

# Current Status of Psychotherapeutic Interventions for Social Phobia

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Psychotherapeutic interventions, especially the cognitive-behavioral psychotherapies, have been well studied as treatments for social phobia. The purposes of this article are to (1) enumerate and describe the varieties of cognitive-behavioral therapy (CBT) that have been applied to the treatment of social phobia, (2) provide a meta-analytic overview of the efficacy of these approaches, (3) examine the relative utility of CBT versus that of pharmacotherapy for social phobia, (4) examine the potential utility of multidisciplinary approaches to treatment, and (5) discuss possible future directions in the development of psychotherapeutic strategies for the treatment of social phobia, including the use of computers as adjunctive tools.  
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Twenty years have passed since social phobia became an official diagnostic category in the Third Edition of the *Diagnostic and Statistical Manual of Mental Disorders*.<sup>1</sup> Over the years, we have accumulated a great deal of knowledge about the nature of this disorder and how it can be treated. In this article, I shall attempt to summarize the current state of knowledge about the use of specific psychosocial interventions for the treatment of social phobia. Thereafter, I shall examine the evidence for the relative efficacy of psychotherapeutic and pharmacotherapeutic approaches to the treatment of social phobia as well as the potential utility of pharmacotherapy-psychotherapy combinations. Future directions for the study of psychosocial interventions for social phobia will also be discussed.

There are many varieties of psychotherapy, but few have been studied in controlled trials in patients with social phobia. For instance, a recent uncontrolled trial of interpersonal psychotherapy (IPT),<sup>2</sup> a time-limited approach to psychotherapy based on the assumption that psychiatric disorders occur and are maintained within a psychosocial and interpersonal context, provided promising results. After treatment, 78% of patients were classified by independent evaluators as responders, and improvement was noted on several other measures. Although IPT has been shown to be efficacious in the treatment of major depression,<sup>3,4</sup> dysthymic disorder,<sup>5</sup> and other disor-

ders with an interpersonal component such as bulimia nervosa,<sup>6</sup> no other studies have been conducted of IPT in social phobia. Similarly, although psychodynamic theorists<sup>7</sup> have offered accounts of the development of social phobia, no specific recommendations for treatment have been put forth, and no studies of psychodynamic treatment for social phobia have yet been conducted. Given this state of affairs, I shall focus my attention in the remainder of this article on the cognitive-behavioral therapies (CBTs) for social phobia.

Rather than a single school of psychotherapy, CBT is best considered a collection of techniques held together by a series of philosophical, clinical, and empirical emphases. The CBTs are time-limited, present-oriented approaches to psychotherapy that attempt to teach patients the cognitive and behavioral competencies needed to function adaptively in their interpersonal and intrapersonal worlds. Cognitive-behavioral therapy is a collaborative effort between therapist and patient, who form a working team to address the patient's presenting concerns. The various CBTs are also bound together by an emphasis on the empirical demonstration of efficacy in controlled research.

The major classes of CBT that have been applied to the treatment of social phobia include (1) exposure, a series of techniques designed to help patients face situations they fear and stay psychologically engaged with the situation so that habituation and extinction processes can take effect; (2) cognitive restructuring, a series of techniques designed to help the patients view their world in unbiased, presumably more accurate, ways that will enable them to move through the world less preoccupied with the dangers that are perceived to lurk around every turn; (3) relaxation training techniques, which help patients learn to attend to, and control, the degree of physiologic arousal experienced during or in anticipation of feared events; and (4) social skills training, or the specific training of patients in the behavioral skills of social interaction, a treatment approach

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that follows logically from an assumption that individuals who are socially anxious lack the necessary skills to derive positive outcomes from social interaction. These classes of techniques can be, and often are, combined in the treatment of a specific patient. In the next section, I shall describe the basics of each of these approaches to CBT.

