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# Relational treatment strategies increase social approach behaviors in patients with Generalized Social Anxiety Disorder

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ABSTRACT

We incorporated strategies based on relational and interpersonal circumplex research within a standard cognitive-behavioral regimen for Generalized Social Anxiety Disorder (GSAD, Generalized Social Phobia) to determine whether these techniques increased the social approach behaviors that facilitate relationship development. Individuals seeking treatment for GSAD were randomly assigned to either the integrated interpersonal cognitive-behavioral group treatment (ICBT) or a wait list condition (WL). Results revealed that the interpersonal techniques were readily implemented by the majority of patients. ICBT produced significant increases in frequency of social approach behaviors and relationship satisfaction, in addition to GSAD symptom reductions comparable to other group CBT regimens. The current research highlights the feasibility and potential benefit of incorporating strategies based on relational and circumplex theories into cognitive-behavioral regimens for GSAD.



## 1. Overview and rationale

Social Anxiety Disorder (SAD), or social phobia, is a condition marked by persistent fear of social or performance situations (American Psychiatric Association, 1994). SAD has a lifetime prevalence of approximately 12% in the general population, making it the fourth most common psychiatric disorder (Kessler et al., 2005). This condition often onsets early and follows a chronic, unremitting course that significantly interferes with the individual's life (e.g. Stein & Stein, 2008). The prevalence and impairment related to SAD underscores the importance of developing a range of treatment strategies for this disorder.

Generalized SAD (GSAD) is a particularly virulent form of SAD in which anxiety is experienced in most social situations. Not surprisingly, individuals with GSAD suffer greater life impairment than those with nongeneralized social anxiety (e.g., Brown, Heimberg, & Juster, 1995; Heimberg, Hope, Dodge, & Becker, 1990; Holt, Heimberg, & Hope, 1992; Hope, Herbert, & White, 1995; Kessler, Stein, & Berglund, 1998; Stein & Chavira, 1998). One important area of disruption is in the person's ability to develop satisfying friendships and other close relationships (e.g., Antony, Roth, Swinson, Huta, & Devins, 1998; Mendlowicz & Stein, 2000; see Alden & Taylor, 2004a, 2010, for reviews). As a result, these individuals are less likely to date or marry, have fewer friends, lower levels of perceived social support, and are more likely to be socially isolated than people with nongeneralized SAD or nonanxious controls (e.g., Mendlowicz & Stein, 2000). Accordingly, in this study we sought to determine whether treatment strategies that directly target behaviors that are key to relationship development might help to overcome these interpersonal deficiencies.

## 2. Social approach and avoidance

There is growing recognition that human behavior is guided by two distinct motivational systems, often labeled the approach and avoidance systems. These systems arise from different central nervous system circuits and regulate behavior through different neurochemical processes (e.g., Davidson, Jackson, & Kalin, 2000). A small body of research indicates that the two systems may also regulate social approach versus social avoidance behavior (Gable & Reis, 2001; Gable, Reis, & Elliot, 2003; Reis & Gable, 2003; Waugh & Fredrickson, 2006). In particular, the approach system is believed to regulate some types of positive affect and social approach motivation, both of which facilitate social initiation, friendly behavior, and openness with others (e.g., Waugh & Fredrickson, 2006). Individuals with SAD display deficiencies in social approach behavior, misinterpret or avoid positive social cues, and are less likely to experience positive affect, which has led to speculations that these people are characterized by dysregulation of the approach system (e.g., Alden, Taylor, Mellings, & Laposa, 2008; Kashdan, 2004; Mansell, Clark, Ehlers, & Chen, 1999; Pishyar, Harris & Menzies, 2004; Taylor, Bomyea, & Amir, 2010; Veljaca & Rapee, 1998). The existence of two distinguishable systems raises the possibility that

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it would be informative to directly assess and target social approach behavior in treatment.

## 3. Circumplex and relational models

Developmental and social-personality research provides guidance about the processes that facilitate social approach behavior and relationship formation. According to circumplex theorists, any act emitted in a social situation sends an interpersonal message (*impact message)* that invites (or "pulls") for certain types of reactions from others and establishes an *interpersonal transactional cycle* that maintains existing social beliefs (Carson, 1969; Horowitz, 2004; Kiesler, 1996; Leary, 1957). Interpersonal transactions tend to follow principles of *complementarity*. One robust finding is that social behavior tends to evoke corresponding responses in terms of affiliation, i.e., friendliness evokes friendliness; hostility evokes hostility, and so on (e.g., Bluhm, Widiger, & Miele, 1990; Curtis & Miller, 1986; Dryer & Horowitz, 1997; Sadler & Woody, 2003; Tiedens & Fragale, 2003). Developmental researchers have documented the contribution of social developmental experiences to establishing core interpersonal patterns that influence how the person approaches social interactions (e.g., Burgess, Rubin, Cheah, & Nelson, 2001; Schmidt, Polak, & Spooner, 2001). Individuals who have positive early experiences with parents and peers learn to expect positive social responses and engage in friendly behaviors, which following the principles described above, pull for friendly responses from others and facilitate relationship formation.

