

## **Cognitive–Behavioral Group Treatment for Social Phobia: Effectiveness at Five-Year Followup<sup>1</sup>**

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*Empirical studies of the behavioral or cognitive–behavioral treatment of social phobia have appeared with increasing frequency over the last decade, and there is reason for cautious optimism in the evaluation of treatment effectiveness. However, few studies have reported systematic followup data, and there is little information available about the durability of change in treated social phobics. We report on the followup evaluation of cognitive–behavioral group therapy (CBGT) for social phobia. Patients who received CBGT or a credible alternative treatment were recontacted after a period of 4.5 to 6.25 years and completed a battery of self-report questionnaires, an individualized behavioral test, and a structured interview with an independent assessor. Patients who received CBGT remained more improved than alternative treatment patients on measures from all assessment modalities. However, due to the long followup period, only a portion of the original study sample could be assessed, and these patients may have been less severely impaired than patients who did not participate in the long-term followup. Limitations of the current study and issues of sample attrition in the conduct of long-term followup studies are discussed.*

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Although it has been referred to as the "neglected anxiety disorder" (Liebowitz, Gorman, Fyer, & Klein, 1985), there has been a recent surge of interest in the study of social phobia and its treatment. In a recent review of the literature (Heimberg, 1989), 17 studies of the treatment of DSM-III or DSM-III-R social phobics were identified. These studies examined a number of treatment procedures including social skills training, systematic and self-control desensitization, *in vivo* exposure, imaginal flooding, applied relaxation, anxiety management training, and several variations on cognitive restructuring. While there was support for the effectiveness of several of these techniques, most studies failed to collect adequate followup data. Only one study (a single case report by Stravyski, 1983) included followup assessment 12 months after termination, and the average length of followup was only 5.12 months. Since Heimberg's review, Mersch, Emmelkamp, and Lips (1991) have reported a followup of 14 months and Wlazlo, Schroeder-Hartwig, Hand, Kaiser, and Munchau (1990) reported a followup of 1.5 to 5.5 years (mean = 2.5 years). While both studies demonstrated positive outcome at followup assessment, their heavy reliance on self-report assessment limits the conclusions that may be drawn.

The current study is an evaluation of long-term outcome for social phobic patients treated with cognitive-behavioral group therapy (CBGT; Heimberg et al., 1990). CBGT is comprised of several components: (a) structured exercises to train patients in the identification, analysis, and disputation of problematic cognitions; (b) exposure to simulations of anxiety-provoking situations during treatment groups; (c) cognitive restructuring procedures to teach patients to control their maladaptive thinking before, during, and after simulated exposures; (d) homework assignments for *in vivo* exposure to situations already confronted during exposure simulations; and (e) assignments for self-administered cognitive restructuring before and after completion of behavioral homework assignments.

Preliminary data on the effectiveness of CBGT were provided by Heimberg, Becker, Goldfinger, and Verymilyea (1985). After treatment, all seven patients demonstrated reductions in anxiety on behavioral, physiological, and subjective measures, and gains were maintained at 6-month followup for 6 of the patients.

Heimberg et al. (1990) compared CBGT to a group treatment package based on education and group support. The comparison package (educational-supportive group psychotherapy; ES) was developed to equal CBGT in credibility and the ability to generate positive outcome expectations. At each assessment (including followups of 3 and 6 months), patients completed self-report questionnaires, an individualized behavioral test, and a structured interview with an independent assessor. Relative to ES patients at posttest, CBGT patients were rated as more improved by the inde-

pendent assessor and reported less anxiety before and during the individualized behavioral test. Both groups of patients showed significant improvement on self-report measures. At 6-month followup, significant differences between CBGT and ES patients were maintained on independent assessor ratings and behavioral test measures. CBGT patients maintained their gains on self-report measures while ES patients did not. At 6-month follow-up, CBGT patients also reported more positive self-statements and fewer negative self-statements on a thought listing task conducted after the behavioral test than ES patients.

The current study examined long-term outcome for social phobic patients who received either CBGT or ES in the Heimberg et al. (1990) study. Participating patients were evaluated with a series of self-report, structured interview, and behavioral test measures. It was hypothesized that patients who had received CBGT would continue to do better than patients who had received ES.

## METHOD

### Subjects

Twenty-seven men and 22 women who sought treatment at the SUNY-Albany Phobia and Anxiety Disorders Clinic participated in the original study. They were interviewed with the Anxiety Disorders Interview Schedule (ADIS; Barlow, 1985; DiNardo, O'Brien, Barlow, Waddell, & Blanchard, 1983) and met DSM-III (American Psychiatric Association, 1980) criteria for social phobia. (A kappa coefficient of .905 has been previously reported for an ADIS diagnosis of social phobia; DiNardo et al., 1983.) Interviewers also rated each patient on the Clinician's Severity Rating Scale which is incorporated into the ADIS interview. Patients were included in the study only if this rating equaled or exceeded 4 (reflecting moderate impairment in daily functioning and need for treatment) on this 0-8 scale. Other inclusion/exclusion criteria are detailed in the original report.

