The Relative Effects of Anxiety Sensitivity and Distress Tolerance on Behavioral Approach and Peak Distress Following Treatment for Spider Phobia

A. Claire Stark, Shannon M. Blakey, Jonathan S. Abramowitz

University of North Carolina at Chapel Hill

Introduction

Anxiety sensitivity (AS) refers to the fear of anxiety-related body sensations due to their feared social, cognitive, or physical consequences. Distress tolerance (DT) refers to a person's ability to withstand distress (e.g., anxiety).

Research documents the importance of AS and DT in the development and maintenance of clinical anxiety.

The extent to which these two constructs behave in conjunction with one another during *treatment* is unclear, yet carries important clinical implications.

The current study tested the hypothesis that in a sample of adults receiving spider phobia therapy, greater AS and lower DT at pre-treatment would predict (a) greater distress and (b) poorer behavioral approach when faced a live tarantula.

Methods

Adults with spider phobia[1] (*N*=55) completed four sessions of exposure therapy for spider phobia[2,3]. The sample was 85.5% female and had a mean age of 31.27 (*SD* = 12.94).

Participants completed self-report measures of AS[4] and DT[5] at pre-treatment. They also completed a 13-step spider behavioral approach task (BAT) at pre- and post-treatment; higher values represent greater behavioral approach toward a live tarantula. During the BAT, participants self-reported their peak distress.

Results

As shown in Table 1, DT (but not AS) was significantly related to the number of BAT steps completed after spider phobia treatment at the bivariate level, although the magnitude of this negative correlation was weak. Neither AS nor DT were significantly correlated with BAT distress following treatment.

Table 1. Zero-Order Bivariate Correlations among Study Variables

Variable	Post-treatment BAT steps	Post-treatment BAT distress
Pre-treatment BAT steps	-	-
Pre-treatment BAT distress	-0.393*	-
AS	-0.265	0.159
DT	-0.004*	-0.138

* $p < .05$

We tested hypotheses with two linear regression models, controlling for pre-treatment levels of outcome variables were controlled for in primary analyses.
Whereas AS was the only significant unique predictor of post-treatment BAT steps (Table 2), DT was the only significant unique predictor of peak subjective distress during the post-treatment BAT (Table 3).

Table 2. Linear regression predicting post-treatment BAT step completion

	B	SE_B	β	t	p
Treatment condition	-.401	.512	-.091	-.783	.437
Pre-treatment BAT steps	.419	.089	.531	4.698	.000
AS	-.062	.028	-.299	-2.202	.032
DT	.030	.023	.174	1.331	.189

Table 3. Linear regression predicting post-treatment BAT peak distress

	B	SE_B	β	t	p
Treatment condition	-1.294	1.527	-.110	-.847	.401
Pre-treatment distress	.483	.156	.408	3.105	.003
AS	.031	.094	.050	.327	.745
DT	-.141	.069	-.292	-2.040	.047

Note. Participants received either exposure plus response prevention or exposure without response prevention as part of a larger study. Although there were no group differences in treatment outcome, we control for participant condition in the present study. The pattern of findings does not change as a function of including/excluding this variable.

Discussion

Results did not support hypotheses and suggest that although DT more significantly relates to one's distress intensity when encountering a feared stimulus, AS is a more important factor in how one behaves *despite* elevated distress.

Findings could indicate that high-AS individuals may resist approaching feared stimuli in order to avoid experiencing anxiety-provoking sensations.
Similarly, high-DT individuals may perceive (or infer from their behavior) their distress to be lower than do their low-DT counterparts.

Strengths include use of a clinical sample, multimethod assessment, and longitudinal design.

Limitations of this study include the use of a geographically limited sample and assessment at only two time points.

Future research should use more generalizable samples and examine AS and DT over the course of treatment, in addition to pre- and post-treatment.

References

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