## COGNITIVE-BEHAVIORAL TREATMENTS FOR SOCIAL PHOBIA

### Exposure

In exposure treatments, patient and therapist first collaborate on the development of a “fear and avoidance hierarchy,” that is, a rank-ordered list of situations that are problematic and anxiety-provoking for the patient. This list is typically rated by the patient on scales assessing the degree of anxiety experienced and the degree to which the patient avoids the situation in everyday life. To keep anxiety in a tolerable range, the patient then starts working on the least fearsome situation and gradually approaches more and more difficult situations as a sense of mastery of the lesser situations is achieved. Either in imagination (as the therapist narrates scenes for the patient to imagine), by role-playing with the therapist or therapy assistants, or by confronting feared situations in the patient’s life outside of session (or typically in a combination of all these modalities), the patient is asked to engage the situation and continue to do so until anxiety naturally begins to subside.

Most CBTs for the anxiety disorders feature exposure as a prominent part of the overall treatment effort. For exposure techniques to be maximally effective, the patients should allow themselves to be fully engaged in the feared situation, that is, to pay full attention to the situation, to experience it completely, and to allow the inevitable cascade of subjective fear and physiologic arousal to occur.<sup>8</sup> However, anxiety disorder patients may find this a frightening proposition and may engage in efforts to manage their anxiety that will be counterproductive and may reduce the efficacy of exposure treatments. For instance, these patients may attempt to distract themselves to avoid paying full attention to the situation in which they find themselves. Alternatively, they may focus inward on themselves and pay attention to their negative thoughts about themselves rather than examine what is actually going on in the situation. Wells and Papageorgiou<sup>9</sup> have demonstrated that efficacy is increased when the standard directions are augmented with instructions that help the patient focus on what is occurring in the situation.

Another maladaptive strategy that may undermine the effectiveness of exposure treatments is the tendency of patients to engage in “safety behaviors.”<sup>10</sup> Safety behaviors are actions that patients falsely believe will enable them to manage the feared situation successfully. However, these behaviors may prevent patients from learning that they might have survived and flourished with no special effort.

Just as the agoraphobic patient is prone to say that she survived the last panic attack only because she ran out of the room before it got too bad, the patient with social phobia may falsely attribute successful outcomes in feared situations to the fact that he carefully rehearsed every line before speaking, that she stood at the periphery of the circle so as to avoid becoming the center of attention, or that he was able to avoid spilling the drink only because he clasped it hard with both hands at all times. Wells and colleagues<sup>11</sup> have demonstrated that analyzing a patient’s safety behaviors and instructing the patient to drop them during exposure exercises facilitate the outcome of exposure treatment.

### Cognitive Restructuring

The findings of studies by Wells and colleagues,<sup>9,11</sup> as well as a large body of experimental psychopathology research, suggest the importance of working with patients to examine their thoughts about specific situations and the beliefs that may underlie them. In fact, recent cognitive-behavioral models of social phobia<sup>10,12</sup> suggest that social phobia arises from inaccurate beliefs about the potential dangers posed by social situations, negative predictions about the outcomes of these situations, and biased processing of events that transpire during social situations.

Cognitive restructuring is a set of interventions originating from the cognitive therapy of Beck and Emery<sup>13</sup> and from the rational-emotive therapy of Ellis.<sup>14</sup> In cognitive restructuring, individuals are taught (1) to identify negative thoughts that occur during stressful or anxiety-provoking situations, (2) to evaluate the accuracy of those thoughts as compared with objective information derived via repeated questioning or as a result of planned “behavioral experiments,”<sup>15</sup> and (3) to derive rational alternative thoughts based on the acquired information. As implied by this description, cognitive restructuring techniques contain a substantial exposure component, although this exposure may not be as systematic and graduated as described above. Furthermore, the purpose of exposure in this treatment approach differs from that described in the previous section. In cognitive restructuring, exposure is less about habituation to anxiety or remaining in the situation until no more anxiety is experienced, and more about the opportunity for patients to collect information that will enable them to “restructure” their view of these situations and to revise their judgments about the degree of risk to which they are exposed. Patients are given assignments that are intended to undermine their belief(s)—that they are unacceptable to others, that they will not know how to behave in particular situations, that other people will be harsh and critical, or that they will be overwhelmed by their anxiety in a way that will be humiliating and embarrassing. For example, a patient who believed that he had to be profoundly witty in conversation in order to be accepted by others was asked to eavesdrop on the (typically mundane) conversations of others in the company cafeteria. Another patient who believed that he would