Of the 49 patients who began the original trial, 40 (20 CBGT, 20 ES) completed posttest assessment. Seventeen patients in each treatment completed the 6-month followup. These 34 patients and three additional patients who did not participate in the 6-month follow-up but whose whereabouts were known to the authors constituted the potential pool of subjects for the current study. A letter was sent to the last known address of these patients, requesting their participation in the study. A postcard was included which patients could return if they wished to have no further involvement in the study. Patients who did not return the postcard were

contacted by telephone, and, if they indicated a willingness to participate, an appointment was scheduled for evaluation. Participating patients were paid \$50.00 for their efforts. Of the 37 patients, 5 could not be contacted, 7 returned the postcard and were not pursued, 5 declined participation after telephone contact, 1 agreed to participate but never did so, and 19 ultimately took part in the study. Four of these 19 patients, who lived at a considerable distance from the clinic, completed interview measures by phone and questionnaire measures by mail. These patients were unable to complete the individualized behavioral test. One patient could not be scheduled for the structured interview but completed all other assessments.

### Treatments

Both treatments were provided in 12 weekly 2-hour sessions by male–female cotherapist teams to groups of 4–7 patients. See Heimberg et al. (1990) and Heimberg (1990) for a thorough description of CBGT and Hope and Heimberg (1990, in press) for examples of its clinical application. ES combined educational presentations and supportive group psychotherapy and is fully described by Heimberg et al. (1990).

### Assessment

#### *Independent Assessor Interview*

The Clinician's Severity Rating Scale was administered as part of the pretreatment ADIS interview. It was repeated in an abbreviated interview at posttreatment and 3 and 6-month followup assessments by interviewers not involved in the patient's treatment. At the long-term followup, patients were interviewed by assessors who were blind to their original treatment classification. In addition to the Clinician's Severity Rating Scale, this interview also included (a) updated demographic information, (b) questions about psychological and/or pharmacological treatments that may have been pursued since the patient received CBGT or ES, and (c) a rating on a 0–4 scale of the degree of interference with work, social activities, or family life experienced by the patients as a result of his/her fear.

#### *Self-Report Assessment of Anxiety and Depression*

Subjects completed several self-report questionnaires for the assessment of social anxiety and depression. These included the Social Avoidance

and Distress Scale (SADS; Watson & Friend, 1969), the Fear of Negative Evaluation Scale (FNE; Watson & Friend, 1969), the Fear Questionnaire (FQ; Marks & Mathews, 1979), the Personal Report of Confidence as a Speaker (PRCS; Paul, 1966), and the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).

### *Individualized Behavioral Test*

Fifteen of the 19 subjects participated in a behavioral simulation of a personally relevant anxiety-provoking event. Simulations were designed to recreate situations which typically evoked high levels of anxiety (at least 75 on a 0–100 Subjective Units of Discomfort Scale; SUDS) as determined prior to treatment. Examples of simulations included presenting material at a staff meeting, making a classroom presentation, or initiating a conversation with a person of the opposite sex. Graduate and undergraduate assistants (not involved in the subject's treatment) played the roles of audience or interaction partners.

Before each simulation, the experimenter described the test scenario and asked the subject to think about it for 3 min. Immediately after this "anticipatory phase," subjects were taken to another room in which the audience or roleplay partners awaited. The second phase of the simulation, the "performance phase," consisted of the 4-min roleplay. Thereafter, subjects completed the thought listing task and ratings described below.

*Subjective Anxiety and Performance Quality.* Subjects reported their subjective anxiety in anticipation of and during the behavior test on the 0–100 SUDS scale. Subjects were prompted for ratings at 1-min intervals, resulting in 3 anticipatory and 5 performance SUDS ratings. Means were calculated separately for the anticipatory and performance phases, and these were submitted to statistical analysis. After the simulation, subjects also completed 0–100 scales to assess the maximum anxiety they experienced and the self-perceived quality of their performances.

*Cognitive Assessment.* Cognitive activity in response to the simulation was assessed with the thought-listing procedure (Cacioppo, Glass, & Merluzzi, 1979). Immediately following the test, subjects were given prepared forms and asked to record the thoughts they experienced during the performance phase, ignoring spelling, grammar, and punctuation. Two assistants later categorized all patients' thoughts as positive (facilitating relaxed and effective performance), negative (hindering relaxed and effective performance), or neutral, and achieved a kappa coefficient of .70. Disagreements between assistants were resolved by discussion with the first author.

