Social rank and affiliation in social anxiety disorder

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ABSTRACT

The present study examined the interpersonal lives of individuals with social anxiety disorder (SAD). According to evolutionary and interpersonal theories, we construed the interpersonal world using the social rank and the affiliation psychological systems. Two studies assessed measures of social rank, affiliation, social anxiety and depression among a population of treatment-seeking individuals with SAD. In study 1, individuals with SAD without major depressive disorder (MDD; $n = 42$) were compared to healthy controls ($n = 47$). In study 2, individuals with SAD and MDD ($n = 45$) were compared to individuals with other anxiety disorders and MDD ($n = 31$). Results indicated that SAD was related to perceiving oneself as having low social rank, being inferior, and behaving submissively, as well as to low perceived intimacy and closeness among peer relations, friendships and romantic relations. SAD was distinctly associated with these perceptions above and beyond the symptomatic (study 1) and the syndrome-level (study 2) effects of depression. These findings were further supported by a path analysis of the SAD participants from both studies. Our findings highlight the need to address both social rank and affiliation issues in the assessment and treatment of SAD.

Social anxiety disorder (SAD) is a common and debilitating psychiatric disorder with an estimated lifetime prevalence rate of 12.1% (Kessler et al., 2005). Individuals with SAD fear and avoid social interactions (e.g., talking to a stranger or peer, going to a party) and performance situations (e.g., giving a speech). These difficulties in interpersonal interactions result in significant impairment in many facets of daily functioning, including friendships, romantic relationships, work, and studies (e.g., Alden & Taylor, 2004).

Several theoretical perspectives converge in suggesting that two main systems govern interpersonal relatedness – one of social rank, power and dominance, and one of affiliation, reciprocity and intimacy (Alden, Wiggins, & Pincus, 1990; Gilbert & Trower, 2001; Trower & Gilbert, 1989). These two main systems constitute the axes that form the interpersonal circumplex, a widely accepted conceptualization of interpersonal space (e.g., Gurtman, 1991). The goal of the social rank system is to monitor the social hierarchy in order to successfully compete for a dominant position which allows access to more resources. Importantly, among humans, dominant positions can be positions of high status and power to distribute punishment and reward (e.g., a boss), but can also be positions of high social desirability and attractiveness (e.g., a celebrity – Gilbert & Trower, 2001). Recent findings from social neuroscience show that distinct neural systems are involved in the recognition and experience of social hierarchy (Chiao, 2010; Sapolsky, 2005). The goal of the affiliation system is to find others with whom one can connect and cooperate. In the present study we adopt this multidimensional view of the social world and use it as a framework to examine impairments in social functioning among individuals with social anxiety disorder (SAD).

Trower and Gilbert's (1989) evolutionary model suggests that whereas all individuals utilize both the social rank and the affiliation systems, individuals with SAD tend to over-utilize the social rank system and under-utilize the affiliation system (Trower & Gilbert, 1989). In other words, individuals with SAD may tend to view interpersonal situations from a competitive, rather than an affiliative perspective.

The over-utilization of the social rank system can cause individuals with SAD to view themselves as inferior, inadequate, undesirable and unattractive socially (e.g., Hope, Sigler, Penn, & Meier, 1998; Leary & Kowalski, 1995), and as lacking the ability to successfully compete with dominant, socially attractive others. These perceptions might lead to the adaptation of submissive

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behaviors (e.g., reduced eye-contact), in order to avoid conflict and decrease possible punishments from dominant others. An additional strategy is overall avoidance of interpersonal contact, which also reduces the probability of punishment, rejection, and put-down (albeit reducing any rewards as well).

There are several studies that support this view of SAD. Consistent with the over-utilization of social rank system, socially anxious individuals have been found to view social interactions as more competitive compared to non-anxious individuals (Hope et al., 1998), and to constantly monitor for signals of social threat (Gilboa-Schechtman, Foa, & Amir, 1999). In addition, socially anxious individuals tend to view themselves as incapable of adequately competing with others (Hope et al., 1998) and to engage in negative social comparisons in which the self is viewed as inferior (Antony, Rowa, Liss, Swallow, & Swinson, 2005). In fact, among socially anxious individuals, negative social comparisons were strongly related to social anxiety, above and beyond the influence of attachment (Aderka, Weisman, Shahar, & Gilboa-Schechtman, 2009). Finally, socially anxious individuals exhibited more submissive behaviors (Heerey & Kring, 2007) and fewer dominant behaviors (Walters & Hope, 1998) compared to non-socially anxious individuals.

