# **Empirically Supported Psychological Treatments for Social Phobia**

David M. Fresco, Ph.D. and Richard G. Heimberg, Ph.D.

Adult Anxiety Clinic of Temple University

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Corresponding Author:

Richard G. Heimberg, Ph.D.

Email: rheimber@nimbus.ocis.temple.edu

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For most individuals, situations that put them under the scrutiny of others (e.g., a job interview, a planned or impromptu speech, a romantic dinner) are uncomfortable. However, for individuals with social phobia, these same situations may cause incapacitating anxiety, at least when they muster the courage to confront these situations at all. Persons with social phobia live with the belief that they are defective individuals and with the ever-present fear that their defects will be obvious to others who observe them. When faced with situations which require social interaction or public performance, they may experience somatic symptoms such as blushing, trembling, dry mouth, or excessive perspiration, which they believe will be noticed by others and provide further evidence of their self-perceived incompetence. They may believe that their only means of relief is to flee or avoid these situations altogether. Although successful in reducing and/or preventing the experience of anxiety in the moment, escape and avoidance of anxiety-provoking situations serve to perpetuate the belief in one's own incompetence rather than providing opportunities to challenge this judgment.<sup>1,2</sup>

Social phobia first appeared in the third edition of <u>Diagnostic and Statistical Manual of Mental</u> <u>Disorders</u>.<sup>3</sup> It originally generated little interest in the professional community and was described a few years later as "the neglected anxiety disorder".<sup>4</sup> However, it has increasingly captured the attention of both clinicians and researchers in psychiatry, psychology, and public health. Twenty years of research document that social phobia is a prevalent disorder with profound consequences for the affected person.

Social phobia is the third most common psychiatric disorder, with a lifetime prevalence rate of 13.3% and a one-year prevalence rate of 7.9%.<sup>5</sup> That social phobia is so common is tragic because it is often associated with significant impairment in social, educational, and vocational functioning.<sup>4,6</sup> Individuals with social phobia are less likely to be married, more likely to terminate their education early, more likely to be unproductive at work or miss work because of their anxiety, and more likely to receive financial assistance than persons without the disorder.<sup>6,7</sup> Social phobia can interfere with any facet of life that evokes the spectre of evaluation by others, such as the ability to initiate or maintain social or

romantic relationships, attending classes that require participation in discussion, taking part in meetings at the workplace, or joining social or recreational groups.<sup>6</sup> Since many of the most rewarding aspects of life involve these situations, the consequences for the individual are in no way trivial.

Social phobia is also associated with high rates of comorbidity with other psychiatric disorders.<sup>5,8</sup> Eighty-one percent of participants in the National Comorbidity Survey who met criteria for social phobia also met criteria for at least one other lifetime psychiatric disorder.<sup>9</sup> In over three-quarters of cases from the Epidemiological Catchment Area (ECA) study, social phobia preceded the onset of the comorbid condition,<sup>8</sup> suggesting that social phobia may be a risk factor for the onset of these other disorders. Specifically, the presence of social phobia increased the likelihood of an additional anxiety disorder diagnosis by a factor of almost 5 (in the case of generalized anxiety disorder) to a factor of 7 (agoraphobia). Individuals with social phobia were more than three times as likely to have a unipolar mood disorder than individuals without social phobia, and they were more than twice as likely to meet criteria for alcohol abuse or dependence.<sup>9</sup> In the ECA study, they are also more likely to contemplate suicide than persons without social phobia.<sup>8</sup>

In the absence of treatment, social phobia is a chronic, lifelong condition with little hope of improvement or recovery.<sup>10</sup> However, randomized control trials have repeatedly demonstrated that social phobia can be successfully treated with either pharmacotherapy or the cognitive-behavior therapies (CBT). The literature on pharmacotherapy suggests that the monoamine oxidase inhibitors, benzodiazepines, and selective serotonin reuptake inhibitors (SSRIs) have acute efficacy for the treatment of social phobia.<sup>11</sup> The SSRIs may be considered the first-line medications for social phobia given their more favorable side-effect profile and greater acceptability to both patients and physicians.<sup>12</sup> However, little is known about the maintenance of gains after the discontinuation of pharmacotherapy for social phobia. In contrast, studies of CBT suggest that the gains realized with these time-limited treatments are maintained over the long term.<sup>13</sup> Unfortunately, no other psychological therapies have been evaluated in

controlled trials. In the remainder of this paper, we describe the major classes of CBT for social phobia and the evidence for their efficacy.

