

Embodied Affect: Bodily Awareness and Affective Experience in Daily Life

Tessa Reid, Jayda Vazquez, Dan Magelinski, Alexandra MacVittie, Kaitlyn McMullen, & Jolie Wormwood

Department of Psychology, University of New Hampshire

Introduction

- **Affect** is a conscious state of feeling, comprised of arousal (how activated or deactivated one feels) and valence (how positive or negative one feels). [1,2]
- **Body Awareness** is the subjective experience of bodily sensations and states and can be influenced by various factors such as attention, memory, and affect. [3]
- Heightened attention to bodily sensations is broadly associated with features of negative affect (i.e. anxiety). [4] and individuals who typically experience negative affect may be more attentive to bodily sensations. [5]
- Body awareness is thought to be involved with regulation of affect [3]; affect dysregulation is central to several mental illnesses (e.g., depression [6], and anxiety [4]).
- Previous literature focuses on objective measurements of bodily awareness in lab settings [2]. In the present study we look to examine the subjective experience of bodily sensations and affect throughout participants' daily lives.

Hypothesis We predicted that in moments of higher bodily awareness, participants would report higher arousal and more negative valence.

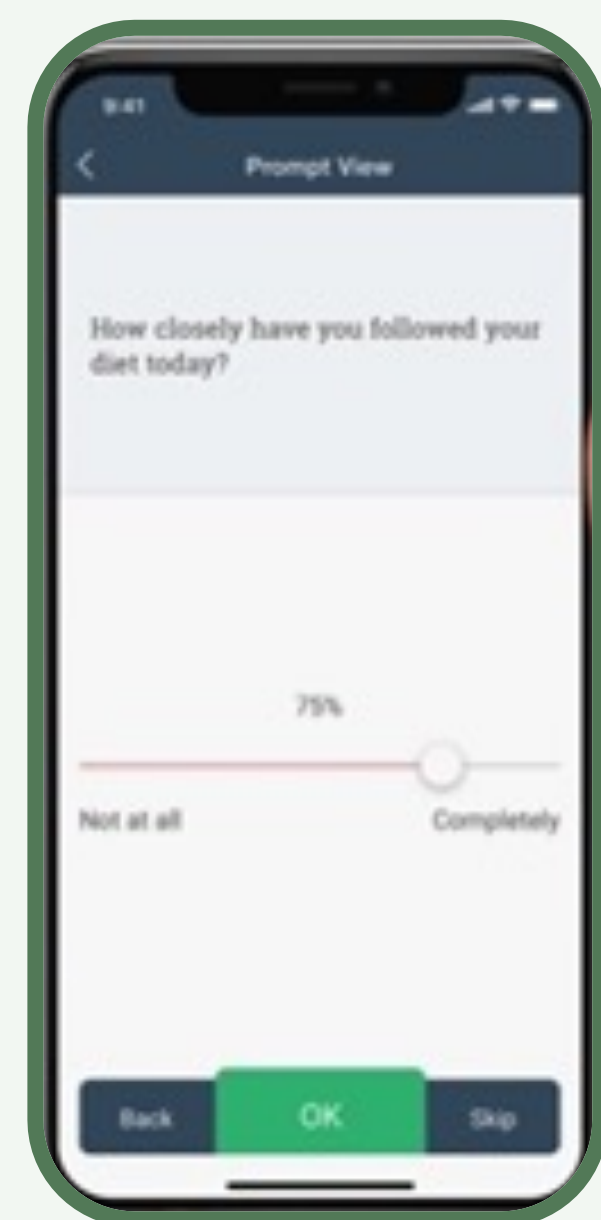
Methods

Participants 116 adults recruited online

Procedure 7-day ecological momentary assessment (EMA) paradigm

Ecological Momentary Assessment Surveys:

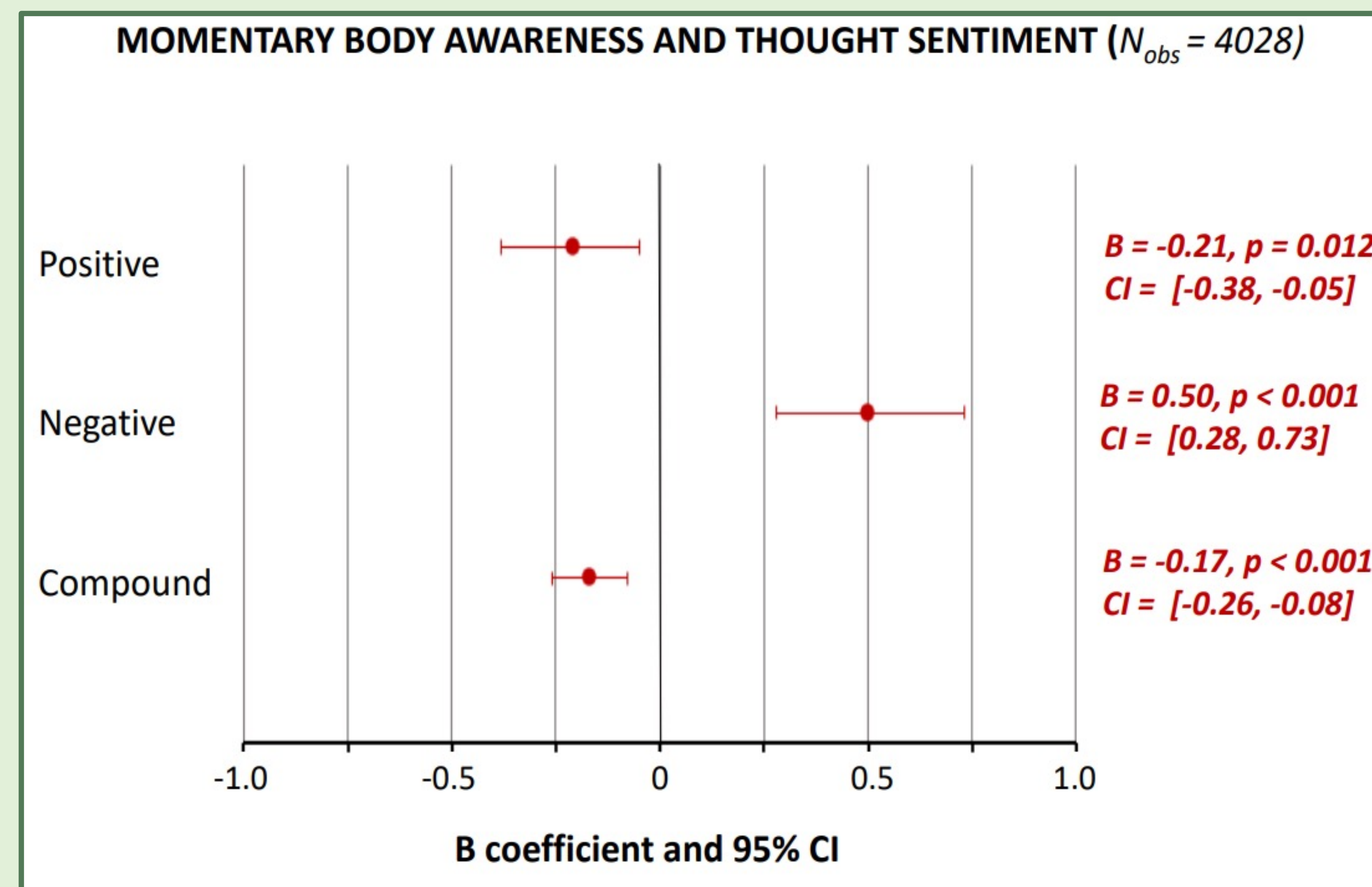
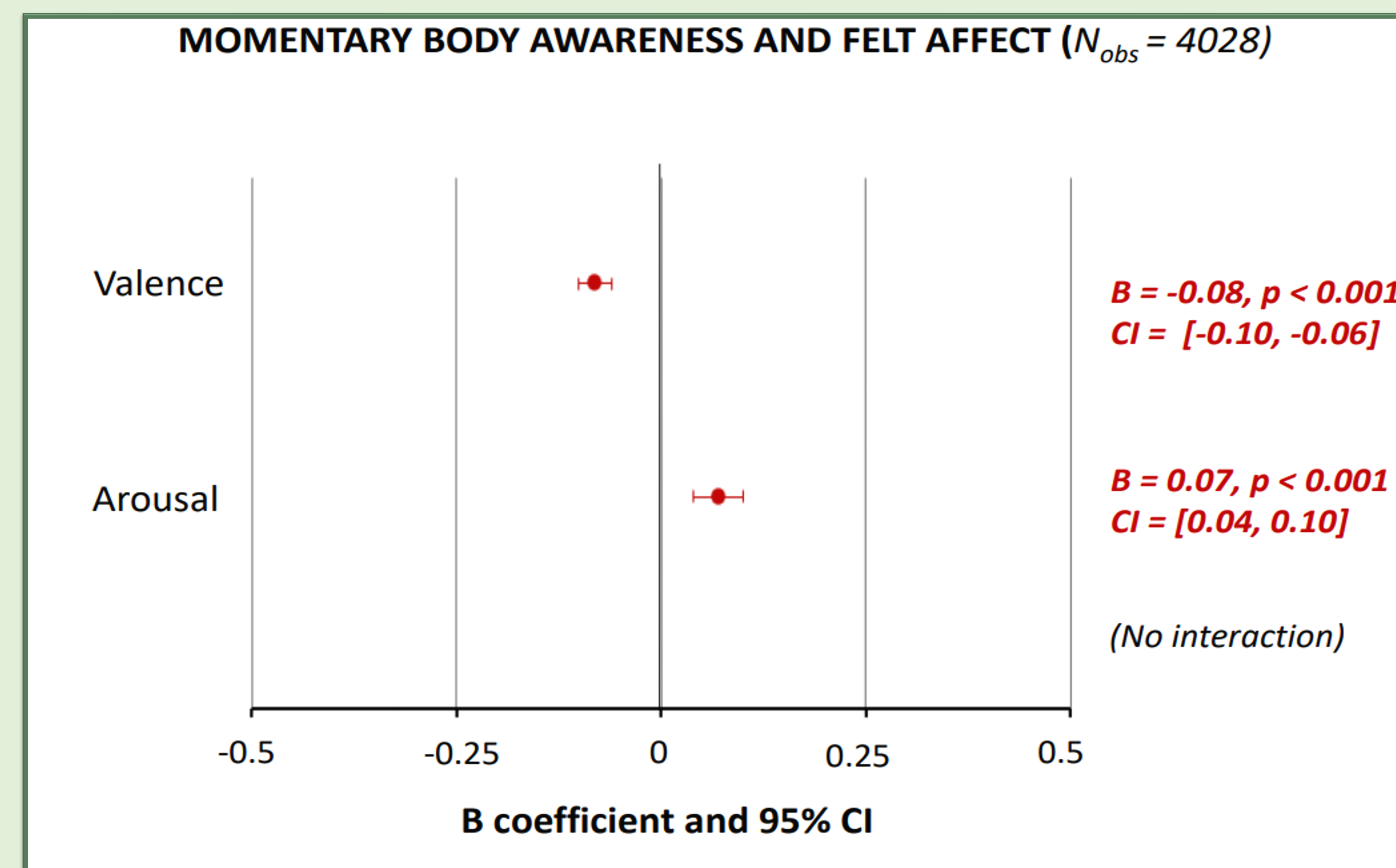
- 6 short surveys (18-items) on their smartphone at random times between 9am and 9pm.
- **Thought Sentiment:** Provided an open-ended description of their current thoughts.
- **Affect:** Felt affect reported on 7-point scales:
 - Felt valence (unpleasant/pleasant)
 - Felt arousal (deactivated/activated)
- **Bodily awareness:** Awareness of 8 different bodily sensations reported on 7-point scales
 - Heartbeat, breathing, body temperature, sensations from the stomach or gut, whether they feel hungry or not, how tired or alert their body feels, how dry or moist their skin feels, and how tight or loose their muscles feel



