

# Does Anxiety Sensitivity Mediate the Relationship Between Trait Anxiety and PTSD Symptomatology?

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## INTRODUCTION

Although traumatic events are relatively common in today's society, not all trauma-exposed individuals develop PTSD (e.g., Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). The lifetime prevalence of PTSD among adults in the United States is around 7% (Kessler, Berglund, Demler, Jin, & Walters, 2005), and the 12-month prevalence rate is around 3.5% (Kessler, Chiu, Demler, & Walters, 2005). Preliminary research suggests that anxiety sensitivity, a construct introduced by Reiss and McNally (1985), may play a role in the development of PTSD (Bryan and Panasetis, 2001; Fedoroff, Taylor, Asmundson, and Koch, 2000; Lang, Kennedy, & Stein, 2002). Anxiety sensitivity is defined as a person's dispositional fear of anxiety, its associated symptoms, and the degree to which a person believes those symptoms denote harmful consequences (e.g., death, illness, etc.). Although there has been debate regarding the incremental validity of anxiety sensitivity (Lilienfeld, Jacob and Turner, 1989), the general consensus has been that anxiety sensitivity is an individual difference variable distinguishable from trait anxiety (McNally, 1999). The present study tested whether anxiety sensitivity mediates the relationship between levels of trait anxiety and levels of PTSD symptomatology in two samples of trauma-exposed women.

## METHOD

Each sample was comprised of women recruited from Cleveland, Ohio and Seattle, Washington. All participants reported experiencing a DSM-IV Criterion A trauma.

	Sample 1 (College)	Sample 2 (Community)
Sample size	295	84
Mean Age (SD)	19.73 (4.26)	32.14 (12.04)
Racial Composition (%)		
Caucasian	186 (63.1)	62 (73.8)
African American	6 (2.0)	15 (17.9)
Hispanic	8 (2.7)	1 (1.2)
Asian	77 (26.1)	3 (3.6)
Other	18 (6.1)	2 (2.4)

## Measures

**Posttraumatic Stress Diagnostic Scale (PTDS;** Foa, Cashman, Jaycox, & Perry, 1997)

**Anxiety Sensitivity Index (ASI;** Reiss et al., 1986)

**State-Trait Anxiety Inventory (STAI;** Spielberger, Gorsuch, & Lushene, 1970).

## RESULTS

According to Baron and Kenny (1986), three regression equations must be run and four conditions must be met to establish a mediational relationship. In each sample, three equations were tested:

- (1) Anxiety sensitivity = B1Trait anxiety
- (2) PTSD symptomatology = B2Trait anxiety
- (3) PTSD symptomatology = B3Trait anxiety + B4Anxiety sensitivity

Evidence of an indirect effect of anxiety sensitivity is met if (1) B1 is significant, (2) B2 is significant, (3) B4 is significant and (4) B3 is smaller than B2.

Sample 1: Each of the four conditions were met. Anxiety sensitivity served as a partial mediator between trait anxiety and PTSD symptomatology; the indirect effect of anxiety sensitivity was significant according to Sobel's (1982) test for significance ( $p < .0001$ ).

Sample 2: Each of the four conditions were not met. Specifically, anxiety sensitivity did not have a significant unique effect on PTSD symptomatology in the third regression equation ( $p = .961$ ).

### Bivariate Correlations

	1	2	3
1. ASI Total Score	--	--	--
2. STAI-T Total Score	.43**	--	--
3. PTDS Total Score	.30**	.29**	--
<i>Community Sample</i>	1	2	3
1. ASI Total Score	--	--	--
2. STAI-T Total Score	.62**	--	--
3. PTDS Total Score	.41**	.66**	--

	B	SE	p-Value	β	R <sup>2</sup>
<i>College Sample (n = 295)</i>					
Step 1: STAI-T (B1)→ASI	.46	.06	.000	.43	.19
Step 2: STAI-T (B2)→PTDS	.27	.05	.000	.29	.09
Step 3: ASI (B4)→PTDS	.19	.05	.000	.22	Model
Step 4: STAI-T (B3)→PTDS	.18	.06	.001	.20	.13
<i>Community Sample (n = 84)</i>					
Step 1: STAI-T (B1)→ASI	.65	.09	.000	.62	.39
Step 2: STAI-T (B2)→PTDS	.60	.08	.000	.66	.44
Step 3: ASI (B4)→PTDS	-.005	.09	.961	-.005	Model
Step 4: STAI-T (B3)→PTDS	.60	.10	.000	.66	.44

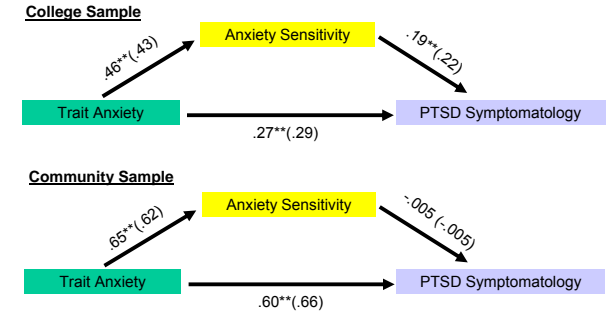


Figure 1. Path models depicting the role of anxiety sensitivity in mediating the effects of trait anxiety on PTSD Symptomatology

\*\* $p < .0005$ ; Unstandardized regression coefficients are outside parentheses, standardized are within.

## DISCUSSION

Based on the above findings, anxiety sensitivity looks to play a role in mediating the relationship between trait anxiety and PTSD symptomatology in a sample of undergraduate women. This relationship, however, did not hold within the community sample. Post hoc t-tests showed that the community samples' scores on the STAI-T, ASI, and PTDS were all significantly higher than those for the undergraduate sample ( $p < .0001$ ). Thus, general levels of anxiety may be a more powerful correlate of PTSD symptomatology than anxiety sensitivity in more clinically impaired populations. In response to the debate surrounding the relative specificity (or non-specificity) of anxiety sensitivity (see Lilienfeld, Jacob, & Turner, 1989; see McNally, 1989), these findings suggest that sample characteristics, specifically levels of psychopathology, may play a role in diminishing the distinctiveness of anxiety sensitivity as it is related to PTSD symptomatology. This study has a number of limitations. First, it was cross-sectional and did not look at the emergence of PTSD symptoms over time. Prospective studies are the best way to assess mediation effects. Second, this study only included women; therefore, we can not extend findings to trauma-exposed men. Third, because this was not a prospective study we could not test the temporal sequence of anxiety sensitivity and trait anxiety with regard to trauma exposure. Future studies should address these limitations to make more definitive conclusions regarding the mediating effects of anxiety sensitivity on PTSD.

References Available Upon Request

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Portions of this study were presented at the Kent State Psychology Forum 2007