*Behavioral Measure.* In the original study, Paul's (1966) Timed Behavioral Checklist for Performance Anxiety was utilized as a behavioral measure of anxiety. However, we currently ask groups of naive judges to provide global ratings of patients' anxiety and performance in an attempt to capture the overall impact that patients make on others. Therefore, at the long-term followup, no specific behavioral training was provided to a mixed group of seven graduate and undergraduate students. Blind to patients' original treatment classification, these judges viewed randomly ordered videotapes of patients' long-term followup behavioral tests and completed 0–100 ratings of the degree of anxiety manifested by the patient and the quality of the patient's behavioral performance. All judges rated all patients, and the mean of the judges' ratings for each patient was submitted to analysis. The intraclass correlation coefficient (Winer, 1971) was calculated as an index of agreement among the seven judges, resulting in values of .82 for anxiety and .78 for performance.

#### *Treatment Credibility and Outcome Expectancy*

To assess whether or not the treatments were equally believable and produced similar expectations regarding treatment outcome, the Reaction to Treatment Questionnaire (RTQ; Holt & Heimberg, 1990) was utilized. The RTQ consists of three sections: (a) four questions developed by Borkovec and Nau (1972) to assess the credibility of treatment rationales, (b) nine items that ask subjects to rate their confidence that their treatment would effectively reduce anxiety in situations that are problematic for social phobics, and (c) four items that ask subjects to rate the severity of their anxiety now, after treatment 1 year later, and 5 years later. The RTQ was administered during the first and fourth treatment sessions. It was not readministered at long-term followup although the previous responses of followup subjects to the RTQ were examined.

## RESULTS

### Preliminary Analyses

#### *Comparison of Long-Term Followup Study Participants and Nonparticipants*

Since only 19 patients participated in the long-term followup, it was important to examine similarities and differences between this group ("par-

ticipants”) and nonparticipating subjects. To do so, we conducted a series of analyses on all dependent measures: (a) comparison of pretreatment scores of participants and all other subjects who were originally entered in the Heimberg et al. (1990) trial (total  $n = 49$ ), (b) comparison of pretreatment scores of participants and other subjects who took part in the 6-month followup but not the long-term followup (total  $n = 37$ ), and (c) comparison of 6-month followup scores of the latter two groups (total  $n = 34$ , which excludes the 3 long-term followup subjects who were not available at the 6-month followup). Statistical analyses took the form of independent-sample  $t$ -tests.

Most analyses yielded nonsignificant findings. However, several differences arose, suggesting that participants might have been less severely impaired than nonparticipants, both before treatment and at the 6-month followup. In the first two sets of analyses, participants achieved significantly lower pretreatment scores on the Fear of Negative Evaluation Scale and the Beck Depression Inventory and reported less anxiety during the individualized behavioral test (performance-phase SUDS ratings) than other patients who originally entered the trial or other patients who participated in the 6-month followup. At 6-month followup, participants achieved significantly lower scores than nonparticipants on the Fear of Negative Evaluation Scale, Beck Depression Inventory, Personal Report of Confidence as a Speaker, Social Avoidance and Distress Scale, the Social Phobia subscale of the Fear Questionnaire, and performance-phase SUDS ratings from the behavioral test.

Analyses comparing participants and nonparticipants were also conducted on RTQ measures collected during treatment sessions. When compared to all other subjects who originally entered the trial or to the subset of other patients who attended the 6-month followup, participants rated the treatment they received (regardless of which treatment it was) as more credible at both administrations of the RTQ and described themselves as more confident in their assigned treatment’s effectiveness for the remediation of specific social fears at session 4.<sup>3</sup>

#### *Pretreatment Comparison of Long-Term Followup Study Participants*

No significant differences were revealed in the comparison of the pretreatment scores (independent assessor ratings, self-report questionnaires, behavioral test measures) of participants who received either CBGT or ES. Examination of their RTQ scores revealed that CBGT patients described

<sup>3</sup>Details of all statistical analyses reported in this section are available from the first author on request.

themselves as more confident in their treatment's effectiveness for the remediation of specific social fears than ES patients at session 4,  $t(14) = 2.73$ ,  $p < .02$ . However, no differences were noted between CBGT and ES patients who completed the long-term followup on any other RTQ measure.

### *Demographic Comparison of Long-Term Followup Study Participants*

The CBGT and ES samples did not differ from each other on gender composition, age, amount of education, employment status, income, or number of years since they first experienced social fears. For the full sample: 13 patients were male; the mean age was 34 years; all patients had completed high school, and 14 had completed college; 16 patients were employed on a full-time basis; they reported a mean annual income of \$17,000 and a mean of 10.74 years of social anxiety before their participation in the original study. There was a nearly significant difference in marital status ( $p < .06$ , Fisher's Exact Test), with 7/10 CBGT patients compared to 2/9 ES patients currently married. This difference in marital status reflects a significant difference between CBGT and ES as reported in the original paper.

