



The effects of social evaluation and looming threat on self-attentional biases and social anxiety

Muhammad Haikal, Ryan Y. Hong*

National University of Singapore, 21 Lower Kent Ridge Road, Singapore 119077, Singapore

ARTICLE INFO

Article history:

Received 17 September 2009
Received in revised form 25 January 2010
Accepted 25 January 2010

Keywords:

Social anxiety
Fear of negative evaluation
Looming cognitive style
Self-attentional biases

ABSTRACT

This paper examines how two proposed cognitive vulnerabilities of social anxiety, the fear of negative evaluation, and looming cognitive style may combine with socially demanding situations in predicting social anxiety symptoms and performance deficits. Fifty-two individuals previously identified as possessing these two cognitive vulnerabilities were randomly assigned to conditions in a 2 (high versus low social evaluation) \times 2 (high versus low temporal looming) experimental design. Significant interaction effects were found for: (a) residual change in anxiety symptoms from baseline level, and (b) performance on a speech task. Specifically, cognitively at-risk individuals exhibited the most increase in anxiety and the most performance deficits in the condition where social evaluation and temporal looming were high. In addition, a mediational effect of illusion of transparency (a form of self-attentional bias) between situational demands and residual change in anxiety was found. Implications arising from these results are discussed.

© 2010 Elsevier Ltd. All rights reserved.

1. Introduction

Social anxiety, or the fear of embarrassment in social or performance situations, has been identified as one of the most common anxiety disorders impacting adults' functioning at work and at home (Higa & Daleiden, 2008; Wittchen, Stein, & Kessler, 1999). Cognitive approaches to social anxiety have proposed that certain cognitive styles and biases play important roles in maintaining and exacerbating anxiety symptoms (Hirsch & Clark, 2004). In particular, cognitive biases may cause individuals with social anxiety to perceive social situations as more threatening than they actually are and to prompt them to behave in ways that lead to maintenance of their fears. Thus, understanding these cognitive factors is important as it may help us improve in the assessment and treatment of social anxiety by recognizing and understanding the factors responsible for the symptoms or that may impede treatment. The current study examines the effects of situational demands (i.e., social evaluation and looming threat) on social anxiety among individuals who possess two cognitive vulnerabilities (i.e., fear of negative evaluation and looming cognitive style). In addition, the role of self-attentional biases as potential mediators for these effects is also examined.

1.1. Cognitive vulnerabilities to social anxiety

Two common cognitive vulnerabilities proposed to be implicated in the etiology of social anxiety are fear of negative evaluation (FNE) and looming cognitive style (LCS). According to Rapee and Heimberg (1997), the construct of FNE plays a key role in motivating individuals with social anxiety to assume that others tend to be highly critical and, as a result, are inclined to evaluate them negatively. In addition, socially anxious individuals believe that they are expected to meet extremely high standards during social encounters. Because they are skeptical of being capable of meeting those perceived high standards, socially anxious individuals tend to believe that they are likely to be evaluated negatively by others and thus suffer from aversive social repercussions. Studies on FNE have aimed mainly at elucidating the manner to which socially anxious individuals perceive information associated with evaluation (Weeks, Heimberg, & Rodebaugh, 2008). Findings suggest that individuals high in FNE report more negative mental images of their own appearance and actions in anxiety-provoking social situations (Coles, Turk, Heimberg, & Fresco, 2001) and rate emotional expression of others as being more negative (Winton, Clark, & Edelmann, 1995), compared to their low counterparts.

According to Riskind (1997), LCS as a cognitive vulnerability refers to the tendency to form mental scenarios and images as intensifying in terms of threat. For a person high on LCS, the potential harm or threat posed by a stimulus is construed to be approaching oneself at an increasingly rate; that is, the threatening stimulus is appraised as "looming" closer to oneself. Such cognitive

* Corresponding author at: Department of Psychology, National University of Singapore, 9 Arts Link, Singapore 117570, Singapore. Tel.: +65 6516 6120; fax: +65 6773 1843.

E-mail address: ryan.hong@nus.edu.sg (R.Y. Hong).

vulnerability has been posited to be a common underlying cognitive vulnerability that spreads across several anxiety disorder symptoms, including social anxiety, obsessive–compulsive disorder, and post-traumatic stress disorder (Williams, Shahar, Riskind, & Joiner, 2005). According to its proponents (e.g., Riskind, Tzur, Williams, Mann, & Shahar, 2007), an important difference between LCS and other cognitive biases is that the former embodies a dynamic nature of perceiving threatening situations such as its velocity and rate of change whereas the latter typically focus on beliefs or cognitions that are fairly static and stable.

Consequently, individuals high on cognitive looming would generate mental scenarios that are associated with rapidly rising risk when anticipating potential threats in the environment. For example, an individual high on FNE (a static cognitive bias) is likely to fear how others may judge him but the threat perceived from the social stimulus remains constant. On the other hand, a high LCS individual may exaggerate the speed of progression of actual or imagined threat (e.g., other are about to socially reject him/her) as time goes by (Riskind, Williams, Gessner, Chrosniak, & Cortina, 2000).