#### Cognitive Behavioral Treatments

# Exposure

Exposure to feared situations is regarded as a central ingredient in almost all cognitive-behavioral treatments for anxiety disorders, and this is certainly the case for social phobia. Exposure requires individuals to imagine (imaginal exposure) or directly confront (*in vivo* exposure) feared stimuli. In the treatment of social phobia, *in vivo* exposure is commonly used. The first step in *in vivo* exposure is for the patient and therapist to generate a list of problematic situations. These situations vary a great deal from patient to patient but often concern giving a speech to an audience, being in an interview situation, having a conversation with someone the person finds attractive, or asking someone on a date. The situations are rank-ordered so that the patient can begin work on moderately feared situations to experience success and gain confidence prior to actively addressing more feared situations. With the assistance of the therapist in the early stages of treatment, and later on one's own, the patient enters the problematic situation and remains there until she or he experiences a degree of relief from the acute sensations of anxiety. After repeated and prolonged exposure, and when the situation no longer elicits a distressing level of fear, the individual turns to the next most feared situation. This process is repeated until the anxiety associated with all problematic situations is reduced.

A number of studies clearly show that exposure-based treatment for social phobia is superior to progressive muscular relaxation training<sup>14</sup>, pill placebo<sup>15</sup> or delayed treatment.<sup>16</sup> However, exposure alone may not produce optimal outcomes in terms of cognitive change or treatment durability. In fact, exposure as a sole treatment has sometimes been associated with decrement of gains in the months after discontinuation of therapist contact.<sup>14,17</sup> Some theorists<sup>18</sup> contend that this may result from the fact that it is difficult to assure that the patient is actually exposed to his or her primary fear (negative evaluation by others rather than the specific situation in which this occurs) and because the patient may assume the

presence of negative evaluation whether it is actually present or not. Consequently, without the inclusion of techniques that address this difficulty, patients may not be successfully exposed to their primary fear.<sup>18</sup>

It is also possible that patients may unwittingly act in ways that undermine the efficacy of exposure exercises. Exposure is maximally effective only when a patient allows himself or herself to fully engage all aspects of the situation. That is, patients need to allow themselves to feel the full brunt of the anxiety, the subjective fear, and the physiological symptoms, for exposure to be most effective. However, some patients have difficulty giving themselves fully to the experience. Instead, they distract themselves or focus inward on their negative predictions about the outcome of the situation or on their self-perceived inadequacies, which in turn, dilutes the effectiveness of the exposure.<sup>19</sup> To prevent this form of avoidance, it is important to firmly instruct the patient to maintain focus on the situation.<sup>20</sup>

When socially anxious individuals successfully complete an anxiety-provoking activity, they tend to generate inaccurate reasons for their success. For example, an individual with public speaking fears believes her talk went well because she studiously avoided multi-syllabic words that would otherwise have caused her to stumble. Similarly, the patient fearful of dating women holds that a date went well because he asked her many questions and kept the spotlight of attention off himself. These "safety behaviors"<sup>21</sup> may also undermine the efficacy of exposure treatment. In essence, safety behaviors are behaviors engaged in by the person which he or she falsely believes cause success or prevent failure. They allow the socially anxious individual to reconcile the fact that he or she successfully completed an anxiety-provoking act with the strongly entrenched belief of his or her social inadequacy. The patient succeeded only because of the safety behavior, not his/her own hard work or natural talent. As a result, he or she is unlikely to experience the situation as a positive outcome, and it is unlikely that anxiety will be reduced the next time the situation occurs. Helping patients identify safety behaviors in advance of exposure exercises and encouraging patients not to rely on them during exposure treatment can minimize their potentially negative impact.<sup>21</sup>

