# Not self-focused attention but negative beliefs affect poor social performance in social anxiety: An investigation of pathways in the social anxiety–social rejection relationship

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## ARTICLE INFO

## ABSTRACT

Patients with social anxiety disorder (SAD) not only fear negative evaluation but are indeed less likeable than people without SAD. Previous research shows social performance to mediate this social anxiety–social rejection relationship. This study studied two pathways hypothesized to lead to poor social performance in social anxiety: increased self-focused attention and negative beliefs. State social anxiety was experimentally manipulated in high and low-blushing-fearful individuals by letting half of the participants believe that they blushed intensely during a 5 min getting-acquainted interaction with two confederates. Participants rated their state social anxiety, self-focused attention, and level of negative beliefs. Two confederates and two video-observers rated subsequently likeability (i.e., social rejection) and social performance of the participants. In both groups, the social anxiety–social rejection relationship was present. Although state social anxiety was related to heightened self-focused attention and negative beliefs, only negative beliefs were associated with relatively poor social performance. In contrast to current SAD models, self-focused attention did not play a key-role in poor social performance but seemed to function as a by-product of state social anxiety. Beliefs of being negatively evaluated seem to elicit changes in behavioral repertoire resulting in a poor social performance and subsequent rejection.

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## Introduction

Patients with Social Anxiety Disorder (SAD) fear negative evaluation by others. Although cognitive models of SAD (Clark, 2001; Rapee & Heimberg, 1997) stress the importance of overestimation of this negative evaluation, an increasing number of studies indicate that socially anxious people are indeed more negatively evaluated than non-socially anxious people. Below six studies that evidence for such a negative social anxiety–social rejection relationship are summarized.

Three studies show this social anxiety–social rejection relation in analogue populations. In the first study, socially anxious and non-socially anxious female students ($n = 42$ for each group) participated in a 5 min structured 'getting-to-know-each-other' task with a blind confederate (Meleshko & Alden, 1993). The socially anxious participants were judged to be less likeable and less comfortable to be around by these confederates than their non-socially anxious counterparts. In the second study, shy and non-shy students (respectively, $n = 22$, $n = 24$; equal distribution of sexes) were observed during 1-h of various social interactions by three independent observers (Pilkonis, 1977). The shy students were rated as less attractive, friendly, assertive, and relaxed than the non-shy participants. In the third study, 149 students (83 females and 66 males) were rated by four video-observers during three 5-min social tasks (Creed & Funder, 1998). Correlations showed that the higher level of social anxiety of the participants the more the video-observers rated them as sensitive to demands, self-pitying, lacking personal meaning in life, and moody.

Two studies show the same pattern for patients with SAD. In the first study (Alden & Wallace, 1995), 32 generalized SAD patients and 32 matched controls participated in a 5-min getting-acquainted interaction with an opposite sex confederate. Both experimenter and confederate rated the SAD patients as less warm, less interested and less likeable than the control participants. In the second study, 63 generalized SAD patients and 27 controls participated in a 5-min getting-acquainted task with two (male and

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female) confederates. Here video-observers were less willing to have future interaction with the SAD patients than with the control participants (Voncken, Alden, Bögels, & Roelofs, 2008).

Not only do socially anxious individuals evoke feelings of rejection in people with whom they interact, there is also evidence that socially anxious adolescents are treated more negatively by their peers than their non-socially anxious classmates (Blöte & Westenberg, 2007). In this study, high (n = 131, 70% girls) and low (n = 165, 35% girls) took part in an oral presentation in front of the class-room. The teachers rated the responses of the peers in the class-room more negatively for the high-socially anxious than for the low-socially anxious adolescents. Taken together, these studies suggest that socially anxious individuals' concerns about being rejected seem to be valid even to the extent that they are treated in a more negative way by others what, in turn, could fuel their social anxiety. This social anxiety–social rejection relationship could, therefore, be an important maintenance factor in SAD.

The mechanisms through which this negative evaluation in social anxiety is elicited are not clear. One obvious candidate for such a mechanism would be that patients with SAD show deficits in their social performance and, therefore, elicit relatively negative responses in others. Indeed, a number of studies have shown that SAD is marked with social performance deficits. This is found in both analogue (e.g., Beidel, Turner, & Dancu, 1985; Bögels, Rijsemus, & De Jong, 2002; Daly, Twentyman, & McFall, 1978; Lewin, McNeil, & Lipson, 1996; Thompson & Rapee, 2002; Twentyman & McFall, 1975) and patient samples (Baker & Edelmann, 2002; Fydrich, Chambless, Perry, Buergener, & Beazley, 1998; Stopa & Clark, 1993; Voncken & Bögels, 2008). Moreover, there is evidence showing that such performance deficits in SAD, in turn, elicit negative responses in others. That is, in the study of Voncken et al. (2008) ratings of social performance of participants during a getting-acquainted interaction by one set of observers, was able to predict social rejection (i.e., less willingness for future interaction) in a second set of observers. Their data further showed that poor social performance, elicited negative emotions in others and was associated with perceived dissimilarity ratings, both of which, in turn, predicted social rejection.

