

# Not my body, not my pain? Pain perception and placebo analgesia in individuals with Body Integrity Dysphoria

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## Introduction

- Physical pain is inherently linked to our body perception.
- Insight into the relationship between clinical alterations in body perception and pain is limited.
- The current study examined both pain perception and placebo analgesia in Body Integrity Dysphoria (BID), a more permanent clinical model of bodily disownership.



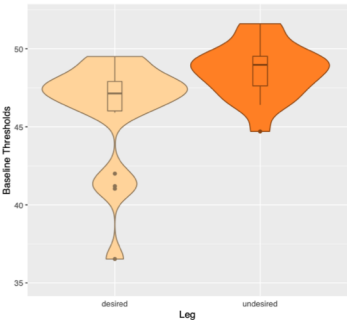
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## Results

Figure 1



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Figure 2

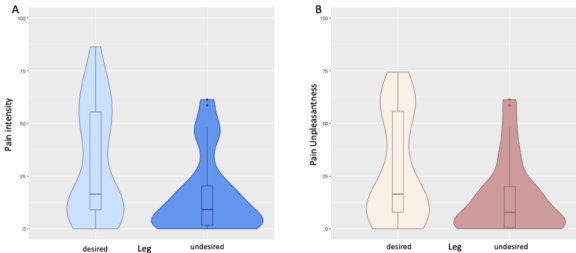
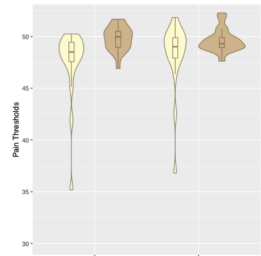


Figure 3



- Fig. 1. Baseline pain thresholds were higher thresholds for the undesired leg
- Fig. 2. A. Baseline pain intensity (A) and pain unpleasantness (B) were lower for the undesired leg
- Fig. 3. Placebo treatment was only effective for pain thresholds administered to the desired leg

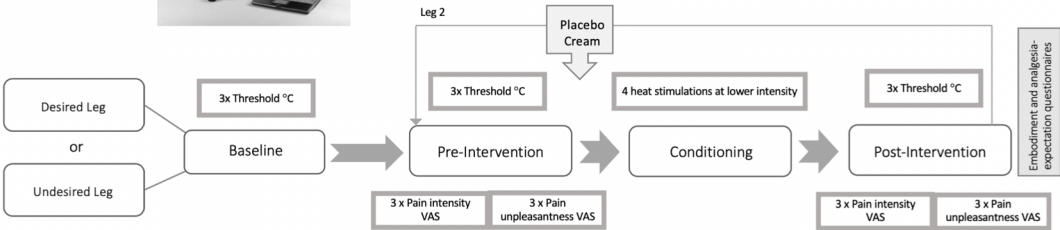
## Methods

TSA-II NeuroSensory Analyzer



## Participants

- 19 (4 F; 13 M; 2 N/A; age 27-69 yrs,  $M = 46.82$ ,  $SD = 11.13$ )
- Unilateral amputation desire of the left or right leg



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## Discussion

- A pathologically reduced sense of body ownership is associated with lower sensitivity to pain and reduced top-down modulation by placebo.
- Patients with BID demonstrated higher pain thresholds, as well as lower pain intensity and unpleasantness ratings when heat stimuli were applied to their undesired as compared to their desired leg.
- Placebo analgesia for pain thresholds was successfully induced to the desired leg only.
- Placebo responses to pain intensity and unpleasantness ratings were not found for either leg, which might suggest generally diminished placebo responses.

## Limitations

- Small sample size
- No sensory discrimination tests

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