### Exposure with Cognitive Restructuring

Cognitive techniques are often combined with exposure in order to address some of the problems noted above. The main goals of techniques such as cognitive restructuring are to help patients to: 1) identify negative thoughts that come to mind in (or in anticipation of) stressful or anxiety-provoking situations; 2) assess the accuracy of those thoughts as compared to the available objective information or as a result of planned "behavioral experiments"; and 3) derive rational alternative thoughts that help to neutralize the effects of the initial, often inaccurate thoughts. Armed with the rational coping statement while engaging in exposure exercises, patients can "undo" habitual ways of viewing these situations, develop more balanced methods for evaluating their interactions with others, and, in turn, lessen the anxiety they experience.

Behavioral experiments refer to in-session or homework-based assignments that patients complete with the intention of chipping away at the belief(s) of their own inadequacy in social or performance situations, of losing control when anxious, or of being harshly criticized by others. For example, a patient who was fearful that others would notice symptoms of anxiety, such as perspiration or shortness of breath, was instructed to vigorously exercise in advance of delivering an impromptu speech. Similarly, a patient who felt she could not say "no" to telemarketers was instructed to wait by the phone in the evening, take all calls, and politely refuse any solicitations. Upon completing a behavioral experiment, the patient is instructed to report on the similarity between his or her predicted outcome and the actual outcome. By repeatedly conducting these "behavioral experiments", patients soon see that being a "scientist" often provides information that is more accurate than their own predictions which, in turn, helps to alter the beliefs identified at the outset as maintaining their social anxiety.

Most studies that have compared exposure alone to exposure combined with cognitive restructuring found the two treatments to produce equivalent reductions in symptoms and similar endstate functioning. However, some studies have reported the combination treatment to be superior on post-treatment measures, to result in lower rates of relapse, or to result in additional improvements following the end of active treatment.<sup>17,22</sup> Three recent meta-analytic studies address the issue of whether

exposure alone is sufficient or whether exposure combined with cognitive restructuring is superior. Two of these studies reported no difference in the effectiveness of the two treatments and similar attrition rates.<sup>23,24</sup> However, a third meta-analysis which broadened the scope to include comparisons to waitlist control, placebo, cognitive restructuring alone, social skills training (as well as exposure alone and exposure combined with cognitive restructuring) reported a different pattern of results. In essence, all active therapies, as well as placebo treatments, produced greater improvement than waitlist controls by treatment's end. However, only exposure combined with cognitive restructuring produced an effect that was significantly larger than that of placebo.<sup>25</sup> Of additional interest, the cognitive-behavioral treatments as a whole resulted in additional gains over the course of follow-up periods that averaged three months in duration.

### Cognitive Behavioral Group Therapy

Cognitive Behavioral Group Therapy (CBGT), developed by Heimberg and colleagues<sup>26</sup>, is the specific treatment protocol for social phobia that has received the most empirical attention and enjoys the most empirical support. In its most common format, CBGT is conducted in 12 weekly sessions that last approximately 2.5 hours. CBGT is typically administered to groups of 6 patients, ideally balanced with respect to age, gender, and severity of social phobia. Two co-therapists typically conduct the therapy. The first two sessions are largely didactic and provide the patients with a rationale for the treatment as well as instruction for exposure and cognitive restructuring, as well as instructions for how to conduct exercises at home during the intervening week that will extend the work done in-session ("homework assignments"). In the remaining sessions, therapists lead patients through individualized in-session exposure exercises that are preceded and followed by therapist-directed cognitive restructuring exercises. Patients are also prompted by the therapists to utilize rational coping statements during the in session exposures. Toward the end of each session, therapists negotiate with each patient homework assignments to be completed in the coming week. These homework assignments often consist of *in vivo* exposures, and the patient conducts his or her own cognitive restructuring before and after the assigned exposure.

The primary goal of homework is to allow for the skills learned in session and under the direction of the therapists to generalize to the patient's personal life.

