

Inducing a State of Surrender: Effects on Predictors of Panic Disorder Symptoms

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Background

- Panic Disorder (PD) is debilitating and affects 4.7% of Americans
- 1 in 4 will experience a panic attack at some point in their life
- State of surrender (SoS) is means to relinquish control and accept what is to come; it is associated with lower anxiety and greater well-being
- Cognitive-behavioral therapy targets anxiety sensitivity and self-efficacy for PD, but acceptance-based approaches show promise
- Distress tolerance (DT) is a modifiable factor that maintains PD (low levels) or protects against it (high levels)

Objectives

- To test the effect of inducing an SoS on factors that influence anxiety disorder symptomology
- To investigate if individuals with panic disorder may especially benefit from an SoS intervention

Participants

- 320 adults recruited online using Prolific
- Mean age = 39.13; SD = 13.09; Range = 18-77 years
- 153 Women (47.8%), 158 Men (49.4%), 7 Non-binary (2.2%), 2 Prefer to self-describe (0.6%)
- 61.3% White/non-Hispanic, 16.6% Black/African American, 10.6% Asian, 8.1% Hispanic/Latino(a)

Method

Procedure

- See Figure 1.

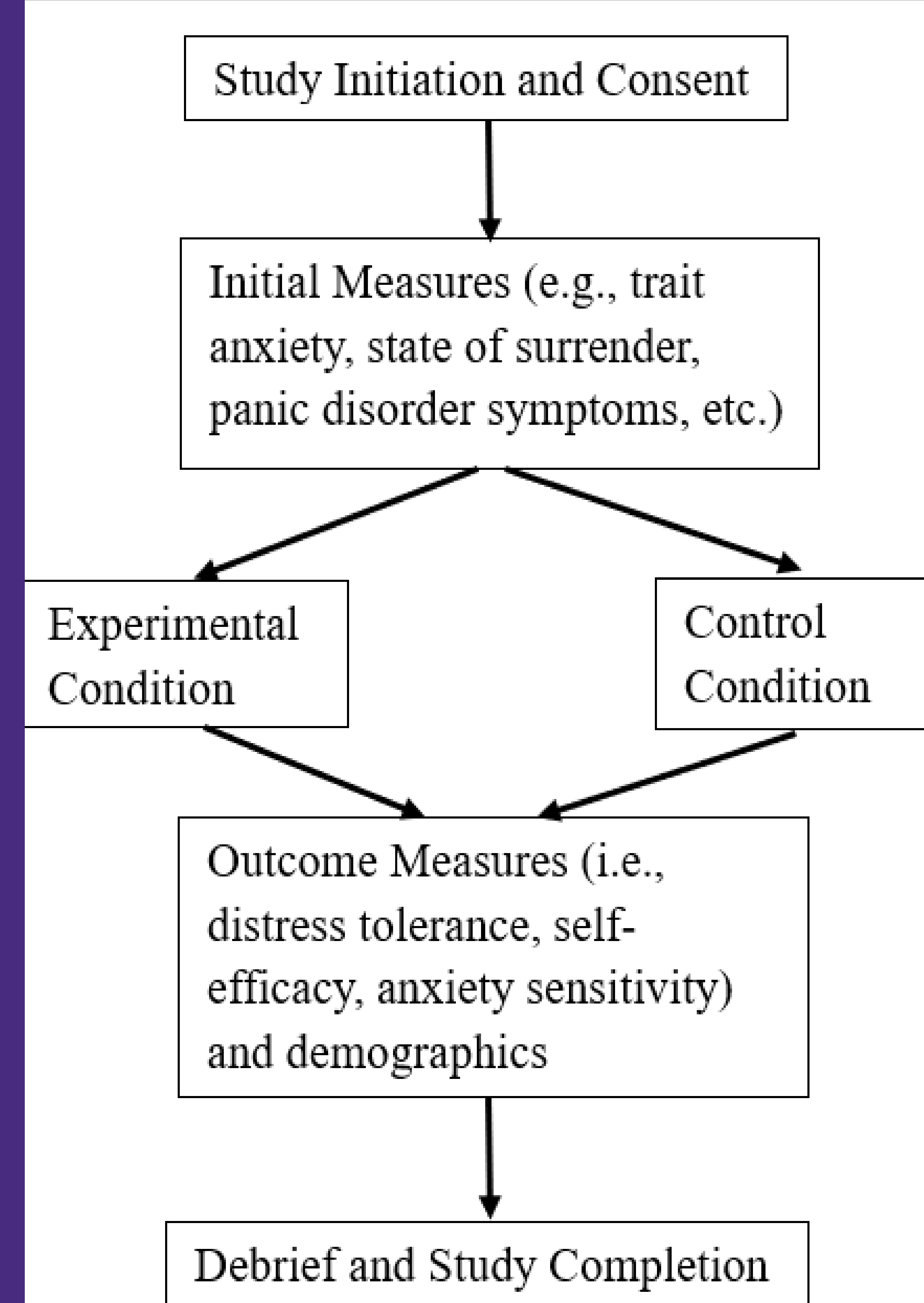
Manipulation

- Random assignment to condition
- Experimental condition: Guided meditation (mindfulness techniques, breathing, etc.), that prompts individuals to “let go” of tensions in the body and thoughts and assume an attitude of “surrender”
- Control condition: White noise audio