not be able to break silences if they occurred in conversation was asked to artificially create these very silences at an upcoming social event. A person with a fear of drinking in public was asked to go out and do so, making sure to fill his glass to the brim and carry it around with him, rather than leave it sitting on the table. Furthermore, he was asked to spill a drink on purpose at some point during the evening. The outcomes of these behavioral experiments were then juxtaposed with the patients' negative predictions about the social catastrophes that they believed were certain to occur. Repeated efforts of this nature encourage patients to become "scientists" for whom the "experimental hypotheses" are their own dire predictions and the "data" derived from these behavioral experiments will require their hypotheses to be revised in the best tradition of the scientific method.

### Relaxation Training

As noted above, relaxation training techniques help the patient learn to attend to and control the degree of physiologic arousal experienced during or in anticipation of feared events. There are a large number of different approaches to relaxation training, although most are derived in some way from the pioneering work of Wolpe<sup>15</sup> and Bernstein and Borkovec.<sup>16</sup> In the typical application, patients learn to relax through exercises involving different muscle groups. These exercises are practiced in session with a therapist and at home alone. Patients focus on a particular muscle group, tense the muscle, hold the tension for 5 to 10 seconds, and next focus on the sensations accompanying the tension. They then release the tension, notice the difference between the feelings of tension and of relaxation, and focus on the sensations accompanying relaxation (e.g., warmth, heaviness). Patients begin by working with 16 muscle groups, but, over time, practice relaxing larger groups of muscles to achieve more rapid relaxation. The next step involves relaxation by recall, in which patients scan their bodies for muscle tension and release any tension by recalling how these muscles felt when relaxed. Patients are also taught cue-controlled relaxation, in which a word such as *relax* is repeatedly paired with a relaxed state and then used as a cue to begin the process of rapidly relaxing during daily activities.

Relaxation strategies for social phobia are typically not effective unless they are "applied." Applied relaxation consists of training in 3 skills. Patients learn to (1) attend to the physiologic sensations of anxiety, (2) relax quickly while engaging in everyday activities, and (3) apply relaxation skills in anxiety-provoking situations. Applied relaxation thus combines relaxation and exposure to help individuals cope with anxiety-provoking situations.<sup>17</sup>

### Social Skills Training

The use of social skills training in the treatment of social phobia is predicated on the assumption that socially anxious patients often exhibit behavioral deficiencies (e.g.,

poor eye contact, poor conversation skills). These behavioral deficiencies may elicit negative reactions from others, thereby causing social interactions to be punishing and anxiety-provoking for the patient.<sup>18</sup> The studies examining the social skills of socially anxious individuals have come to different conclusions, with some suggesting behavioral deficiencies<sup>19,20</sup> and others not.<sup>21-23</sup> Furthermore, even when behavioral deficits are observed, it is unclear whether they are a function of a lack of social knowledge or skill, behavioral inhibition or avoidance produced by anxiety, or a combination of these and other factors. In our clinic, it is not uncommon for patients to complain that they do not know how to behave in various situations. However, observation of their performance during exposures often reveals their behavior to be within acceptable limits. This observation is consistent with research suggesting that individuals with social phobia often underestimate the adequacy of their social performance.<sup>23</sup>

Techniques commonly used in social skills training include therapist modeling, behavioral rehearsal, corrective feedback, social reinforcement, and homework assignments. Notably, if these techniques effectively reduce anxiety for some individuals with social phobia, this reduction does not necessarily occur because deficiencies in the patient's repertoire of social skills have been remediated (although this certainly may be the case). Social skills training may provide benefits because of the training (e.g., repeated practice of feared social behaviors), the exposure (e.g., confrontation of feared situations), or the cognitive elements (e.g., corrective feedback about the adequacy of one's social behavior) inherent in the procedures. Social skills training may also be easily combined with other techniques such as cognitive restructuring or exposure. For instance, Social Effectiveness Training<sup>24</sup> is a multi-component treatment package combining exposure with social skills training and education in a mixture of group and individual formats.