In an initial controlled trial, 49 patients were randomly assigned to either CBGT or to educational-supportive group therapy (ES), a credible placebo treatment consisting of lectures, discussions, and social support.<sup>27</sup> By treatment's end, clinical assessors classified 75% of CBGT patients as significantly improved compared to 40% of ES patients. CBGT patients also reported less anxiety than ES patients during an individualized behavior test (exposure to a mock-up of a personally-relevant feared situation). When assessed six months after the end of treatment, the CBGT patients continued to demonstrate greater improvements on both assessor ratings and self-rated anxiety than ES patients. Finally, a subset of patients from the original treatment sample was assessed 4 to 6 years after the end of treatment.<sup>28</sup> Independent assessors classified 89% percent of CBGT patients, compared to 44% of ES patients, as no longer meeting criteria for social phobia.

In one of the largest studies of the treatment of social phobia to date, 133 patients were randomly assigned to CBGT, phenelzine sulfate, pill placebo, or ES with 107 patients completing 12 weeks of treatment.<sup>29</sup> Phenelzine, a monoamine oxidase inhibitor, was first studied as a treatment for social phobia when it was determined that it was more effective than the tricyclic antidepressant imipramine for the treatment of atypical depressive patients, a group characterized by heightened interpersonal rejection sensitivity (a characteristic held in common with social phobia patients).<sup>30</sup> It was selected as the active comparator in this study given its efficacy in placebo-controlled trials with social phobia patients.<sup>31</sup> At the end of acute treatment, 21 of 28 CBGT patients (75%), and 20 of 26 (77%) of phenelzine patients were classified as responders by independent assessors. In general, CBGT and phenelzine produced response rates equivalent to one another and higher than placebo and ES. CBGT patients were somewhat slower than phenelzine patients to respond (The majority of responding phenelzine patients did so in the first 6 weeks of treatment whereas improvement among CBGT responders was not generally documented until week 12). In the second phase of this study, patients classified as responders to either CBGT or

phenelzine received 6 months of maintenance treatment followed by a 6-month no-treatment assessment period.<sup>32</sup> By the end of the study, half of the phenelzine responders had relapsed, compared to only 17% of CBGT responders. The overall pattern of results suggests that phenelzine might have slightly greater immediate efficacy, but cognitive-behavioral treatment may confer greater protection against relapse.

Although we have focused here on group treatment for social phobia, there is increasing evidence that individual cognitive-behavioral treatment for social phobia is as efficacious as the group version, although somewhat less cost-effective.<sup>33</sup> This is good news for practitioners who do not specialize in treatment of social phobia or whose practice is not oriented toward group interventions. We have recently developed a client workbook that is based on the same principles and procedures that are featured in CBGT.<sup>34</sup> We now present an excerpt from the treatment of a client in individual CBT for social phobia.

# An Example of Cognitive Restructuring in Cognitive-Behavioral Treatment

Recently, one of us treated Scott, a 25-year-old man who experienced generalized social anxiety, but who sought treatment primarily because he had difficulties approaching women he found attractive. To better understand his difficulty, we utilized cognitive restructuring exercises to examine a recent failed encounter with a woman.

First, Scott was asked to provide a descriptive account of the recent situation. He explained that he had tried to approach a woman who regularly worked out on a stair climber at his health club and engage her in a conversation. He had felt an attraction to this woman for some time, but felt too anxious to say anything other than "hello". On a Friday afternoon, she began to use the machine next to him, so he decided to engage her in some small talk. The conversation actually went on for a few minutes as the two made several exchanges. After a few minutes, Scott found the courage to ask her join him for a drink after they finished their workouts, but she replied that she was busy that evening.

Scott was asked to recall any negative thoughts that passed through his mind during this encounter. He reported several negative thoughts as indicated in the following: "She must think I am a real loser. I must be nuts to think that someone so attractive would ever want to go out with me. I am the laughing stock of the whole gym for getting shot down. This is the story of my life . . . I am not cut out to have a romantic relationship with a woman."