Data Processing

- **Thought Sentiment:** Thought reports were analyzed using a natural language processing approach to assess valence (negative/positive/compound).
- **Body Awareness:** Ratings of the 8 individual bodily sensations were averaged together for each prompt for each participant.

Results



Discussion

Results

- In moments of higher bodily awareness, participants, on average, reported heightened arousal and feeling more negatively.
- This finding was reflected in their current thought sentiment such that, in moments of higher bodily awareness, participants also had more negative and less positive sentiment in their current thoughts.

What does this mean?

- One possible reason for these results is that people may tend to notice their bodies more when things are wrong.
- The consistency between valence of thought sentiment and reported valence supports self-report accuracy of valence.
- The findings regarding thought content suggests that the experience of affect may have implications preceding conscious categorization.

Future Directions

- Future studies will look at the link between bodily awareness and symptom severity in panic and anxiety disorders.

References

- [1] Lindquist, K. A. (2013). Emotions Emerge from More Basic Psychological Ingredients: A Modern Psychological Constructionist Model. *Emotion Review*, 5(4), 356–368.
- [2] Kuppens, P., Tuerlinckx, F., Russell, J. A., & Barrett, L. F. (2013). The Relation Between Valence and Arousal in Subjective Experience. *Psychological Bulletin*, 139(4), 917–940.
- [3] Mehling, W. E., Gopisetty, V., Daubenmier, J., Price, C. J., Hecht, F. M., & Stewart, A. (2009). Body awareness: construct and self-report measures. *PloS one*, 4(5), e5614.
- [4] Domschke, K., Stevens, S., Pfleiderer, B., & Gerlach, A. L. (2010). Interoceptive sensitivity in anxiety and anxiety disorders: an overview and integration of neurobiological findings. *Clinical psychology review*, 30(1), 1–11. <https://doi.org/10.1016/j.cpr.2009.08.008>
- [5] Stegen, K., Diest, I. V., Van De Woestijne, K. P., & De Bergh, O. V. (2001). Do persons with negative affect have an attentional bias to bodily sensations? *Cognition and Emotion*, 15(6), 813–829. <https://doi.org/10.1080/02699930143000211>
- [6] Barrett, L. F., Quigley, K. S., & Hamilton, P. (2016). An active inference theory of allostasis and interoception in depression. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 371(1708), 20160011. <https://doi.org/10.1098/rstb.2016.0011>