Measures

- State-Trait Anxiety Inventory, Short Form (STAI5; Zsido et al., 2020)
- State of Surrender Short Version (SoS Scale; Russ & Elliot, 2017)
- Panic Disorder Symptom Severity Self Report. 2 item Version (PDSS-SR; Kraepelien et al., 2019)
- Distress Tolerance Scale-Short Form (DTS-SF; Garner et al., 2018)
- Anxiety Sensitivity Index (ASI-3; Taylor et al., 2007)
- General Self Efficacy Scale-3 (GSE-3; Doll et al., 2021)

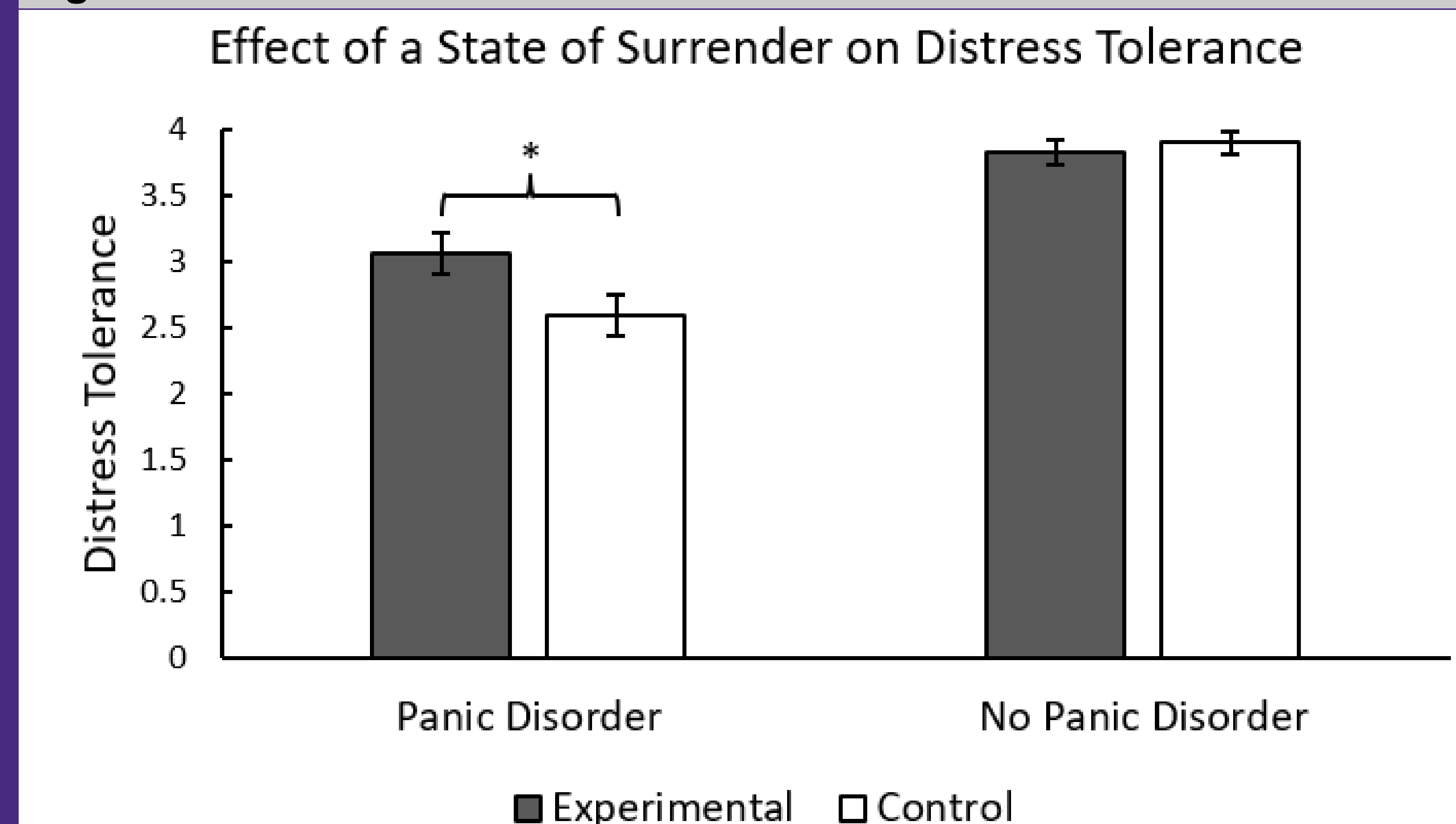
Figure 1.



Results

- Independent sample *t*-tests revealed no baseline differences in trait anxiety or SoS by condition
- *T*-test revealed the manipulation was marginally successful, two tailed $p = .05$, one-tailed $p = .03$
- A cutoff score of 3 or greater determined panic disorder status in the sample ($n = 76$, 23.8%)
- 2 (Panic Disorder vs. No Panic Disorder) x 2 (Experimental vs. Control) ANOVAs were performed on anxiety sensitivity, distress tolerance, and self-efficacy
- Anxiety Sensitivity and Self-efficacy: Main effects of PD status, but not of condition; no interaction
- Distress tolerance: Main effect of PD status, no main effect of condition ($p = .125$), significant interaction ($p = .04$)
- Experimental condition had higher distress tolerance, only in those with panic disorder ($p = .04$)

Figure 2.



Discussion

- The SoS intervention showed positive effects for individuals with PD, but only for distress tolerance
- Anxiety sensitivity likely not affected by the manipulation as it is a generally stable trait – not likely influenced by a single session
- More research on SoS and self-efficacy needed; mindfulness and acceptance-based approaches are known to increase it
- Limitations: self-report, online experiment, validity of PD cutoff (very high rate in the sample)

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