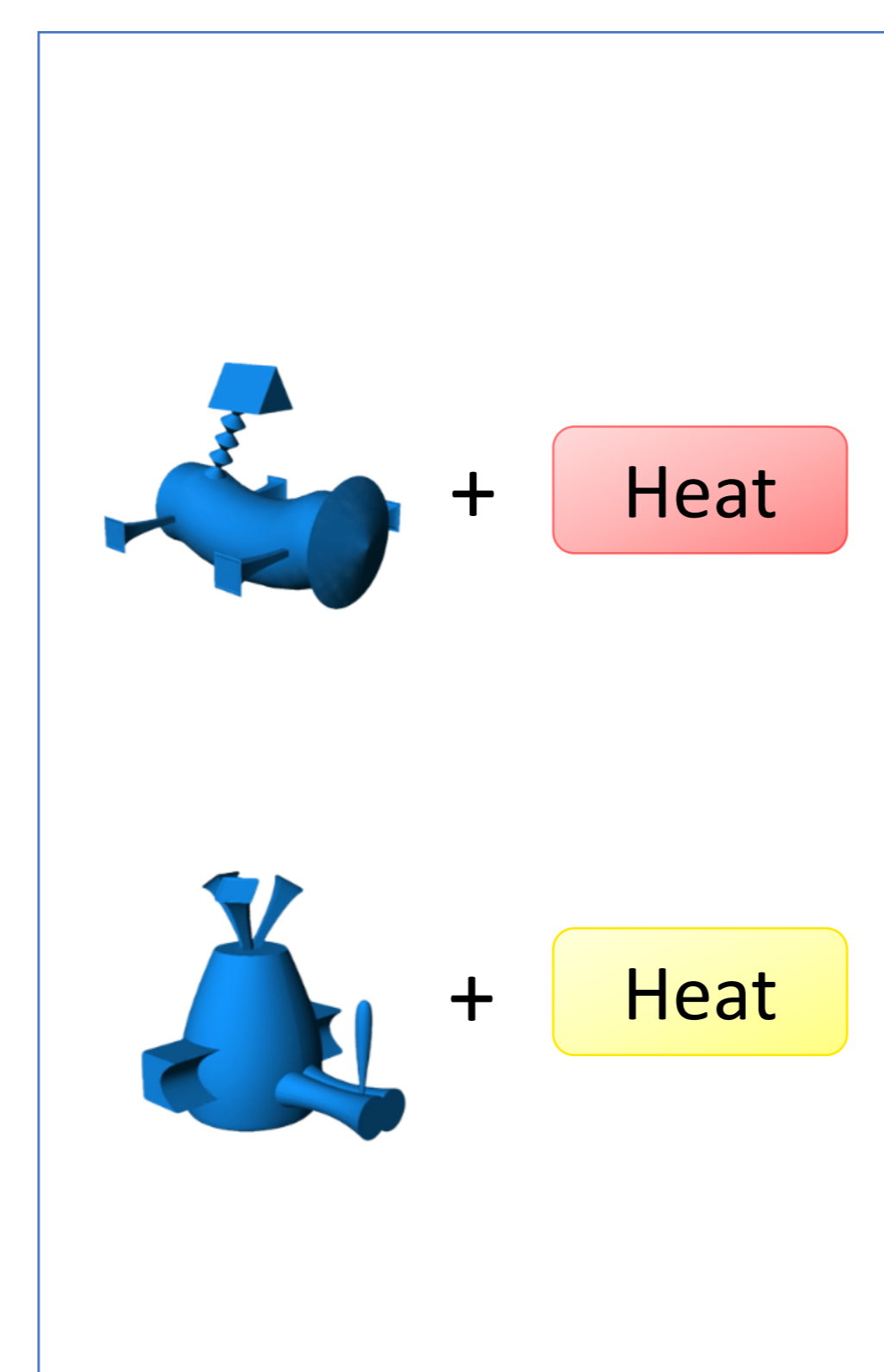
Procedure:

1. Conditioning visual stimuli⁵ with thermal sensations

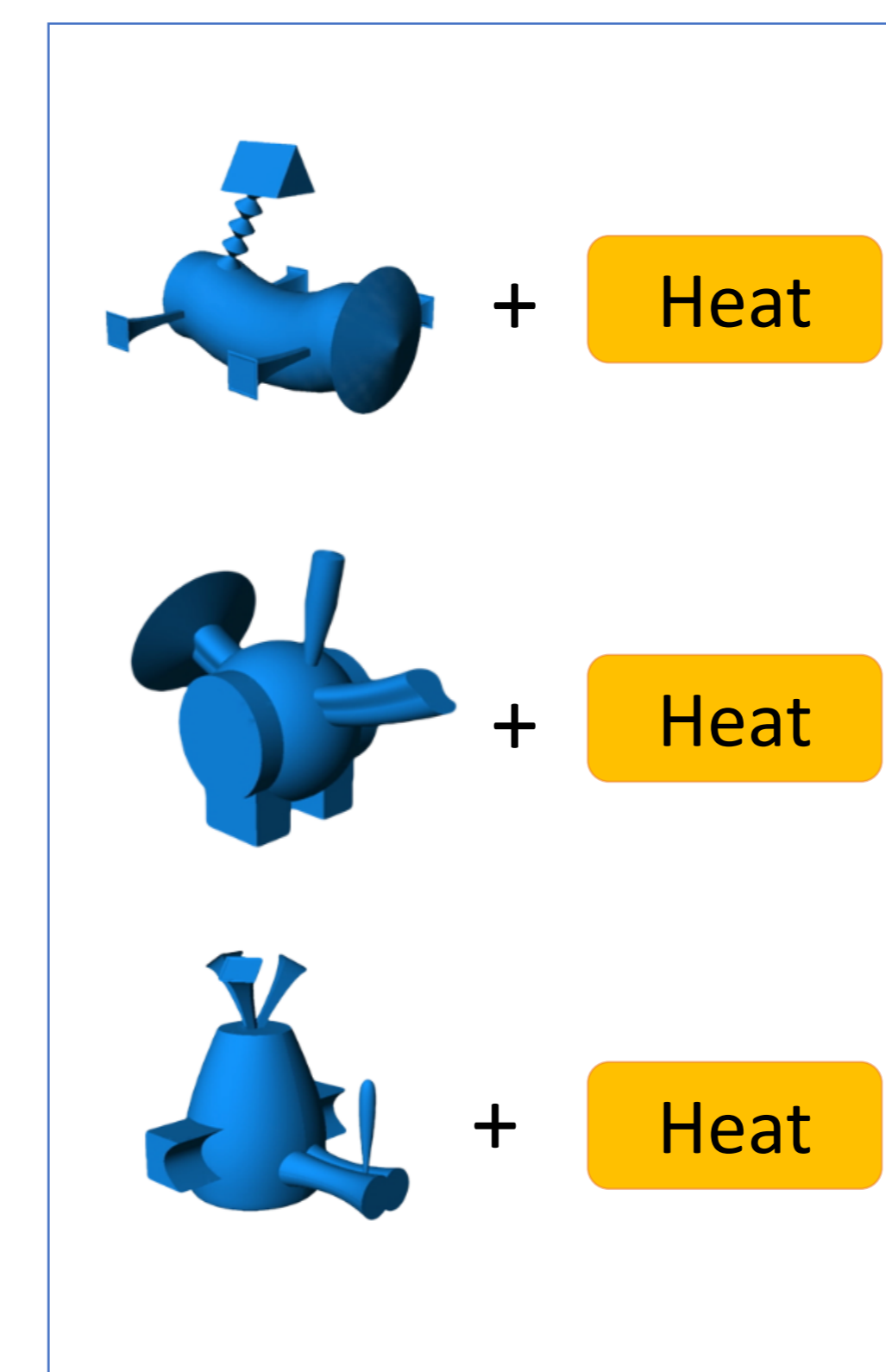
Calibration



Conditioning



Testing



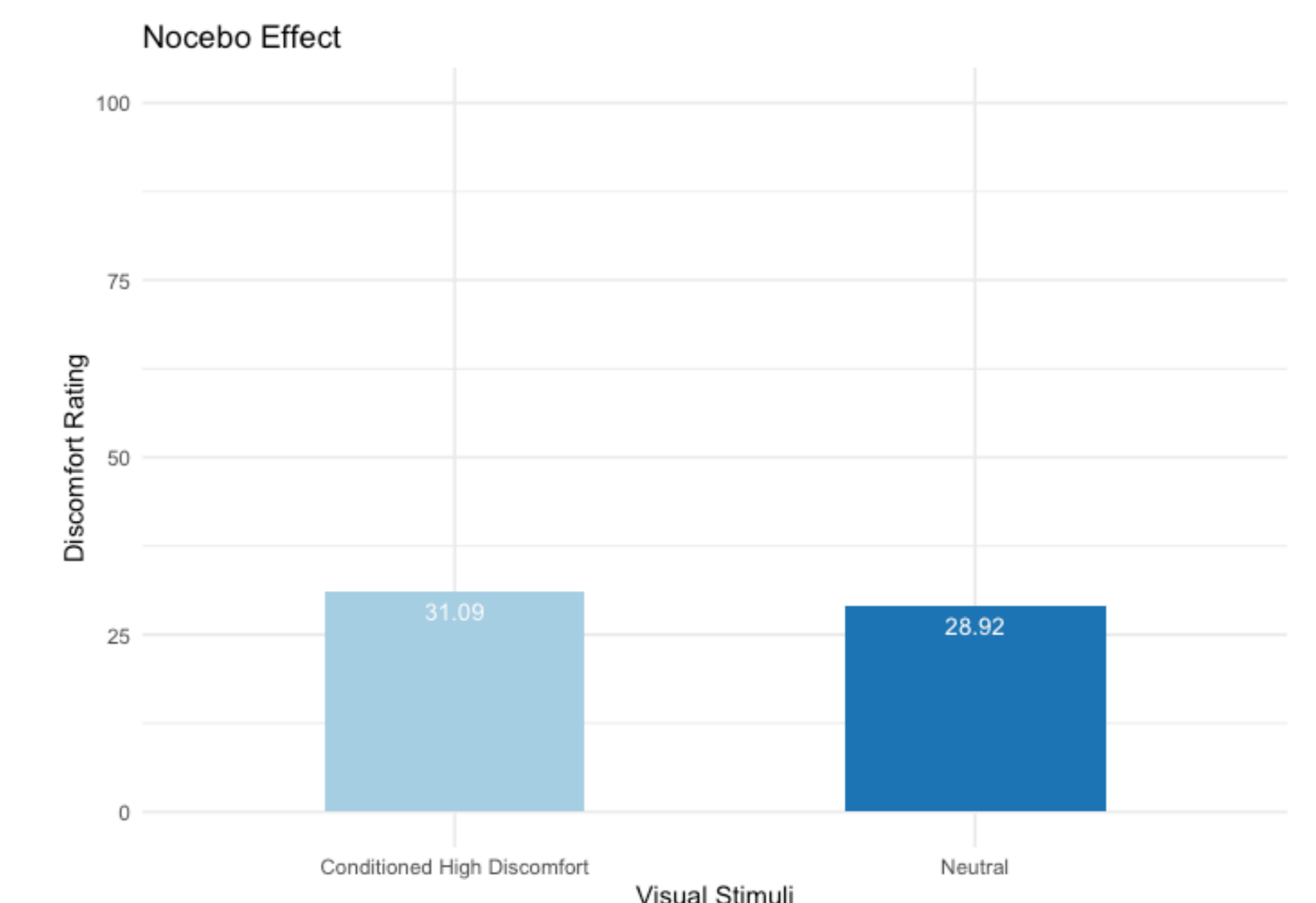
2. Questionnaires

- STAI: State Trait Anxiety Inventory
- MAIA: Multidimensional Assessment of Interoceptive Awareness

References

¹Faasse, K. Australian Psychologist (2019), ²Weik et al., In review (2020), ³Stewart et al., Journal of Anxiety Disorders (2001), ⁴Pollatos et al., International Journal of Psychophysiology (2007), ⁵Barry, T. et al. Frontiers in Psychology (2014).

Results



- A significant nocebo effect was found ($t(42) = 2.94$, $p = .005$).
- There was no significant relationship between trait anxiety and nocebo ($F(1, 41) = 0.47$, $p = .498$, $\beta = -0.06$).
- Interoceptive awareness was not significantly related to trait anxiety ($F(1, 41) = 1.10$, $p = .301$, $\beta = -0.02$) or the nocebo effect ($F(1, 41) = 0.58$, $p = .452$, $\beta = 0.51$).

Conclusion

A significant nocebo effect was found. However, trait anxiety did not predict the nocebo effect. Further research is necessary to better understand the relationship between anxiety and nocebo, and if interoceptive awareness plays a part.