## EFFICACY OF COGNITIVE-BEHAVIORAL TREATMENTS FOR SOCIAL PHOBIA

The number of studies examining the efficacy of CBTs for social phobia increased dramatically in the 1990s, and this rate of growth shows little sign of slowing down. Qualitative reviews of the literature become increasingly difficult to do and even more difficult to digest. Readers interested in pursuing such reviews are referred to other articles previously published by my research group.<sup>25-27</sup> Here, I shall focus instead on quantitative reviews that use the techniques of meta-analysis. Meta-analysis is a method for examining the outcomes of several studies simultaneously by reducing the results of each study to a common metric, the effect size.<sup>28</sup>

Three meta-analytic reviews have been conducted examining the relative efficacy of various classes of CBTs

**Table 1. Percent Attrition for Various Classes of Cognitive-Behavioral Psychotherapy for Social Phobia<sup>a</sup>**

Treatment Category	Mean	SD	No. of Trials
Waiting list	5.7	4.6	6
Placebo	7.5	7.5	6
Cognitive restructuring	12.2	10.9	5
Social skills training	16.6	8.2	5
Exposure	16.4	7.4	8
Exposure and cognitive restructuring	18.0	11.0	12

<sup>a</sup>Adapted, with permission, from Taylor.<sup>31</sup>

**Table 2. Posttreatment Effect Sizes for Various Classes of Cognitive-Behavioral Psychotherapy for Social Phobia<sup>a</sup>**

Treatment Category	Mean	SD	No. of Trials
Waiting list	-0.13	0.15	5
Placebo	0.48	0.26	5
Cognitive restructuring	0.63	0.32	5
Social skills training	0.65	0.46	4
Exposure	0.82	0.25	8
Exposure and cognitive restructuring	1.06	0.32	11

<sup>a</sup>Adapted, with permission, from Taylor.<sup>31</sup>

for social phobia.<sup>29-31</sup> Each meta-analysis has many merits, but for the sake of simplicity, I have selected the meta-analysis by Taylor<sup>31</sup> for the current discussion. Before an examination of the results of Taylor's efforts, certain technical aspects of his meta-analysis should be described. He calculated effect sizes for each study on the basis of the formula for Cohen's<sup>28</sup>  $d$  ( $[M_{pre} - M_{post}]/SD_{pooled}$ ), where  $M_{pre}$  is the pretreatment mean,  $M_{post}$  is the posttreatment mean, and  $SD_{pooled}$  is the standard deviation calculated across all relevant observations. This method defines an effect size as the number of standard deviation units of improvement made by patients receiving a particular treatment in a particular study. An average effect size of 1 for a specific treatment indicates that, on average, the patients in all the studies who received that treatment improved by 1 standard deviation. Generally, half that effect size is thought to be a meaningful level of response. Taylor examined the results of 42 outcome trials and calculated effect sizes on the basis of validated self-report measures that were available in most studies. Because clinician-rated measures tend to yield larger effects than self-report measures, this is a conservative approach.

A potential problem with meta-analyses is that effect sizes may be inflated by failure to publish negative trials. To guard against this, calculations are made of the number of articles that would need to have a null result to render a finding trivial. This calculation is called the "fail-safe N." A large fail-safe N suggests that the effect size for a particular treatment is robust. Fail-safe Ns in Taylor's meta-analysis ranged from 48 to 223, numbers that should inspire confidence in his results.