To date, research on the looming cognitive model have focused largely on the generality of the looming cognitive style to anxiety disorders. In a study by Williams et al. (2005), LCS was found to predict the shared variance of various anxiety disorder symptoms. However, there is an increased interest in the role of LCS in the context of other cognitive vulnerability factors. For instance, Riskind, Williams, and Joiner (2006) proposed that predictability of a specific anxiety disorder by LCS might be dependent on its interactions with other proximal disorder-specific cognitive vulnerabilities. With regard to social anxiety, its symptoms were proposed to be the result of an interaction between the looming cognitive style and early developmental experiences where acceptance and worthiness were based on attaining perfection, causing the individual to envision intensifying threatening scenarios of social embarrassment or rejection.

1.2. Self-attentional bias

Rapee and Heimberg (1997) highlighted that, in a social situation, all individuals simultaneously allocate their attentional resources to form mental representations of how they were being seen by the audience and to monitor internal cues such as physical symptoms of anxiety. However, such cognitive activities appear to be maladaptive among people with social anxiety in that the elevated self attention often leads to increased negative self-views, anxiety symptoms, and impaired performance (Clark & Wells, 1995; Perowne & Mansell, 2002; Woody, 1996; Woody & Rodriguez, 2000). As in Brown and Stopa (2007), the current study uses two concepts derived from social psychology to explain the possible attentional biases in social anxiety: the illusion of transparency and the spotlight effect. The illusion of transparency refers to the tendency for people to overestimate how apparent their internal sensations are to others (Gilovich, Savitsky, & Medvec, 1998) whereas the spotlight effect refers to the tendency for people to believe that their behaviors are more likely to be noted and remembered by others than is actually the case (Gilovich, Kruger, & Medvec, 2002; Gilovich, Medvec, & Savitsky, 2000). An important distinction between the illusion of transparency and the spotlight effect is the domain of self-attention which is involved. The illusion of transparency focuses on internal self-attention whereas the spotlight effect focuses on external self-attention. Internal self-attention is directed to the self with a focus on one's thoughts and feelings whereas external self-attention is associated with how individuals view themselves from the perspective of the observer (Brown & Stopa, 2007; Woody & Rodriguez, 2000). To the best of our knowledge, only one study

(Brown & Stopa, 2007) had examined the role of the illusion of transparency and the spotlight effect in the context of social anxiety. Specifically, those authors found that socially anxious individuals reported high levels of the spotlight effect (but not the illusion of transparency effect) and performance deficits when they thought that they would be socially evaluated.

1.3. The present study

In this study, we were interested in the emotional and behavioral consequences of cognitively at-risk individuals when they were placed in situations that were particularly challenging for them. Based on our earlier reviews on FNE and LCS, we hypothesized that individuals who possessed these cognitive vulnerabilities would exhibit negative outcomes (e.g., elevated anxiety symptoms) when they were placed in situations that (a) exposed them to the possibility of being socially evaluated and (b) the rate at which the threat was approaching was salient to them. We chose to focus on two cognitive vulnerabilities simultaneously for the reason that such factors rarely operate in isolation in the development of psychopathology (Hirsch & Clark, 2004). In addition, because our study involved experimental manipulation of two situational features in a crossed design (see Section 2), we were able to explore the possibility of an interaction effect on outcomes like anxiety symptoms and task performance. That is, individuals who are cognitively vulnerable to social anxiety may experience the most detrimental effects, not in an additive but in a multiplicative manner, when placed in demanding situations. This is an intriguing postulation in that such individuals may suffer from a “double whammy” in those situations and thus suffer negative and undesirable consequences.

We hypothesized further that self-attentional biases would be elicited under the abovementioned situational conditions for these cognitively vulnerable individuals. Specifically, we predicted that at-risk individuals would report higher levels of illusion of transparency and the spotlight effect in a situation where social evaluation and threat looming are high. This raises the possibility that self-attentional biases may mediate the effects between situational features and outcomes. For example, we expected that cognitively at-risk individuals would exhibit the illusion of transparency and spotlight effects under demanding situations, which then resulted in increased anxiety levels and interference in task performance, compared to less demanding situations. The reason why self-attentional processes are considered to be potential mediators here is because they constitute self-relevant cognitions that get activated in response to specific situational contexts (Gilovich et al., 1998).

2. Method

2.1. Participants

Participants were undergraduate students at the National University of Singapore. They were recruited from the larger sample of 145 undergraduate students who had participated in a related study in exchange for course credit. As part of that study, participants completed the Brief Fear of Negative Evaluation Scale (BFNE; Rodebaugh et al., 2004) and (b) the Looming Maladaptive Style Questionnaire (LMSQ; Riskind et al., 2000). Based on their composite score on the BFNE and LMSQ combined, the top 80 participants were invited to participate in the current experiment. Among the 80 invited participants, 55 agreed to participate in the present study. Three participants withdrew halfway through the study as they were not comfortable with the procedure of being video-recorded (see below). This resulted in a moderate to high risk sample of 52 participants (65% of those invited) and all

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