Consistent with the under-utilization of the affiliation system, individuals with SAD have been found to experience a wide range of interpersonal difficulties (for a review see Alden & Taylor, 2004). Specifically, individuals with SAD report reduced quality of romantic relations, and less emotional expression, self-disclosure, and intimacy within these relationships compared to non-anxious individuals (Sparrevohn & Rapee, 2009). Similarly, Alden and Wallace (1995) found that both neutral observers and conversational partners rated individuals with SAD as being less warm and interested compared to individuals without SAD in a "getting acquainted" task. Individuals with SAD were also found to exhibit lower rates of self-disclosure during conversations, which can lead to rejection by others (e.g., Papsdorf & Alden, 1998). To sum, there is ample evidence suggesting that individuals with SAD do not utilize the affiliation system as do non-anxious individuals.

The social rank and affiliation systems have also been linked to depression (Gilbert, 2006). Irons and Gilbert (2005) found that among adolescents both attachment measures (affiliation) and social rank measures are associated with depressive symptoms (Irons & Gilbert, 2005). Moreover, social rank measures mediated the relationship between attachment and depressive symptoms among insecurely attached adolescents (Irons & Gilbert, 2005). Similarly, compared with their non-depressed counterparts, depressed individuals reported engaging in more negative social comparisons, perceiving themselves as inferior, and displaying more submissive behaviors (Gilbert, Allan, & Trent, 1995). Finally, depression is associated with a multitude of interpersonal/affiliation problems (e.g., Joiner & Coyne, 1999). Given the high comorbidity between SAD and depression, it is not clear if impaired social cognition and social behavior in SAD are a result of social anxiety, depression, or both. In the present study we sought to examine whether social rank and affiliation perceptions were related to SAD above and beyond the effect of depression.

The present paper reports on 2 studies which examined social rank and affiliation perceptions among individuals with SAD. In study 1 we compared individuals with SAD and without major depressive disorder (MDD) to healthy controls (with no AXIS-I disorders) controlling for levels of depression statistically. In study 2 we compared individuals with comorbid SAD and MDD to individuals with other anxiety disorders and MDD (thus controlling for MDD using the study design). To assess the social rank

perceptions we used measures of social comparison and submissive behavior. To best capture multiple aspects of interpersonal relations, we assessed affiliation perceptions using measures that tap romantic relations, non-romantic friendships, and peer relations. In doing so, we assessed measures of social rank, affiliation, social anxiety and depression among a clinical SAD population within a unified design.

In both studies we hypothesized that individuals from the SAD group would evince greater perceived inferiority and greater use of submissive behaviors compared to the control group. In addition, we hypothesized that individuals from the SAD group would evince more impaired interpersonal relations with friends, romantic partners and peers compared to the control group. Finally, we expected that these perceptions would be related to social anxiety over and above concomitant depressive symptoms, general anxiety symptoms, or a diagnosis of MDD.

Study 1

Method

Participants

Participants in study 1 comprised two groups: individuals who sought treatment for social anxiety disorder (SAD group; $n = 42$), and individuals from the community who did not seek treatment (control group; $n = 47$). Participation was voluntary and no compensation was given to individuals who agreed to take part in the study. Participants were excluded from the SAD group if they (a) received a diagnosis of schizophrenia; (b) received a diagnosis of MDD; (c) received a diagnosis of substance dependence; or (d) had insufficient knowledge of the Hebrew language. We excluded individuals with comorbid depression because depression has been previously associated with both the social rank and affiliation systems. As we were interested in the effect of SAD per se, comorbid MDD would have confounded our results. Exclusion criteria for the control group included the presence of any AXIS-I disorder or a lack of proficiency in Hebrew.

Table 1 presents demographic and clinical data for the participants in this study. In addition to the primary diagnosis of SAD, individuals in the SAD group had additional AXIS-I diagnoses: 13 had generalized anxiety disorder, 2 had panic disorder, 8 had obsessive-compulsive disorder, and 1 had posttraumatic stress disorder.

Procedure

Participants in the SAD group sought treatment at a large public clinic in Israel. As part of the routine intake procedure, participants were interviewed using the structured clinical interview for DSM-IV AXIS-I disorders (SCID; First, Spitzer, Gibbon, & Williams, 1996). Interviewers were three M.A. level clinical psychologists experienced in the administration of the SCID. All three interviewers received training prior to the study from the third author of the present study, a senior clinical psychologist. All diagnoses were subsequently examined and approved by the third author. Following the SCID, participants were approached by a research assistant, who invited them to take part in the study about interpersonal relationships. If participants agreed, they filled out informed consent forms and self-report measures. A total of 46 individuals were approached at the clinic and of these, 42 (91.3%) agreed to participate.

Participants in the control group were individuals recruited from the community. Participants underwent the SCID and completed the self-report measures. Of the 60 individuals contacted for participation 47 (70%) agreed to take part in the study.