Taylor examined cognitive restructuring, social skills training, exposure, and exposure combined with cognitive

**Table 3. Follow-Up Effect Sizes for Various Classes of Cognitive-Behavioral Psychotherapy for Social Phobia<sup>a</sup>**

Treatment Category	Mean	SD	No. of Trials
Waiting list	...	...	...
Placebo	...	...	...
Cognitive restructuring	0.96	0.47	5
Social skills training	0.99	0.64	3
Exposure	0.93	0.25	8
Exposure and cognitive restructuring	1.08	0.41	9

<sup>a</sup>Adapted, with permission, from Taylor.<sup>31</sup>

restructuring. These were compared with both waiting-list control and placebo control conditions (a combination of psychological and pill-placebo conditions, which were equivalent to each other in effect size). Table 1 shows that the CBTs did not differ from each other in percent attrition, and although CBTs were associated with somewhat higher withdrawal rates than either of the control conditions, the difference was not significant.

The effect sizes for the different CBTs and control conditions at the end of acute treatment appear in Table 2. Several points are evident. All CBT variations were more effective than the waiting-list control conditions, and the CBT variations did not differ from each other. However, only the combination of exposure and cognitive restructuring was statistically superior to the placebo controls. Although not indicated in the table, the effect sizes were similar for group and individual interventions.

Many of the studies in Taylor's meta-analysis included a follow-up period averaging about 3 months after discontinuation of acute treatment. The effect sizes for the CBT variants appear in Table 3 (effect sizes for the control conditions were not available because control patients in most studies had received other treatments by that time). These effect sizes were not different from each other, but they are, as a group, significantly larger than they were at the end of treatment. Thus, the patients who received CBTs continued to improve after the discontinuation of treatment.

### COMPARISON OF COGNITIVE-BEHAVIORAL THERAPY AND PHARMACOTHERAPY FOR SOCIAL PHOBIA

The question of the relative efficacy of cognitive-behavioral and medication approaches to the treatment of social phobia has not received the attention it deserves. Only a handful of studies have been conducted, and 2 of these<sup>32,33</sup> examined medications that have not been successfully differentiated from placebo in double-blind trials. Another study<sup>34</sup> compared group CBT with the monoamine oxidase inhibitor phenelzine, the high-potency benzodiazepine alprazolam, and placebo. However, patients in the medication and placebo arms of the study received instructions to engage in exposure to feared situations between sessions, thus making the results of this



study difficult to interpret. Yet another study<sup>35</sup> compared group CBT with the benzodiazepine clonazepam, but included no placebo condition. A potentially excellent study comparing group CBT with fluoxetine and their combination, conducted by Jonathan R. T. Davidson, M.D., at Duke University and Edna B. Foa, Ph.D., at the University of Pennsylvania, is still underway (unpublished study). The only other published comparative study of medications and CBT for social phobia is the collaborative study conducted by myself and Michael Liebowitz, M.D., of Columbia University and the New York State Psychiatric Institute Anxiety Disorders Clinic, in which we examined the efficacy of group CBT and phenelzine in patients with social phobia.<sup>36,37</sup> A description of that study follows a brief explanation of our cognitive-behavioral program, which uses a therapeutic approach known as cognitive-behavioral group therapy (CBGT).

Cognitive-behavioral group therapy<sup>38,39</sup> integrates cognitive restructuring techniques and exposure in the treatment of social phobia. Most commonly, CBGT is administered to groups of 6 patients in 12 weekly sessions of approximately 2.5 hours each. Ideally, male and female cotherapists lead the groups to allow for maximum flexibility in constructing within-session exposure exercises. In the first and second sessions, patients are presented with the rationale and instructions for exposure, cognitive restructuring, and homework assignments and are given opportunities to practice cognitive restructuring skills. Thereafter, therapists lead patients through individualized exposures (most often in the form of role-played simulations of each patient's feared situations) that are preceded and followed by therapist-directed cognitive restructuring exercises. Patients are also coached in rational thinking during the exposure itself. At the end of each session, therapists work individually with patients to develop homework assignments for completion during the upcoming week. Homework typically consists of exposures to real-life situations and patient-directed preexposure and postexposure cognitive restructuring, with the goal of teaching patients to become their own cognitive-behavioral therapists over the long term.