Scott was then asked to question his thoughts rather than doing what he had always done, that is, to accept his thoughts as if they reflected consensual reality, He was able to see that he actually had very little information about the woman's impression of him. In fact, all he knew was that she was busy <u>that</u> evening. Scott had not bothered to find out if there was an alternate day that she was free or interested in getting together with him. With some additional questioning, Scott also conceded that the chances of other gym patrons actually hearing his conversation with the woman were small, and had they heard, that they would hold it against him, even more remote. However, the belief that he was not being cut out for a romantic relationship remained difficult to challenge, despite the fact that he had done some dating and had one relationship that had lasted 18 months. Scott was finally able to reframe that thought to say that he presently has not been successful with women, but that the situation could change in the future.

The final step of this cognitive restructuring was to generate a rational coping statement that Scott could say to himself when he was next in a situation with a woman he found attractive. A rational response is a statement that represents a distillation of the cognitive restructuring exercise that an individual can recall when confronted with an anxiety-provoking situation. Scott settled on: "Dating and relationships require effort and hard work. I may need to hear and accept 'no' if I want the chance to hear 'yes'." With these rational responses in mind, Scott attended two parties in the week between sessions, and he engaged three women in conversation. The conversations went well, and he had further conversations with two of the women over the next few weeks. Thereafter, he asked each of them to go out with him. One refused, but the other accepted.

# Other Cognitive-Behavioral Treatments

# Social Skills Training

The social skills deficit model of social phobia asserts that individuals who lack the basic skills for social interaction provoke negative reactions from others, which in turn, makes social interactions unpleasant and anxiety-provoking. Consequently, social skills training (SST) therapies have been developed to help clients learn these important behavioral skills. SST is commonly comprised of therapist modeling, behavioral rehearsal, corrective feedback, social reinforcement, and homework assignments. Patients work with therapists to hone their skills in various kinds of interactions in which they were unsuccessful in the past. For example, a client who has found it difficult to obtain employment because of anxiety in job interviews may roleplay being interviewed for a job. The roleplay may indicate that the client displays several problematic behaviors: she speaks too softly, she looks downward, she maintains poor posture, and she repeatedly denigrates herself in response to the interviewer's questions. After this assessment, the therapist would focus on these behaviors (probably one at a time) and demonstrate effective performance. The roleplay would then be repeated with the instruction to the client to change one aspect of her behavior. The behavior would be rehearsed over time and, as the first one is mastered, a second would be added. Over time, the client would have learned a new set of behaviors for job interviews. In essence, SST is the "practice makes perfect" approach to social anxiety.

Social skills training has been a useful part of manualized, multi-component treatments for social phobia.<sup>35</sup> Social Effectiveness Training (SET) combines exposure with social skills training and education delivered both in group and individual sessions. In a recent pilot study, 13 of 17 social phobia patients who completed a course of SET demonstrated significant improvements in self-reported and clinician-rated social anxiety as well as anxiety experienced during behavioral tests.<sup>36</sup>

#### **Relaxation Strategies**

Relaxation strategies are based on the notion that socially anxious individuals experience extreme physiological arousal that hampers their performance. Consequently, patients with social phobia are taught three sets of skills in a treatment approach known as applied relaxation. First, via structured self-monitoring exercises, patients are taught to pay attention and recognize the physiological sensations associated with their anxiety. Second, patients are taught relaxation skills that allow them to bring on relaxation quickly while continuing to engage in their everyday activities. Finally, patients are taught to deploy relaxation skills at the first signs of arousal when faced with anxiety-provoking situations.<sup>37</sup>

Applied relaxation thus combines relaxation and exposure to help individuals cope with anxietyprovoking situations.

The relaxation component of applied relaxation often begins with progressive muscle relaxation, which typically comprises the focus of one's attention on different muscle groups as one first tenses and then relaxes the muscle. After working with one muscle group, the individual is prompted to move onto another muscle group and begin the process again. Progressive muscle relaxation initially requires daily practice of 20-30 minutes so that a number of muscle groups throughout the body are trained. However, over time, patients learn strategies for relaxing more quickly and can achieve a good measure of relaxation in 20-30 seconds. They are then encouraged to do so when confronted with an anxiety-provoking situation. It is the deployment of this relaxation in anxiety-provoking situations that is key to the effectiveness of applied relaxation procedures. While applied relaxation has been shown to be superior to waitlist controls<sup>38</sup> and as effective as social skills training<sup>39</sup>, relaxation exercises without the exposure component have not met with success.<sup>14</sup>

