



The relationship between anxiety sensitivity and latent symptoms of emotional problems: A structural equation modeling approach

Alison R. Lewis^{a,*}, Richard E. Zinbarg^{a,b}, Susan Mineka^a, Michelle G. Craske^c, Alyssa Epstein^d, James W. Griffith^e

^aNorthwestern University, Department of Psychology, 2029 Sheridan Road, Swift Hall 102, Evanston, IL 60208, USA

^bThe Family Institute at Northwestern University, 618 Library Place, Evanston, IL 60201, USA

^cUniversity of California at Los Angeles, Department of Psychology, UCLA 405 Hilgard Ave., Los Angeles, CA 90095-1563, USA

^dEmanuel Medical Center, 2121 Colorado Ave, Suite C, Turlock, CA 95382, USA

^eNorthwestern University, Feinberg School of Medicine, Department of Medical Social Sciences, 710 N. Lake Shore Dr., Suite 729, Chicago, IL 60611, USA

ARTICLE INFO

Article history:

Received 13 December 2009

Received in revised form

19 April 2010

Accepted 2 May 2010

Keywords:

Anxiety sensitivity

Anxiety

Depression

Hierarchical model

ABSTRACT

A large body of research suggests that common and specific psychopathology dimensions underlie the symptoms that occur within mood and anxiety disorders. As of yet, it is unclear precisely how the facets of Anxiety Sensitivity (AS), or fear of the symptoms of fear and anxiety, relate to these latent factors. Using data from 606 adolescents participating in the baseline phase of a longitudinal study on risk factors for emotional disorders, we modeled the facets of AS as measured by the Anxiety Sensitivity Index-Expanded Form (ASI-X) and related these facets to a hierarchical model of latent symptoms of psychological distress. Results suggest that one facet of AS is associated with a broad General Distress factor underlying symptoms of most emotional disorders while others relate to intermediate-level and conceptually-meaningful narrow factors representing aspects of psychological distress specific to particular emotional disorders.

© 2010 Elsevier Ltd. All rights reserved.

Anxiety Sensitivity (AS) has been defined as a fear of anxiety and physical sensations related to anxiety arising from beliefs that anxiety and its correlates have harmful somatic, psychological, and social consequences (Reiss, 1987; Reiss & McNally, 1985; Reiss, Peterson, Gursky, & McNally, 1986). A growing body of research suggests that AS is associated with a broad range of emotional disorders (Olatunji & Wolitzky-Taylor, 2009). Understanding the ways in which AS relates to different symptoms of mood and anxiety disorders may contribute to our understanding of the etiology and maintenance of such symptoms, perhaps paving the way for the development of more effective psychological treatments.

A number of factor-analytic studies suggest that the structure of the most common measure of AS, the Anxiety Sensitivity Index (ASI), includes three group factors (i.e., factors common to some but not all items) representing Physical, Social, and Mental-Incapacitation Concerns (e.g., Li & Zinbarg, 2007; Stewart, Taylor, & Baker, 1997; Zinbarg, Barlow, & Brown, 1997). The Physical Concerns factor reflects concerns that the physical symptoms of anxiety are

signs of catastrophic physical illness, while the Social Concerns factor reflects concerns that others will notice one's anxiety symptoms. Finally, the Mental-Incapacitation Concerns factor reflects fears of the cognitive symptoms of anxiety and concerns that these symptoms are signs that one is going crazy or becoming mentally ill. The three group factors coexist with a higher-order AS construct, and most emotional disorders are associated with significant elevations on at least some facets of AS (Taylor, Koch, Woody, & McLean, 1996; Zinbarg et al., 1997).

Although the facets of AS appear to be elevated in the context of several emotional disorders, individuals with different disorders differ in the degree to which they show elevations on particular AS facets. For example, Rector, Szacun-Shimizu, and Leybman (2007) found that panic disorder with agoraphobia (PDA) was associated with significantly greater elevations on the Physical Concerns facet than either social phobia (SP) or generalized anxiety disorder (GAD). Similarly, SP was associated with significantly higher elevations on AS Social Concerns than either PDA or GAD, and GAD was associated with significantly greater elevations on the Mental-Incapacitation Concerns facet than SP (for similar results see Zinbarg et al., 1997).