Several controlled studies have evaluated the efficacy of CBGT. Prior to our collaborative study, CBGT had produced outcomes superior to waiting-list control conditions<sup>40</sup> and psychological placebo treatment.<sup>41</sup> CBGT was also superior to individual CBT programs in cost-effectiveness.<sup>42</sup> Most importantly, patients treated with CBGT maintained their gains at follow-up assessments 4 to 6 years after treatment had been discontinued.<sup>43</sup>

In our collaborative study,<sup>36</sup> 133 patients were randomly assigned to CBGT, phenelzine, pill placebo, or educational supportive group psychotherapy (ES), a credible psychological placebo treatment. One hundred seven patients completed 12 weeks of acute treatment. At posttest, independent assessors classified 21 (75%) of 28 CBGT com-

pleters and 20 (77%) of 26 phenelzine completers as having a clinically significant response (intent-to-treat analysis: CBGT = 58%, phenelzine = 65%). CBGT and phenelzine produced response rates higher than rates associated with pill placebo and ES, but not different from each other. Many phenelzine patients who were classified as responders after 12 weeks of treatment had achieved gains by the midtreatment (6-week) assessment; however, this was less common among CBGT patients. Phenelzine patients were also more improved than CBGT patients on a subset of measures after 12 weeks.

In the second phase of this study, patients who responded to CBGT or phenelzine were continued through 6 months of maintenance treatment and a 6-month treatment-free follow-up period.<sup>37</sup> After the follow-up period, 50% of previously responding phenelzine patients relapsed, compared with only 17% of CBGT patients. The difference in relapse between treatments was especially pronounced for patients with generalized social phobia. The overall pattern of results suggests that phenelzine might have slightly greater immediate efficacy, but that CBGT may confer greater protection against relapse.

#### **COMBINING COGNITIVE-BEHAVIORAL AND PHARMACOLOGIC TREATMENTS FOR SOCIAL PHOBIA**

Few studies have examined the efficacy of combining cognitive-behavioral and pharmacologic treatments for social phobia, even though combined treatments are common in clinical practice. There are only 2 published trials,<sup>32,44</sup> and, as was the case for drug-CBT comparisons, these studies did not examine medications that surpassed placebo in other trials. The only other studies of combination treatment are the Davidson-Foa collaboration (group CBT and fluoxetine; J. R. T. Davidson, M.D., E. B. Foa, Ph.D., unpublished study) and a follow-up to the Liebowitz-Heimberg collaboration that is currently investigating combined CBGT and phenelzine (M. R. Liebowitz, M.D., R. G. Heimberg, Ph.D., unpublished study). However, neither of these studies is yet complete. Right now, the utility of combined treatment is an open question; however, it is interesting to consider the possibilities of this approach.

There are 3 potential outcomes if drugs and CBT are combined. The therapies may synergize each other, thereby producing a better outcome than either treatment alone. This is, of course, the desired result, and it may occur if the 2 treatments increase the chances of response for a specific individual or if they increase the magnitude of the individual's response. However, it is also possible that medication and CBT may add little to each other. This would be the case if the medication and the psychotherapy were found to work on the same aspects of the target problem, or if the first treatment was sufficiently powerful so the second treatment would have little to contribute. It is

also possible that one treatment may detract from the efficacy of the other. For example, medication might detract from CBT if a patient believes that the medication is providing the entire benefit. The patient, therefore, might not invest in the activities of CBT or might use the medication as a safety net. Of course, this is an example of a potentially negative belief that might be tested in CBT.

There is much that we need to study and learn about how various CBTs and medications work together or against each other and whether there are differences in patients that suggest better responsiveness to one or the other. To understand the relative efficacy of different methods of starting and sequencing the treatment components would also be of great interest. For instance, is it best to start a medication first to take the edge off the patient's fears and promote quicker entry into feared situations? Might the medication be phased out as CBT takes hold? It is also important to consider whether cognitive-behavioral interventions might be used to help patients with social phobia discontinue medications on which they have become psychologically or physically dependent. This strategy has been used quite successfully with panic disorder patients.<sup>45</sup>

### FUTURE DIRECTIONS IN THE PSYCHOTHERAPY OF SOCIAL PHOBIA

Clearly, there is much to do in the further development and evaluation of CBTs for social phobia. However, rather than praise our successes and criticize our failures, I should like to look toward the future. This is a time when we can become extremely creative with our psychotherapeutic or psychoeducational interventions. Our present-day technologies can help us in ways heretofore unavailable. Patients can use hand-held computers that will lead them step by step through actual exposures to feared situations and help them to do their cognitive restructuring work.<sup>46</sup> With the creation of "virtual exposures," patients can face their fears by becoming immersed in environments that simulate reality. The therapeutic applications of these technologies have already been studied for the fear of heights,<sup>47</sup> claustrophobia,<sup>48</sup> and the fear of flying,<sup>49</sup> and their use for overcoming the fear of public speaking is just around the corner. Patients can have access to CD-ROMs or Web pages, and computer-to-computer interactive treatments can allow therapists in the technologically developed world to reach persons with Internet access in distant areas for "face-to-face" therapy that would be otherwise unavailable. The new century should be an exciting one.

*Drug names:* alprazolam (Xanax and others), clonazepam (Klonopin and others), fluoxetine (Prozac), phenelzine (Nardil).

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## Question and Answer Session

**Question:** Do psychotherapeutic techniques work in social phobia for patients with comorbidities?

**Dr. Heimberg:** Yes. Cognitive-behavioral therapy (CBT) is effective in the treatment of social phobia, even if concomitant disorders are present. In a study that my colleagues and I have just finished,<sup>1,2</sup> for instance, 3 distinct groups of patients were treated for social anxiety with CBT: patients with social phobia only; patients with social phobia and a comorbid anxiety disorder, mainly generalized anxiety disorder; and those with social phobia plus depression. In this setting, patients with social phobia alone and those with social phobia and comorbid anxiety responded equally well to psychotherapy. The presence of a second anxiety disorder did not seem to affect response to CBT. Experience in clinical practice may be a little more complicated, with more varied outcomes and a need for several treatment techniques to improve the dual disorders. However, a favorable overall response can be expected.

On the other hand, the group with comorbid depression did not fare as well. The patients did benefit from CBT, but the response was somewhat less satisfying because their clinical state at the end was not what we had hoped for. On social phobia measures, they were more impaired at baseline than the patients in the other treatment groups. They improved on these measures by about the same amount, but remained more impaired after treatment. Our data did not enable us to study the effect of more treatment. We also used the Beck Depression Inventory to measure outcome in the patients with comorbid depression. According to this scale, they were no longer depressed after treatment. In this group with social phobia plus depression, there were 2 subgroups: individuals who also had another comorbid anxiety

disorder and those who did not. The response to CBT was the same in both subgroups.

**Question:** When do you find that the combination of CBT and pharmacologic therapy is most called for in the treatment of social phobia?

**Dr. Heimberg:** When patients are frightened and resistant to CBT, you can start them on medication—perhaps a benzodiazepine—to get them to a point where they are comfortable beginning psychotherapy. And some patients might first present to my office stabilized on medication; they might continue their drug regimen, or, as they begin to benefit from CBT, they might do well even if weaned from the medication.

As a psychologist, when I see patients with social phobia, they often have been through multiple medication trials, frequently at inadequate doses. But even if they have been adequately medicated, they generally are not having an adequate response or they would not be coming to see me. So there are many patients and many situations in which psychotherapy and pharmacotherapy can work hand in hand.

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