#### Conclusions

Although it has taken many years, social phobia is neglected no more. Our understanding of the nature of this disorder has advanced greatly, as has our knowledge of how to treat it. Although the medication treatment of social phobia was not considered within the scope of this paper, there has also been a great increase in the study of pharmacotherapies for social phobia, and medication treatments have enjoyed success comparable to that of the cognitive-behavioral psychotherapies.<sup>11-13</sup> In fact, an important area for consideration is whether treatment for social phobia can be improved by combining cognitive-behavioral treatment with medication to capitalize on the rapid response that characterizes some medication treatments and the durability of treatment gains associated with cognitive-behavioral treatments.

# References

- 1. Rapee RM, Heimberg RG. A cognitive-behavioral model of anxiety in social phobia. *Behaviour Research and Therapy.* 1997;35:741-756.
- Clark DM, Wells A. A cognitive model of social phobia. In: Heimberg RG, Liebowitz MR, Hope DA, Schneier FR, eds. Social Phobia: Diagnosis, Assessment, and Treatment. New York, NY, USA: Guilford Press; 1995:69-93.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 3rd. ed Washington, D.C: American Psychiatric Press, Inc.; 1980.
- 4. Liebowitz MR, Gorman JM, Fyer AJ, Klein DF. Social phobia: review of a neglected anxiety disorder. *Archives of General Psychiatry*. 1985;42:729-736.
- Kessler RC, McGonagle KA, Zhao S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Archives of General Psychiatry*. 1994;51:8-19.
- 6. Schneier FR, Heckelman LR, Garfinkel R, et al. Functional impairment in social phobia. *Journal of Clinical Psychiatry*. 1994;55:322-331.
- Stein MB, McQuaid JR, Laffaye C, McCahill ME. Social phobia in the primary care medical setting. *Journal of Family Practice*. 1999;48:514-519.
- 8. Schneier FR, Johnson J, Hornig CD, Liebowitz MR, Weissman MM. Social phobia: comorbidity and morbidity in an epidemiological sample. *Archives of General Psychiatry*. 1992;49:282-288.
- Magee WJ, Eaton WW, Wittchen HU, McGonagle KA, Kessler RC. Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey. *Archives of General Psychiatry*. 1996;53:159-168.
- Reich J, Goldenberg I, Vasile R, Goisman R, Keller M. A prospective follow-along study of the course of social phobia. *Psychiatry Research*. 1994;54:249-258.
- Scott EL, Heimberg RG. Social phobia: an update on treatment. *Psychiatric Annals*. 2000;30:678-686.

- Schneier FR. Treatment of social phobia with antidepressants. *Journal of Clinical Psychiatry*. 2001;62 (suppl):43-48.
- Fresco DM, Erwin BA, Heimberg RG, Turk CL. Social and specific phobias. In: Gelder M, Andreasen N, Lopez-Ibor J, eds. *The New Oxford Textbook of Psychiatry*. Oxford: Oxford University Press; 2000:794-807.
- Alström JE, Nordlund CL, Persson G, Hårding M, Ljungqvist C. Effects of four treatment methods on social phobic patients not suitable for insight-oriented psychotherapy. *Acta Psychiatrica Scandinavica*. 1984;70:97-110.
- Turner SM, Beidel DC, Jacob RG. Social phobia: a comparison of behavior therapy and atenolol. *Journal of Consulting and Clinical Psychology*. 1994;62:350-358.
- 16. Newman MG, Hofmann SG, Trabert W, Roth WT, Taylor S. Does behavioral treatment of social phobia lead to cognitive changes? *Behavior Therapy*. 1994;25:503-517.
- Mattick RP, Peters L. Treatment of severe social phobia: effects of guided exposure with and without cognitive restructuring. *Journal of Consulting and Clinical Psychology*. 1988;56:251-260.
- Butler G. Exposure as a treatment for social phobia: some instructive difficulties. *Behaviour Research and Therapy*. 1985;23:651-657.
- Foa EB, Kozak MJ. Emotional processing of fear: exposure to corrective information.
  *Psychological Bulletin*. 1986;99:20-35.
- Wells A, Papageorgiou C. Social phobia: effects of external attention in anxiety, negative beliefs, and perspective taking. *Behavior Therapy*. 1998;29:357-370.
- 21. Wells A, Clark DM, Salkovskis P, Ludgate J, et al. Social phobia: The role of in-situation safety behaviors in maintaining anxiety and negative beliefs. *Behavior Therapy*. 1995;26:153-161.
- 22. Butler G, Cullington A, Munby M, Amies P, Gelder M. Exposure and anxiety management in the treatment of social phobia. *Journal of Consulting and Clinical Psychology*. 1984;52:642-650.