Regarding the prospective prediction of panic and anxiety symptoms, some research suggests that the AS Physical Concerns facet may be the best predictor of panic symptoms (Grant, Beck, & Davila, 2007; Hayward, Killen, Kraemer, & Taylor, 2000), although

* Corresponding author. Tel.: +1 847 733 4300x1119; fax: +1 847 491 7859.

E-mail addresses: alison-lewis@northwestern.edu (A.R. Lewis), rzinbarg@northwestern.edu (R.E. Zinbarg), mineka@northwestern.edu (S. Mineka), craske@psych.ucla.edu (M.G. Craske).

other research suggests that the Mental-Incapacitation Concerns facet may be a better predictor (Li & Zinbarg, 2007; Schmidt, Lerew, & Jackson, 1999). Unexpectedly, the only AS study that has attempted to prospectively predict social anxiety symptoms failed to find evidence that these symptoms are predicted by any AS facet (Grant et al., 2007). However, one should always be reluctant to accept the null hypothesis and this is especially true in this case given the poor psychometric properties of the Social Concerns subscale of the original ASI (e.g., Blais et al., 2001).

Research examining the differential associations of the facets of AS with depression has been largely cross-sectional in nature. This research suggests that the Mental-Incapacitation Concerns facet is more strongly related to the diagnosis and symptoms of depression than is any other AS facet (e.g., Cox, Enns, & Taylor, 2001; Rector, Szacun, & Leybman, 2007; Taylor et al., 1996). Indeed, some researchers have speculated that the Mental-Incapacitation Concerns facet may represent “a depression-specific form of anxiety sensitivity” (Taylor et al., 1996, p. 478) that is more strongly related to depression than to anxiety disorders. Others have suggested that this facet may prompt rumination about potential signs of mental incapacitation and thereby promote subsequent depression (Cox et al., 2001). The few relevant longitudinal studies to date have yielded inconsistent results. Schmidt, Lerew, and Joiner (1998) found that the Mental-Incapacitations Concerns facet prospectively predicted hopelessness and exhibited an association with future depression symptoms that approached significance after partialling variance due to anxiety symptoms. However, Grant et al. (2007) found that only the Physical Concerns facet prospectively predicted depression symptoms.

Additional research evaluating the associations of the facets of AS with mood and anxiety symptoms is clearly needed to better understand the role of these facets in the etiology and maintenance of various emotional problems. First, additional large-scale studies using more reliable measures of the various AS facets are needed to better evaluate the differential predictive power of these facets. Second, studies have yet to systematically examine the degree to which each facet relates to underlying dimensions that are common to multiple disorders (such as negative affect or general distress), and to dimensions specific to particular disorders. In light of the emerging consensus that symptoms of psychopathology are hierarchically structured (see Watson, 2005), studies are needed to examine the relationship between the facets of AS and a hierarchical model of the shared and unique features of anxiety and mood disorders.

Further, examining the relationship between the facets of AS and a hierarchical model of symptoms may provide valuable insights into the pattern of relationships between facets and emotional disorders found in previous studies. For example, such analyses may help to reconcile findings that the Mental-Incapacitation Concerns facet of AS is associated with depression and has also sometimes appeared to be more strongly associated with panic than either the Physical or Social Concerns facets. This pattern of findings suggests that the Mental-Incapacitations Concerns facet may actually be associated with a general distress psychopathology factor with which both depression and panic symptoms are saturated (as has also been hypothesized by Olatunji & Wolitzky-Taylor, 2009, p. 993).

