

Can Somatic Awareness Buffer the Cardiovascular Responses to Stress in Women?

Jenna Patterson¹, Haley A. C. Douglas^{1,2}, & M. Kathleen B. Lustyk^{1,2}

¹Seattle Pacific University

²University of Washington

Introduction

Mindfulness is a common feature of "third wave" therapies (Öst, 2008) that promotes symptom improvement or management, in part, through somatic awareness (SA). Mindfulness associated improvements in women's health research include reduced stress and improved outcomes in pregnant women (Vieten & Astin, 2008), post-menopausal women (Carmody et al., 2006), and breast cancer patients (Shapiro et al., 2003).

Purpose

1. To assess whether increased SA is associated with stress reduction in women.
2. To examine the relationships among SA, reactivity, state anxiety, and trait anxiety.

Method

Women ($n = 40$, 18-45 years old, 70% Caucasian,) completed a laboratory stressor during the follicular phase of their menstrual cycle (days 5-9). Following a 15 minute baseline, participants completed the Paced Auditory Serial Addition Test (PASAT). The PASAT is a cognitive stressor involving addition of numbers in serial order with increased rapidity. A 15 minute recovery period followed the stressor.

Seattle Pacific University, Lustyk Women's Health Lab, Website: www.spu.edu/lustyklub, Contact email: pattej@spu.edu

Measures

Hemodynamic Variables

Heart Rate (HR): Measured continuously via electrocardiography.

Diastolic (DBP) and Systolic (SBP) Blood Pressure: Assessed at varying time interval with an auto-inflating sphygmomanometer.

Psychological Measures

Body Awareness Questionnaire (BAQ): self reported body/somatic awareness was assessed pre- stressor.

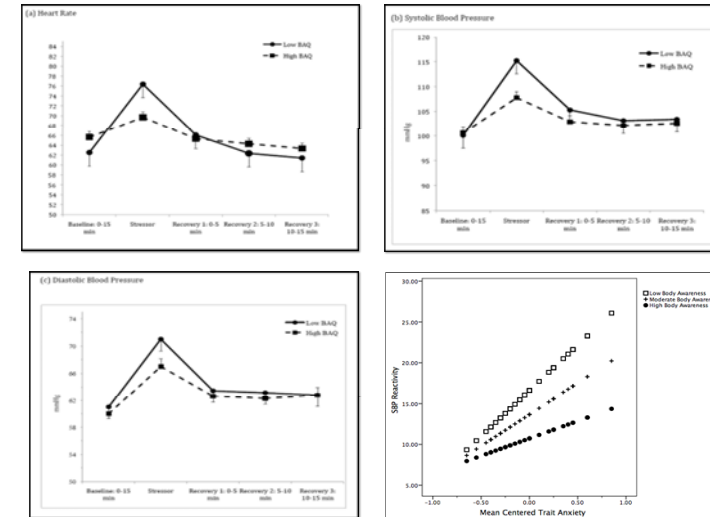
Spielberger State/Trait Anxiety Inventory (State/Trait): Self-reported trait and state anxiety. State/Trait were assessed pre- post- stressor.



Results

Results revealed significant HR and BP reactivity in response to the PASAT. SA was significantly and inversely related to HR and BP reactivity. Since trait anxiety is known to affect reactivity to laboratory stressors (Pollatos, et al. 2007), analyses were performed with trait anxiety in the model. BP reactivity was positively correlated with trait anxiety, yet negatively correlated with SA ($p < .05$). SA failed to significantly moderate the relationship between trait anxiety and BP.

Results



Conclusions

Although increasing SA may not affect stress responses in women by reducing the effects of trait anxiety, the significant inverse relationships among SA and stress in women warrants further study. As one of the four foundations of mindfulness (Kornfield, 2001), SA may be one mechanism underlying stress reduction findings in research evaluating the efficacy of "third wave" clinical modalities.