- Feske U, Chambless DL. Cognitive behavioral versus exposure only treatment for social phobia: a meta-analysis. *Behavior Therapy*. 1995;26:695-720.
- Gould RA, Buckminster S, Pollack MH, Otto MW, Yap L. Cognitive-behavioral and pharmacological treatment for social phobia: a meta-analysis. *Clinical Psychology: Science and Practice*. 1997;4:291-306.
- 25. Taylor S. Meta-analysis of cognitive-behavioral treatment for social phobia. *Journal of Behavior Therapy and Experimental Psychiatry*. 1996;27:1-9.
- 26. Heimberg RG, Becker RE. *The Nature and Treatment of Social Fears and Phobias*. New York: Guilford Press; in press.
- 27. Heimberg RG, Dodge CS, Hope DA, Kennedy CR, et al. Cognitive behavioral group treatment for social phobia: comparison with a credible placebo control. *Cognitive Therapy and Research*. 1990;14:1-23.
- Heimberg RG, Salzman DG, Holt CS, Blendell KA. Cognitive-behavioral group treatment for social phobia: effectiveness at five-year followup. *Cognitive Therapy and Research*. 1993;17:325-339.
- Heimberg RG, Liebowitz MR, Hope DA, et al. Cognitive-behavioral group therapy versus phenelzine in social phobia: 12-week outcome. *Archives of General Psychiatry*. 1998;55:1133-1141.
- Liebowitz MR, Quitkin FM, Stewart JW, McGrath PJ, et al. Antidepressant specificity in atypical depression. *Archives of General Psychiatry*. 1988;45:129-137.
- Liebowitz MR, Schneier FR, Campeas R, et al. Phenelzine vs atenolol in social phobia: A placebo-controlled comparison. *Archives of General Psychiatry*. 1992;49:290-300.
- 32. Liebowitz MR, Heimberg RG, Schneier FR, et al. Cognitive-behavioral group therapy versus phenelzine in social phobia: Long-term outcome. *Depression and Anxiety*. 1999;10:89-98.

- 33. Lucas RA, Telch MJ. Group versus individual treatment of social phobia. Paper presented at the annual meeting of the Association for Advancement of Behavior Therapy. Atlanta, GA; November, 1993.
- 34. Hope DA, Heimberg RG, Juster H, Turk CL. *Managing social anxiety: A cognitive-behavioral therapy approach (Client Workbook)* San Antonio, TX: The Psychological Corporation; 2000.
- Turner SM, Beidel DC, Cooley MR, Woody SR, Messer SC. A multicomponent behavioral treatment for social phobia: social effectiveness therapy. *Behaviour Research and Therapy*. 1994;32:381-390.
- 36. Turner SM, Beidel DC, Cooley-Quille MR. Two-year follow-up of social phobics treated with Social Effectiveness Therapy. *Behaviour Research and Therapy*. 1995;33:553-555.
- Öst LG. Applied relaxation: Description of a coping technique and review of controlled studies.
  *Behaviour Research and Therapy*. 1987;25:397-409.
- Jerremalm A, Jansson L, Öst LG. Cognitive and physiological reactivity and the effects of different behavioral methods in the treatment of social phobia. *Behaviour Research and Therapy*. 1986;24:171-180.
- 39. Öst LG, Jerremalm A, Johansson J. Individual response patterns and the effects of different behavioral methods in the treatment of social phobia. *Behaviour Research and Therapy*. 1981;19:1-16.