The next critical question is how to explain SAD patients' poor social performance. Enhanced self-focused attention has been proposed as a mechanism that gives rise to social under-performance of SAD patients (Clark, 2001). Self-focused attention is the attention focused internally on aspects of the self, such as, own arousal, behavior, thoughts, emotions, or appearance (Bögels & Mansell, 2004). There is ample evidence that socially anxious individuals (including patients with SAD) display higher levels of self-reported self-focused attention than non-socially anxious individuals (for a review see Bögels & Mansell, 2004). It is proposed that too much attention focused inward, results in little attention for the task at hand (e.g., having a conversation) and other person(s), thus, results in social performance problems (Clark, 2001). More-over, a highly self-focused person might not only show perfor-mance problems, but might also come across as aloof, disinterested and absent minded (Bögels & Mansell, 2004) and, therefore, could be perceived as unlikeable.

Although self-focused attention is theorized to lead to social performance problems, thus far there is hardly any convincing empirical evidence showing that heightened self-focused attention indeed has a detrimental influence on individuals' social skills and/or likeability. A series of previous studies that were designed to experimentally test the influence of enhanced self-focused atten-tion on social performance failed to find evidence for such a rela-tionship between self-focused attention and social performance (Bögels et al., 2002; Burgio, Merluzzi, & Pryor, 1986; Woody, 1996; Woody & Rodriguez, 2000). On the other hand, there is some

tentative evidence that experimentally enhancing self-focused attention does affect participants' social skills (McManus, Sacadura, & Clark, 2008). However, in this study the influence of self-focused attention could not be disentangled from the use of safety behav-iors as in the experimental condition the participants were instructed to use safety behaviors which included focusing ones attention inward. Another previous study showed that high-socially anxious participants displayed poorer social performance in the high self-focused attention (with camera) than in the control (without camera) condition (Alden, Teschuk, & Tee, 1992). However, it in this earlier study it might have been increased social anxiety (induced by the camera) rather than enhanced self-focused atten-tion per se that resulted in relatively poor performance. All in all, the available evidence does not allow any final conclusion regarding the effect of self-focused attention on social performance.

The belief that one is negatively judged has also been proposed to directly decrease social performance (Clark, 2001). Participants who were (falsely) led to believe that their interaction partners disliked them were rated by independent observers higher on distancing (behaviors such as disagreeing and expressions of dissimilarity) and lower on a general warmth factor (behaviors such as self-disclosure, voice tone and general attitude) than participants who were led to believe that their partners liked them (Curtis & Miller, 1986). Moreover, the belief of the participants came true: the partners, unaware of the manipulation of the participants, disliked the participants who believed that they were disliked more than the participants who believed they were liked. Apparently, the mere belief of being disliked can affect social performance and make this belief come true.

The present study was designed in an attempt to unravel the social anxiety–social rejection relationship and focuses on how social anxiety leads to a poorer social performance and subse-quently to social rejection. Two pathways are proposed to link social anxiety to a poor social performance: via self-focused attention and/or via negative beliefs. See Fig. 1 for the hypothesized model. In this model, the path from poor social performance to social rejection was added, based on previous research (i.e., Voncken et al., 2008). Moreover, a path directly from state social anxiety to social rejection was added as the relationship between social anxiety and social rejection could also be explained by other variables than currently hypothesized.

In order to investigate this model, we experimentally manipu-lated the state social anxiety of participants during a 5 min getting-acquainted conversation with two unknown confederates. We choose to induce social anxiety by letting half of the participants believe that their body showed a blushing response. Blushing is the most typical of the physical socially anxious responses (Drummond, 1997) compared to, for instance, increases in heart beat or sweating which are also typical for arousal during other anxious states (e.g., panic attacks). Therefore, blushing was most suitable to increase social anxiety. Moreover, Dijk and de Jong (2009) showed that people generally anticipate a negative evalu-ation as a result of displaying a blush, which in turn may increase feelings of social anxiety. Last, Wild, Clark, Ehlers, and McManus (2008) demonstrated that the false negative feedback of physical arousal lead their participants to show a poorer social performance and more negative beliefs (self-focused attention was not assessed). We expected the blushing manipulation to be less relevant for low than for high blush-fearful individuals. Therefore, we selected high and low-blushing-fearful individuals and tested the model sepa-rately in these two groups.

To assess the five elements of the model (social anxiety, self-focused attention, negative beliefs, social performance and social rejection), the participants rated their feelings of social anxiety, the