

INDIVIDUAL DIFFERENCES IN RESPONSE TO EXPERIENTIAL UNCERTAINTY:

The Roles of Physiological Activity and Interoceptive Awareness



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INTRODUCTION

- Intolerance of uncertainty (IU) refers to the tendency to be distressed and/or incapacitated by a perceived lack of salient information within a given context¹.
- Individual differences in IU are related to mental health and well-being^{2, 3}.
- Existing work predominantly relies on self-reported experiences of uncertainty¹.
- Here, we use a novel behavioral task to assess phenomenological components of uncertainty by measuring individuals' subjective affective experiences and the bodily activity from which they are thought to arise in real time.

METHODS

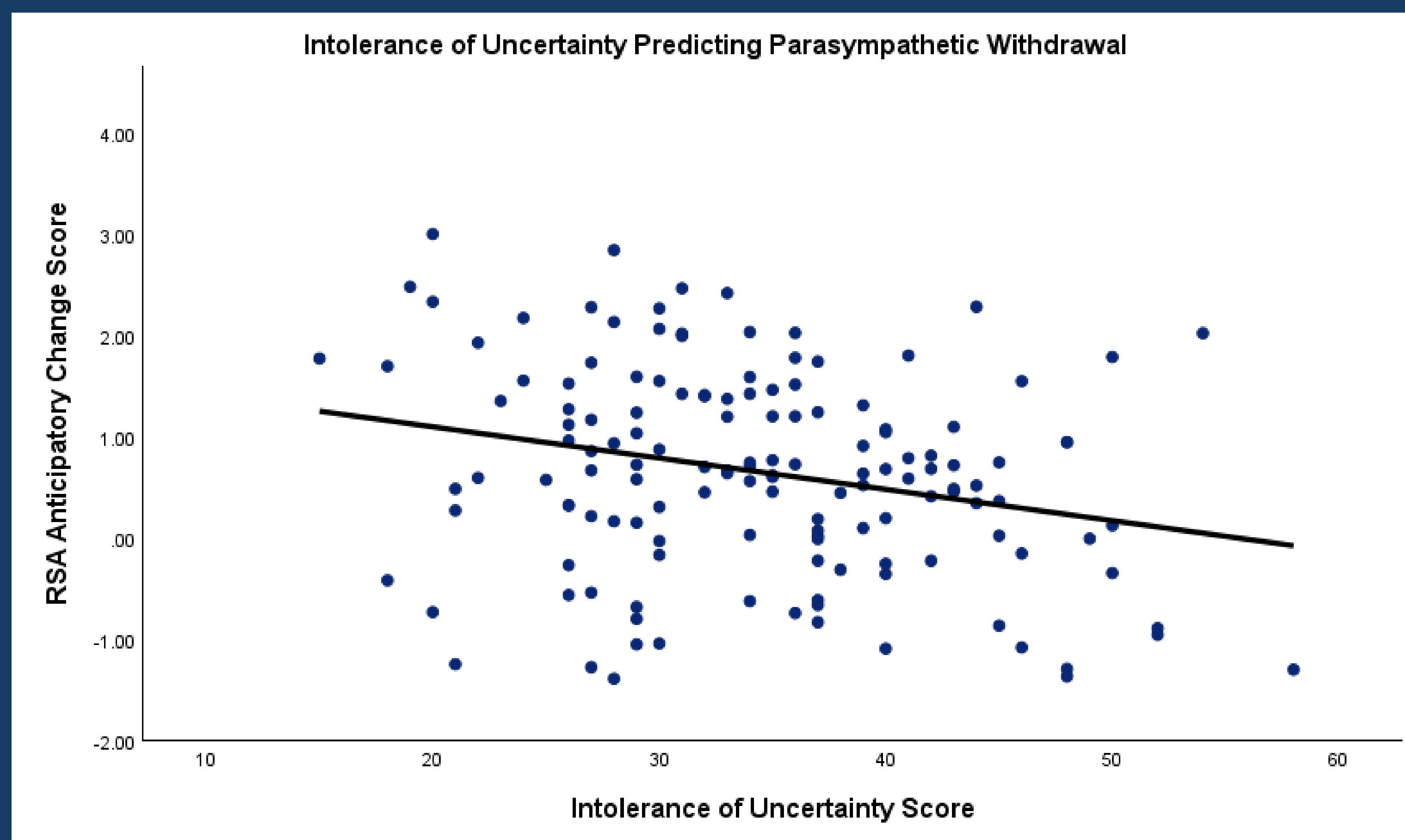
Participants were 149 undergraduates (89.31% white; 67.33% female)
Procedure

- Resting baseline
- Heartbeat Tracking Task (HBT)⁴
 - Measure of interoceptive awareness
- Box task
 - Participants put their hand into an opaque box and felt an unknown object
 - Outcome variables:
 - Respiratory sinus arrhythmia (RSA)
 - Interbeat interval (IBI)
 - Electrodermal activity (EDA)
 - Self-reported arousal and valence in anticipation of completing the task.
- Self-report measure of IU¹



RESULTS

- **Data Processing:**
 - Change scores were calculated by subtracting participants' physiological activity at rest from activity during the anticipatory period (30s preceding putting their hand in the box)
- Individuals with higher IU exhibited greater reductions in RSA in anticipation of the uncertainty task, $\beta = -.20$, $p = .008$.
- No relation between IU and self-reported affect was observed.
- Individuals higher in IU had lower interoceptive awareness (measured via the HBT task), $r(143) = -.175$, $p = .035$.



DISCUSSION

- Results suggest physiological responding plays an important role in experiential uncertainty for those high in IU.
- Speculatively, greater interoceptive uncertainty may play a role in intolerance of uncertainty such that it leads individuals to require more certainty from their environment to feel secure.

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