The Northwestern-UCLA Youth Emotion Project (YEP) is well suited to examine how the various facets of AS relate to a hierarchical model of mood and anxiety symptoms. During the first wave of this longitudinal study on vulnerability factors for emotional disorders, participants were given an expanded version of the ASI designed to increase the reliability of the AS facet scales, the ASI-X (see Li & Zinbarg, 2007), along with symptom measures of different forms of anxiety and depression. Prenoveau et al. (2010) found that the YEP symptom data were best modeled by a tri-level hierarchical arrangement with a latent General Distress factor, two intermediate-level factors representing Anxious-Misery and Fears, and five conceptually-meaningful, narrow symptom group factors (see Fig. 1). These conceptually-meaningful narrow factors corresponded to symptoms at the core of MDD and several different types of anxiety disorders. Prenoveau et al. labeled these factors as Depression, Social Anxiety, Specific Phobia-like Fears, Interoceptive/Agoraphobic Fears, and Anxious Arousal. In the present research, we examined the factor structure of the ASI-X in our data before examining how the various facets of AS related to this hierarchical model of mood and anxiety symptoms. On the basis of the studies reviewed above, we formed several a priori hypotheses about the facets of AS and how they might relate to different levels of the symptom hierarchy.

First, we predicted that AS would be adequately modeled by a higher-order model consisting of a general AS factor that coexists with three lower-order factors representing Physical, Social, and Mental-Incapacitation Concerns. Second, it was hypothesized that Mental-Incapacitation Concerns would predict a latent General Distress factor. Third, if the Mental-Incapacitation Concerns facet is more strongly related to depression than to the other emotional disorders (as suggested by Taylor et al., 1996), then the Mental-

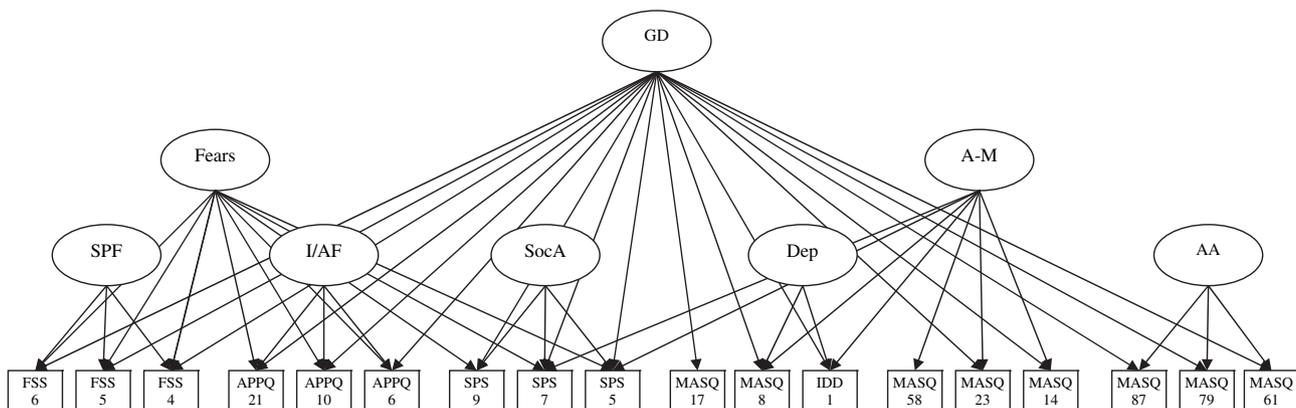


Fig. 1. Three-level hierarchical model of anxiety and mood symptoms. GD = General Distress; A-M = anxious-misery; SPF = specific phobia-like fears; I/AF = interoceptive/agoraphobic fears; SocA = social anxiety; Dep = depression; AA = anxious arousal; FSS = Fear Survey Schedule-II; APPQ = Albany Panic and Phobia Questionnaire; SPS = Social Phobia Scale; MASQ = Mood and Anxiety Symptom Questionnaire; IDD = Inventory to Diagnose Depression. For clarity of presentation, error terms and methods factor incorporated by Prenoveau et al. (2010) have not been shown, and only 18 questionnaire items have been represented rather than all 67.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات