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Social Self-Reappraisal Therapy for Social Phobia: Preliminary Findings

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Abstract

The recent psychopathology literature suggests that individuals with social phobia overestimate social standards and are deficient in setting and attaining social goals, have a negative perception of themselves as social objects and show heightened self-focused attention when confronted with social threat. They further overestimate the potential cost of a social encounter, experience their anxiety as uncontrollable and visible to others, view their social skills as inadequate, rely on safety behaviors and avoidance strategies to control their anxiety, and engage in post-event rumination. Traditional cognitive-behavior therapy does not adequately address all of these features of social phobia during treatment. We discuss here an enhanced version of cognitive-behavioral treatment for social phobia, which is specifically designed to address these factors. The results of an uncontrolled pilot study suggest that this new treatment may be more effective than traditional cognitive-behavioral therapy for social phobia.

Cognitive behavior group therapy for social phobia (CBGT) is the most validated approach to treating social phobia (e.g., Heimberg, 1991). The efficacy of CBGT has been shown in a number of earlier studies (Gelernter et al., 1991; Heimberg et al., 1985; 1990; 1993; 1998) and is currently considered to be the “gold standard” psychological treatment approach for social phobia. The treatment protocol was developed based on Beck and Emery’s (1985) cognitive therapy for anxiety disorders. In fact, due to the similarity between Beck’s cognitive therapy and Heimberg’s approach to social phobia, previous investigators have labeled this type of intervention “Beck-Heimberg CBT” (e.g., Feske & Chambless, 1997; page 714).

Although CBGT is statistically more effective than no treatment or a placebo condition, it is generally agreed that there is still much room for further improvement, because a significant subset of patients fail to achieve optimal benefit from this treatment. For example, a recent study by Heimberg et al. (1998) reported that only 58% of patients responded to CBGT as compared to 27% of the patients who completed educational-supportive group therapy. Mattick and Peters (1988) found that only 38% of individuals with social phobia who completed a treatment very similar to Heimberg’s protocol achieved high end state functioning.

In order to further improve the efficacy of the social phobia treatment protocols, it will be necessary to review the more recent findings on the maintenance of social phobia. Based on the recent literature on psychopathology, we have developed a working model of the maintaining factors of social phobia (Figure 1). This model includes a number of variables that we identified earlier as possible mediators of change (Hofmann, 2000b). According to this model, individuals with social phobia are apprehensive in social situations in part because they perceive the social standard (i.e., expectations and social goals) as being high. They desire to

make a particular impression on others but doubt that they will be able to do so (Leary, 2001), partly because they are unable to select specific achievable behavioral strategies to reach their goals (Hiemisch, Ehlers, & Westermann, 2002). This leads to a further increase in social apprehension and also to increased self-focused attention (Heinrichs & Hofmann, 2001; Woody, 1996), which triggers a number of closely interrelated cognitive responses. Specifically, vulnerable individuals exaggerate the potential social costs involved in social situations (Foa, Franklin, Perry, & Herbert, 1996; Hofmann, 2004). Individuals with social phobia assume that they are in danger of behaving in an inept and unacceptable fashion and believe that this will result in disastrous consequences (Clark & Wells, 1995). They further perceive little control over their anxiety response in social situations (Hofmann & Barlow, 2002), and exaggerate the visibility of their anxiety response to other people. These responses are closely associated with each other and with a tendency to perceive oneself negatively in social situations (Clark & Wells, 1995). The activation of these factors leads to an exacerbation of social anxiety. As a result, the person engages in avoidance and/or safety behaviors (Wells et al., 1995), followed by post-event rumination (Mellings & Alden, 2000; Rachmann, Grüter-Andrew, & Shafran 2000). This cycle feeds on itself, ultimately leading to the maintenance and further exacerbation of the problem.

Based on this model, we developed a new cognitive-behavioral treatment protocol, Social Self-Reappraisal Therapy (SSRT), to specifically target the various aspects of social phobia that lead to the maintenance of the problem. This name was chosen because many of the treatment techniques are specifically designed to modify the client's perception of self in social situations. Although current CBT approaches have similar treatment goals, some of the techniques of SSRT are novel applications for treating symptoms of social phobia and are directly based on the experimental literature. The following paragraphs will provide a brief review of the empirical literature and discuss specific treatment recommendations to target these variables.

Treatment Format and Session Structure

Treatment is conducted in the form of 12 weekly 2.5-hour sessions. Sessions 1–6 are group treatments with 5 patients and 2 therapists per group. These sessions follow a standard format that includes review of previous “homework” (i.e., between session assignments) with group discussion, and presenting of agenda items for the particular session. Homework assignment for each patient consists initially of at least one in-vivo exposure exercise per day. For later homework practices, patients are asked to purposefully create one “social mishap” per week in order to test certain beliefs about the consequences of violating perceived social norms. Although compliance to these assignments was not specifically measured in the present study, the therapists reported that all patients showed good compliance and attempted to perform the majority of exposure exercises.

Beginning with session 7, the session begins in a group setting but the exposure tasks are individually tailored in vivo tasks that occur outside the group setting. Prior to session 7, the therapists meet with each patient individually for approximately 5–10 minutes to construct a fear and avoidance hierarchy of in-vivo social situations. This information is used to construct brief in-vivo exposure situations that involve social mishaps (e.g., dropping a pastry on the floor and asking for a new one without paying again). The therapists accompany some of the patients if deemed clinically advantageous (e.g., to discourage avoidance or safety behaviors). After patients receive the instructions for these brief (10–20 minutes) in vivo exposures exercises, they gather again as a group and discussed their experiences.

This procedure represents a significant departure from other therapy protocols for social phobia, which are conducted either as individual or group treatments. In order to maximize treatment efficacy, we believe that it is necessary to combine individual in-vivo and therapist-

assisted exposure exercises to specifically target individual concerns in social situations. The specific treatment strategies are described in a session-by-session treatment manual that is available from the first author. Below we provide the theoretical justification and practical implementation strategies.

Specific Treatment Strategies

Social Standards and Goals

Theoretical justification—Several models of social anxiety assume that anxiety arises in social situations when individuals wish to convey a desired impression but are unsure about their ability to do so (Clark & Wells, 1995; Leary, 2001; Trower & Gilbert, 1989). Studies have further demonstrated that individuals with social phobia show a discrepancy between perceived social standards and their perceived social abilities (Alden, Bieling, & Wallace, 1994; Alden & Wallace, 1991, 1995; Wallace & Alden, 1991, 1995). This discrepancy was found to be largely due to the individuals' underestimation of their ability level in relation to the perceived social standard and desired goals. A recent study further demonstrates that socially anxious people engage in information processing that interferes with successful goal attainment when approaching social situations (Hiemisch et al., 2002). Specifically, this study suggests that high socially anxious individuals show an inappropriate *deliberative* mindset when required to plan how to achieve a certain goal (which requires an *implementation* mindset). Hiemisch et al. (2002) described this mindset as being *inappropriate* because it is incompatible with a particular action toward goal attainment.

Implementation strategies—SSRT targets this issue by helping patients select the potential goals prior to each exposure practice. Realistic goal setting is aided by clarifying the social standard and perceived expectations of others prior to exposure. Once the goals are clearly defined, they are then used to evaluate the social encounter as either successful or unsuccessful. The patient is encouraged to discuss and evaluate the best strategy to reach a particular goal. After the exposure, the situation is evaluated based on whether or not the goals were reached, regardless of the subjective anxiety encountered in the situation. The selected goals vary greatly and may include such situations as receiving a refund for a particular item that the person just purchased, or being able to arrange a first date with an attractive person. Before each individual exposure task, for example, participants are asked to specify concrete behavioral goals that determine success (e.g., an exposure task that targets assertiveness may be regarded as successful or unsuccessful, depending on whether or not the person was able to return an item, irrespective of the his/her anxiety in the situation).

Self-focused Attention and Self-Perception

Theoretical justification—Cognitive models of social phobia have placed a particular emphasis on self-perception as an important maintaining factor of the disorder (Beck & Emery, 1985; Clark, 2001; Clark & Wells, 1995; Leary, 2001; Rapee & Heimberg, 1997). The cognitive model assumes that, when confronted with social threat, socially anxious individuals shift their attention inward and engage in a process of detailed monitoring and observation of themselves, which is consistent with some of the information processing literature (e.g., Heinrichs & Hofmann, 2001). Recent studies further showed that under conditions of high self-focused attention, individuals with social phobia experience spontaneous, recurrent, and excessively negative self-images, which they believe to be accurate at the time they occur (Hackmann, Clark, & McManus, 2000; Hackmann, Suraway, & Clark, 1998; Hofmann & Heinrichs, 2003). These negative self-images are causally related to social anxiety (Hirsch, Clark, Mathews, & Williams, 2003). Compared to non-anxious controls, individuals with social phobia are more likely to “see” themselves in social situations as if from an observer's perspective (Hackmann et al., 1998). When instructed to focus their attention on aspects of the

external environment, individuals with social phobia report less anxiety and fewer negative beliefs (Wells and Papageorgiou, 1998). Moreover, individuals with social phobia have a tendency to miss important positive cues during a social encounter and lack the type of positive inferential bias that characterizes the cognitive processes of non-anxious controls (Hirsch & Matthews, 2000). Finally, recent studies suggest that changes in self-perception and self-focused attention directly mediate treatment change (Hofmann, 2000a; Hofmann et al., 2004). Video feedback has been shown to be an effective tool to correct negative and distorted self-perception (Rapee & Hayman, 1996), especially when combined with a cognitive preparation period prior to viewing the video taped performance (Harvey, Clark, Ehlers, & Rapee, 2000; Hirsch et al., 2003; Kim, Lundh & Harvey, 2002).

Implementation strategies—Different techniques are used in SSRT to manipulate and modify self-focused attention and self-perception, including instructional techniques (asking patients to switch their attentional focus during an exposure trial and monitor his/her subjective anxiety) as well as video feedback, audio feedback, mirror exposures, and group feedback. Video feedback, in particular, seems to be an effective way of correcting distorted self-perception and manipulating the effect of self-focused attention on subjective anxiety. The effects of the video feedback can be maximized by including a cognitive preparation period prior to viewing the video (Harvey et al., 2000; Kim et al., 2002). As part of the cognitive preparation period in this protocol, patients are asked to predict in detail what they will see in the video, form an image of themselves giving the speech, and then watch the video from an observer's point of view (i.e., as if they were watching a stranger) following completion of the speech. The emphasis of and decision to use a specific technique to change self-perception was determined based on the client's experience and preference.

Estimated Social Cost

Theoretical justification—Clark and Wells (1995) argue that individuals with social phobia believe that “(1) they are in danger of behaving in an inept and unacceptable fashion, and (2) that such behavior will have disastrous consequences in terms of loss of status, loss of worth, and rejection” (pp. 69–70). Consistent with this hypothesis are results by Foa et al. (1996) who found that patients evidenced socially relevant judgmental biases prior to treatment, which were attenuated following treatment. Similar results were reported by McManus, Clark and Hackmann (2000) and Hofmann (2004). The latter study showed that direct cognitive intervention leads to better maintenance of treatment gains, and this effect appears to be mediated via changes in estimated social cost during treatment. Estimated social cost is a specific expression of the dysfunctional beliefs about the potential outcome of a social encounter. As other dysfunctional social beliefs, this maladaptive thought should therefore be responsive to cognitive intervention.

Implementation strategies—Although certain cognitive strategies in traditional CBT approaches address this issue to some degree, SSRT aggressively targets estimated social cost in a number of different ways. During the homework review, the therapist specifically asks questions to identify and challenge the patient's exaggerated cost estimation (e.g., “what would be the worst outcome of this situation? Why is this situation such a catastrophic event? How will your life change as a result of this event?”). These discussions are intended to illustrate to participants that social mishaps are normal and that the negative consequences of such mishaps are short lasting. Furthermore, during the planning stage of the exposure exercises, the therapist instructs the patient specifically to create social mishaps in order to examine the actual consequences. For example, the patient may be asked to buy a piece of pastry at a café and “accidentally” drop it on the floor, and then ask for a new one. The specified goal of this situation may be to obtain a new pastry without paying for it.

Perception of Emotional Control

Theoretical justification—Barlow (2002) assumes that treatment changes in social phobia occur partly as a result of changes in the perception of control over the person's anxious responding to threatening events. Similar to other anxiety disorders, individuals with social phobia may therefore experience unexpected bursts of emotions ("true alarms" or "false alarms"), which cause the vulnerable individual to view their bodily reactions as being out of their control (Barlow, 2002). In fact, Leung and Heimberg (1996) found that social phobic patients perceive a lack of internal control, and individuals with social phobia are most commonly concerned about having a panic attack in a social situation (Hofmann, Ehlers, & Roth, 1996). Individuals with social phobia not only believe that their anxiety response is out of control in social situations, but also that it can be easily noticed by other people, which increases their level of public self-consciousness and self-focused attention (e.g., Bögels, Alberts, de Jong, 1996; Hofmann & Heinrichs, 2003; Mansell & Clark, 1999; Mellings & Alden, 2000; Norton & Hope, 2001; Wells & Papageorgiou, 2001). Based on these studies, it can be hypothesized that the perception of control over one's anxiety response associated with threatening events may be an important mediator of treatment gains in social phobia.

Implementation strategies—Perceived emotional control is elevated through repeated and prolonged exposure to physiological (anxiety) symptoms in social situations while encouraging patients to experience and accept the feeling of anxiety to its fullest. This approach is similar to the acceptance technique in Acceptance and Commitment Therapy, as advocated by Hayes, Strosahl and Wilson (1999), as well as others. Borrowing from this approach, SSRT introduces the patient to the notion that control can be gained by accepting the emotional experience. Furthermore, perception of emotional control is targeted by creating a state of dissonance between the individual's perception of their own autonomic arousal and an outsider's perspective by watching video-recordings of their speeches and by eliciting feedback from the audience members (e.g., "other people cannot see that my heart is racing, palms are sweating").

Perceived Social Skills

Theoretical justification—Socially anxious individuals appraise their own performance in social situations more negatively than non-anxious individuals, even when accounting for differences in actual performance (Alden & Wallace, 1995; Glasgow & Arkowitz, 1975; Norton & Hope, 2002; Rapee & Lim, 1992; Stopa & Clark, 1993). Although social skills training is often beneficial (most likely due to the exposure part of therapy), it does not seem to be a necessary treatment component. However, effective treatments typically lead to an improvement in the *perception* of the patient's social skills (e.g., Newman, Hofmann, Trabert, Roth, & Taylor, 1994).

Implementation strategies—There is little evidence to suggest that individuals with social phobia are consistently deficient in their social skills (e.g., Stravynski & Amado, 2001). Rather, the literature seems to suggest that individuals with social phobia perceive their social skills as being inadequate to reach their social goals and meet the perceived social standard. The perception of one's social skills is an aspect of a person's self-perception and is therefore modified during SSRT with the same strategies as other distorted aspects of self-perception (i.e., via video feedback, audio feedback, mirror exposure, and group feedback).

Safety and Avoidance Behaviors

Theoretical justification—A study by Alden and Bieling (1998) found that high socially anxious students who participated in a getting-acquainted task used more safety behaviors and elicited more negative responses from others when they were led to believe that others were particularly likely to appraise them negatively, compared with individuals who engaged in

positive appraisal. Wells et al. (1995) further demonstrated that exposure interventions with specific instructions to abandon safety behaviors are more effective than exposure therapy without instructions to refrain from such behaviors. Similar results were reported by Morgan and Raffle (1999). In this study, individuals with social phobia were assigned to either a standard CBT program or to a CBT program that also included instructions to refrain from any safety behaviors. As expected, individuals showed greater improvement if they were instructed to abandon their safety behaviors. These studies provide support for the notion that safety behaviors are important maintaining factors, similar to withdrawal, escape, and other avoidance behaviors (e.g., Battersby, 2000).

Implementation strategies—As mentioned above, safety behaviors are conceptualized as subtle forms of avoidance strategies. In order to identify them, patients are instructed to monitor their social encounters between sessions. Furthermore, the group members are encouraged to be vigilant for signs of any such safety behaviors by participants during in-session exposure practices. Starting with the first treatment session, SSRT instructs patients to identify and eventually eliminate any avoidance behaviors. The term “avoidance behavior” is very broadly defined as anything the person does or does not do to reduce his/her anxiety in the social situation. Avoidance behaviors are conceptualized as important maintaining factors of social phobia. As depicted in Figure 1, avoidance behaviors establish the positive feedback loop leading to high anxiety in social situations despite repeated and often-successful social encounters.

Post-event Rumination

Theoretical justification—According to the cognitive model by Clark and colleagues (e.g., Clark and Wells, 1995; Clark, 2001), individuals with social phobia engage in post-event processing during which they mentally review the social interaction in detail. This processing typically centers on anxious feelings and negative self-perceptions, in which the individual recalls the interaction as being more negative than it actually was. As a result, the social phobic individual engages in anticipatory processing in which their thoughts are dominated by the recollections of past failures, leading to the maintenance of the problem. Recent empirical studies found a high degree of association between post-event processing of negative-evaluative events and social anxiety in student samples (Lundh & Sperling, 2002; Mellings & Alden, 2000; Rachman et al., 2000). A study by Rachman et al. (2000) found that post-event rumination was associated with avoidance of similar social situations in the future. Post-event rumination may be closely associated with exaggerated social cost in social phobia if individuals with social phobia engage in ruminative thinking about a social encounter because they believe that an inadequate social performance leads to disastrous consequence.

Implementation strategies—Post-event rumination is a frequently occurring phenomenon after an unsuccessful or ambiguously successful social encounter, especially after situations that are associated with high-perceived social costs and negative self-perception because of the assumed catastrophic outcome of a social situation. Post-event rumination is targeted specifically by helping patients process negative social events more adaptively through guided questions (e.g., “How will your life change as a result of a particular social mishap?”). This is done through group discussions during the homework review.

Preliminary Efficacy Data

Methods

Participants—Participants were recruited from the regular patient flow at our anxiety disorders center. Individuals who were in concurrent psychotherapy were excluded from the study. If clients received psychoactive medication, they had to be on a stable dose for at least

3 months prior to the diagnostic assessment. Ten consecutively admitted clients with a principal diagnosis of social phobia as defined by the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV;* American Psychiatric Association, 2000) who met these study criteria were invited to participate in a 12-session therapy group for social phobia. All individuals accepted treatment. On average, participants were 29.3 years old (SD: 7.8; range: 20 – 44). Half of them (50%) were female. Most of them (80%) met criteria for the generalized subtype, and half (50%) met criteria for an additional Axis I diagnosis, most commonly major depressive disorder (30%). All participants were Caucasian. Half of the patients underwent various long-term treatments for social anxiety in the past with little or moderate success. These treatments included counseling and common forms of pharmacotherapy. Three participants were on a stable dose of psychoactive medication three months before and during the course of the study (one on Klonopin, 4.0 mg/d.; one on Clonazepam, 0.5 mg/d; one on Paxil, 0.25 mg/d and Risperidal, 0.5 mg/d).

Procedure—After a routine 4–6 hour intake assessment using the Anxiety Disorders Interview Schedule for *DSM-IV* Lifetime version (ADIS-IV-L; DiNardo, Brown, & Barlow, 1994), which was conducted by doctoral students or Ph.D.-level clinicians, eligible clients (i.e., individuals with a principal diagnosis of social phobia) were invited to participate in the group treatment. Two groups were conducted with 5 patients per group. In order to estimate the effects of the intervention, all clients were asked to fill out the Social Phobia and Anxiety Inventory (SPAI; Turner, Beidel, Dancu, & Stanley, 1989) immediately before the first session and immediately after the last session. Each of the groups was led by two therapists, who were second and third year doctoral students with experience conducting Beckian cognitive-behavior therapy. All therapy sessions were audiotaped. The first author listened to all tapes prior to meeting with the therapists during weekly one-hour supervision sessions. All patients completed 11 of the 12 treatment sessions, but only 8 of the 10 individuals attended the last session and provided post-treatment assessment data. According to the treating therapists, these two individuals made very large gains during treatment that were consistent with improvements made by the other group members. The trajectory of the SPAI scores of the individual patients confirmed this impression (Figure 2). Individuals who dropped out of the study (LD, CM) showed similar reductions in their social anxiety from pre to mid-treatment assessment than individuals who completed the treatment.

Results

A paired *t*-test demonstrated that the reduction in SPAI (total) scores from pre-test (M: 95.04; SD: 19.85) to post-test (M: 64.54; SD: 14.42) was statistically significant, $t(7) = 5.27, p < .001$. The mean percent reduction in SPAI (total) scores ($[M_{pre} - M_{post}] / M_{pre} * 100$) in the sample was 25.17% (median: 21.18%, range: 14.02% – 40.58%). Turner et al. (1989) suggested that an SPAI (total) cut-off score of 80 is optimal for identifying individuals with social phobia among a sample of clinic patients with anxiety disorders. All of the participants, with the exception of one who received a high dose of pharmacotherapy during the study period (4.0 mg of Klonopin per day), were above this cut-off score at pre-test, and below it at post-test. Figure 2 shows the SPAI scores of the participants at pre-treatment, mid-treatment, and post-test in each of the two treatment groups.

In order to directly compare the treatment effects of this intervention with other published studies (e.g., Feske & Chambless, 1995), we calculated the effect size using the formula: $[M_{pre} - M_{post}] / SD_{pre}$. The effect size estimate was 1.54. However, a close examination of the data showed that the standard deviation at pre-test was unusually large because of one particular person who had a very low SPAI score at pre-test. This person was on a high dose of Klonopin when he initiated treatment. When excluding this patient the effect size increased to 2.37 for the SPAI (total). Similarly, the effect size estimate was higher (1.76) when replacing the pre-

test standard deviation in the effect size estimate formula with a pooled standard deviation estimate of the total sample, $SD_{\text{pooled}} = \sqrt{[(SD_{\text{pre}}^2 + SD_{\text{post}}^2)/2]}$.

In comparison, our previous study (Hofmann, 2004), which used the same patient recruitment and diagnostic assessment procedure, showed that CBGT was associated with an uncontrolled pre-post effect size (using pre-test standard deviation in the nominator) of 1.07 for the SPAI total score among completers ($n = 28$). It should be noted that the therapists who conducted the CBGT groups had the same level of clinical training as the therapists of the present pilot study. As in CBGT, the present treatment was conducted in form of 12 weekly 2.5 hours group sessions with 5 patients and two therapists per treatment group.

Discussion

Although cognitive-behavior therapy is an effective form of intervention for social phobia, there is clearly still room for improvement. Based on a review of the current literature on social anxiety and social phobia, we developed a maintenance model of social phobia that has direct treatment implications. We have presented here a new cognitive-behavioral treatment protocol for social phobia, which targets a number of maintaining factors of social phobia more directly and aggressively than traditional cognitive-behavioral therapy. The preliminary efficacy data of this intervention are very promising. The new treatment is associated with an effect size ranging between 1.54 and 2.37, depending on the effect size estimate that is used. This is considerable higher than the effect sizes that we typically observe in our own studies and other reports that use Heimberg's CBGT approach, which is around 1.0 or less.

Clark and colleagues (Clark et al., 2003) recently developed a new individual therapy protocol that shares some similarities with the treatment we presented here. Specifically, the Clark et al. (2003) protocol also focuses on modifying safety behaviors and self-focused attention, among other cognitive strategies. However, there are also notable differences between the protocol we presented here and Clark's approach. For example, Clark's treatment does not include any in-vivo therapist-assisted exposure tasks, goal setting instructions, and techniques to enhance perceived emotional control (all of which are essential elements in our proposed treatment protocol).

Clark et al. (2003) reported that this (individual) treatment was associated with an uncontrolled pre-post effect size (with unpooled standard deviation) of 2.14 for the SPAI (total) ($n = 20$). However, another recently published study by Stangier et al. (2003) reported a considerably smaller uncontrolled pre-post effect size for the SPAI after administering Clark's original protocol (ES: 1.77) and an even smaller effect size when administering this treatment in a group format (ES: 0.60). This suggests that individual therapy might be more effective for treating social phobia than group therapy. The superiority of individual therapy over group treatment in the Stangier et al. study might be related to the fact that social phobia comprises a heterogeneous group of individuals in terms of number and type of feared situations and social concerns, and individual treatment format might be best to individually tailor therapy to the person. However, we also believe that the group support adds an important motivational component to therapy, and the group format provides an excellent environment for some exposure situations. In order to have the advantages of both formats, we therefore combined group therapy with individually tailored and therapist-assisted individual in-vivo exposures.

The study shows a number of limitations. First, the SPAI was the only outcome measure. Although the SPAI is one of the most reliable and valid self-report instruments for social phobia, it is uncertain whether other measures, including clinician ratings, behavioral measures, and cognitive assessment instruments would have resulted in the same degree of improvement. Second, we did not assess reliability of the diagnostic procedure. However, the Kappa

coefficient between two independent raters at our Center is typically .77 for social phobia (Brown, DiNardo, Lehman, & Campbell, 2001). Furthermore, no adherence forms were available to quantify treatment integrity.

However, it should be noted that this was a pilot study and an initial step in the development of a treatment protocol. In order to obtain conformity of the treatment procedures, all therapists followed a structured treatment protocol. In addition, the first author of this study listened to all treatment sessions and discussed them during the weekly supervision sessions with the therapists. Finally, our pilot study did not include follow-up assessments.

Although clearly more research will be necessary, our data suggest that advances in the understanding on the psychopathology and maintenance of the problem have direct implications for treatment. We encourage our colleagues from the treatment process and outcome researcher to incorporate findings from the psychopathology literature into the treatment development process to a much greater degree than it has been done in the past.

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Figure 1.
Model of Maintaining Factors of Social Phobia Targeted in Treatment.

Figure 2.
SPAI (total) scores at pre-test, mid-treatment, and post-test in each participant