Relational theorists focus on the processes involved in developing *close* relationships. Reis and Shaver (1988), in their interpersonal process model, proposed that reciprocal self-disclosure in the early stages of relationships is critical to establishing the mutual trustworthiness necessary to progress to greater intimacy. Mutual self-disclosure leads to perceived similarity and liking, which in turn facilitate relationship formation and satisfaction (e.g., Collins & Miller, 1994; Laurenceau, Barrett, Feldman, & Pietromonaco, 1998; Radcliff, Lumley, Kendall, Stevenson, & Beltran, 2007; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Vittengl & Holt, 2000).

For socially anxious people, empirical findings reveal that adverse early social environments, in conjunction with innate biological factors, act to maintain or increase social reticence and avoidance (e.g., Burgess et al., 2001; Rubin, Burgess, & Hastings, 2002; Schmidt et al., 2001). Developmental events continue to influence perceptions of contemporary social interactions (Taylor & Alden, 2005, 2006) and lead these individuals to behave in ways that cause them to be perceived negatively by others (e.g., Alden & Bieling, 1998; Creed & Funder, 1998; Heerey & Kring, 2007; Meleshko & Alden, 1993; Taylor & Alden, 2010). In particular, socially anxious individuals and patients with GSAD fail to reciprocate openness and positive emotion expression from others, which reduces the willingness of strangers to engage in future interactions (e.g., Alden & Bieling, 1998; Davila & Beck, 2002; Heerey & Kring, 2007; Vonken, Alden, Bögels, & Roelofs, 2008). Even when socially anxious people do develop close relationships, they avoid emotion expression and emotional closeness, and engage in fewer positive behaviors than nonanxious people (Davila & Beck, 2002; Grant, Beck, Farrow, & Davila, 2007; Sparrevohn & Rapee, 2009; Wenzel, 2002; Wenzel, Graff-Dolezal, Macho, & Brendle, 2005). Thus, socially anxious people display deficits in the interpersonal behaviors needed to establish and enhance close relationships. Importantly, clinical experience indicates that people with SAD typically do not understand the processes that affect their relationships but rather attribute their emotional and social isolation to some vaguely defined, global sense of personal inadequacy (see also Moscovitch, Orr, Rowa, Reimer, & Antony, 2009).

## 4. Treatment

A central feature of contemporary cognitive-behavioral treatment (CBT) regimens is the use of behavioral exercises (*experiments*) to evaluate dysfunctional beliefs and behaviors (e.g., Clark & Wells, 1995; Heimberg & Becker, 2002). In this research, we adapted this established treatment strategy to develop behavioral experiments designed to help patients recognize the basic principles of interpersonal interactions, and the role of approach behaviors in facilitating social transactions. We also adapted standard cognitive techniques to help patients with SAD identify the social developmental experiences that led to their core interpersonal beliefs, examine how those beliefs fueled their social behavior, i.e., their maladaptive transaction cycles, and update beliefs based on their treatment experiences.

To understand the current regimen, it is useful to contrast it with social skills training (SST) and Interpersonal Psychotherapy (IPT; Klerman & Weissman, 1993), which have also been applied to SAD (e.g., SST, Herbert et al., 2005; IPT, Lipsitz, Markowitz, Cherry, & Fyer, 1999). Whereas SST typically uses skill modeling and rehearsal techniques to overcome skill deficiencies, the current regimen used behavioral experiments to evaluate the accuracy of social beliefs and the interpersonal effects of habitual interpersonal patterns. Hence, the emphasis was on modifying beliefs and expectations rather than teaching behavioral skills per se. IPT is derived from psychodynamic therapy and incorporates exploration of patient resistance and identification of patient wishes and fantasies, as well as a broader exploration of interpersonal patterns. Traditionally, the IPT regimen focuses on the four interpersonal situations believed to maintain depression, namely unresolved grief, role transitions, interpersonal role disputes, and interpersonal deficits. In contrast, the current regimen is based on research indicating that the core interpersonal problem in GSAD is fear-mediated reluctance to engage in relationship-facilitating behaviors, and therefore adapted a standard CBT format to encourage experimentation with social approach strategies.

## 5. Benchmark comparison

Another critical question is whether integrating social approach treatment strategies with established CBT regimens might reduce the demonstrated effectiveness of those regimens in overcoming the key SAD symptoms of social anxiety and avoidance (e.g., Clark et al., 2006; Heimberg et al., 1998). It is possible that trying to fit additional goals and strategies, particularly ones based on complex relational theories, into existing regimens might overwhelm patients suffering from severe social anxiety and avoidance or prove too difficult to implement in short-term treatment. If so, one would expect to see low rates of homework completion, and higher attrition rates and substantially lower treatment effects compared to those of established regimens. As a first step in addressing this concern, the results of the current integrated regimen were compared with the results of two recent meta-analyses of CBT outcome trials (Aderka, 2009; McEvoy, 2007). These two studies provide particularly relevant benchmarks because they focus on contemporary CBT regimens, are based on the same measures as those used in the current study, and distinguish outcome by group versus individual format, which allows comparison of the current results to those of other group CBT regimens. McEvoy (2007) reported effect sizes for specific SAD symptom measures across 7 CBT outcome trials, and therefore provides a benchmark of comparison on specific measures. Aderka (2009) reported the *average* treatment effect size across multiple SAD symptom measures for 14 recent CBT outcome studies, and therefore provides a broader benchmark for overall treatment effects.