

# Comparisons of Different Measures of Anxiety Sensitivity

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## Introduction

The significance of “fear of fear” has been recognized by therapists of various schools, especially Cognitive-Behavioural Therapy. Some of the most significant postulates are formulated by Reiss and McNally (1985) who introduced the term “anxiety sensitivity”. Anxiety sensitivity refers to the fear of anxiety based on the belief that anxiety has damaging physical, psychological and social consequences (e.g. a person may believe that the rapid heart rate is a sign of impending heart attack). People with increased anxiety sensitivity misinterpret different somatic and psychological sensations as threats, believing that negative consequences will ensue, which leads to creating and/or maintaining anxiety. Numerous studies indicate that anxiety sensitivity is a significant factor of vulnerability to anxiety disorders, especially panic disorder (Taylor, 1999), post-traumatic stress disorder (Taylor, 2003) and hypochondriasis (Watt & Stewart, 2000). It is also factor of vulnerability for major depressive disorder (Taylor et al., 1996), chronic pain (Asmundson, 1999), addictions (Otto et al., 2004) etc. The most commonly used measure of anxiety sensitivity is Anxiety Sensitivity Index (ASI) (Reiss et al., 1986), which assesses physical, psychological and social concern about symptoms of anxiety.

## Aims of the Study

In order to improve the measurement of anxiety sensitivity and to overcome the unstable factor structure of the ASI (Reiss et al., 1986), other versions have been constructed over time. The aim of this study is to compare ASI with three later versions: Anxiety Sensitivity Index-Revised (ASI-R), Anxiety Sensitivity Profile (ASP) and Anxiety Sensitivity Index-3 (ASI-3). The reliability of the instruments, the factor structure and the correlation with trait anxiety and depression have been studied.

## Method

### Sample and procedure

The sample consisted of 400 adults from Serbia (50% male and 50% female) aged between 18 to 59 years ( $M=30,98$ ,  $SD=7,07$ ). Criteria for inclusion was no history of psychiatric treatment. Respondents completed questionnaires at their workplaces.

### Measures

Measures of anxiety sensitivity include: 1. *Anxiety Sensitivity Index* (ASI) (Reiss et al, 1986), 2. *Anxiety Sensitivity Index-Revised* (ASI-R) (Taylor & Cox, 1998a), 3. *Anxiety Sensitivity Profile* (ASP) (Taylor & Cox, 1998b), 4. *Anxiety Sensitivity Index-3* (ASI-3) (Taylor et al, 2007). Trait anxiety was operationalized through *The State and Trait Anxiety Inventory* (STAI-Y; Spielberger, 1983). Depression was operationalized through *Beck Depression Inventory* (BDI-II) (Beck et al, 1996).

## Results

Table 1 shows arithmetic means and standard deviations of all instruments

Table 1: Arithmetic means and standard deviations

	AS	SD
ASI	20,24	11,08
ASI-R	32,24	28
ASP	148,10	70,45
ASI-3	16,46	13,42
STAI-T	41,26	11,93
BDI	8,81	8,15

Principal component analysis with promax rotation of AS scores show that only ASI-3 has three-factor structure which is consistent with the results of previous studies (Physical Concern, Psychological Concern and Social Concern). ASI has 2 factors (Physical Concern, Psychological Concern); ASI-R has 4 factors (Physical Concern, Physical Concern - Serious Illness, Psychological Concern, Social Concern); ASP has 4 factors which are the least consistent with previous studies (Neurological-dissociative Concern, Psychological Concern, Respiratory and Cardiovascular Concern, Gastrointestinal Concern).

Analysis of internal consistency show that all instruments and majority of their factors have good internal consistency. For ASI  $\alpha = .88$  (for factors: .87, .76); for ASI-R  $\alpha = .97$  (for factors ranging from .87 to .95); for ASP  $\alpha = .98$  (for factors ranging from .92 to .97), for ASI-3  $\alpha = .92$  (for factors ranging from .77 to .91).

Correlations and partial correlations of AS measures with trait anxiety and depression show that all instruments have significant partial correlations with trait anxiety (ranging from 0.14 to 0.32) and with depression (ranging from 0.21 to 0.36), except ASP, which doesn't have significant partial correlation with trait anxiety. The highest partial correlation with trait anxiety has ASI-3.

## Conclusions

Comparisons of Anxiety Sensitivity Index with its revised versions suggest that ASP is the most problematic instrument because of the unexpected nature of the factor structure and lack of partial correlation with trait anxiety. On the other hand, ASI-3 is recommended for further use because of stable factor structure and partial correlations with trait anxiety and depression. However, these findings need to be verified on clinical population.

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