### **Assessment of Long-Term Treatment Outcome**

The primary analyses of long-term treatment outcome involved comparisons of CBGT and ES patients on measures which were also included in the original study. The majority of these analyses took the form of analyses of covariance (ANCOVAs) in which the original pretreatment score served as the covariate. Measures administered only at followup were compared with independent sample  $t$ -tests. All between-group analyses utilized one-tailed tests of significance since there was a clear *a priori* hypothesis that CBGT would outperform ES.

There was no difference between CBGT and ES patients in the mean interval between the end of treatment and the long-term followup evaluation (CBGT,  $M = 64.1$  months,  $SD = 8.14$ ; ES,  $M = 67.56$  months,  $SD = 4.98$ ;  $t(17) = 1.10$ , n.s.).

### *Independent Assessor Interview*

*Clinician's Severity Rating Scale.* The ANCOVA of long-term followup Clinician Severity Ratings revealed a significant effect of treatment,  $F(1, 15) = 4.14$ ,  $p < .03$ . CBGT patients' fears ( $M = 1.89$ ,  $SD = 1.83$ ) were



rated as significantly less severe than those of ES patients ( $M = 3.89$ ,  $SD = 2.26$ ). Both groups remained significantly improved from their own pretreatment levels (CBGT, pretreatment  $M = 5.67$ ,  $SD = 0.87$ ;  $t(8) = 8.13$ ,  $p < .001$ ; ES, pretreatment  $M = 5.89$ ;  $SD = 1.36$ ;  $t(8) = 2.75$ ,  $p < .03$ ). See Fig. 1.

In the original paper, we classified patients as significantly improved if they showed a decrease of 2 points on the Clinician's Severity Rating Scale *and* their end-point score was 3 or less (suggesting no further need for treatment). Accordingly, 75% of CBGT patients and 40% of ES patients were classified as significantly improved at posttest. At the long-term followup evaluation, 8/9 CBGT patients compared to 4/9 ES patients were so classified. This difference approached statistical significance ( $p = .066$ ) as determined by Fisher's Exact Test.

*Interference as a Result of Phobic Symptoms.* Assessors rated CBGT patients ( $M = 0.60$ ,  $SD = 0.70$ ) as experiencing significantly less interference with work, social activities, or family life from their symptoms than ES patients ( $M = 1.78$ ,  $SD = 1.09$ ),  $t(16) = -2.83$ ,  $p < .006$ .

*Additional Treatment.* No differences arose between CBGT and ES patients in these analyses. Two patients from CBGT and three from ES

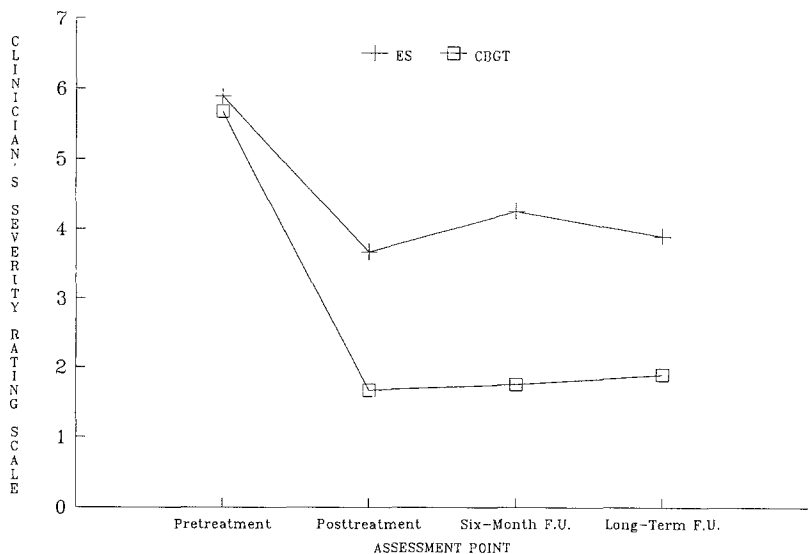


Fig. 1. Clinician's Severity Rating Scale scores for patients receiving cognitive behavioral group therapy (CBGT) or educational supportive group psychotherapy (ES) at pretreatment, posttreatment, 6-month followup, and long-term followup. (F.U. = followup.)

had sought additional treatment for their social phobias since the end of their original treatment. Two patients from each treatment were taking anxiolytic medications at the long-term followup assessment.

### *Self-Report Assessment of Anxiety and Depression*

Self-report scores for pretreatment, posttreatment, 6-month followup, and long-term followup are reported in Table I. There were no CBGT/ES differences at posttest or 6-month followup. However, only CBGT patients' 6-month scores were significantly reduced. At the long-term followup, CBGT patients reported significantly lower scores than ES patients on the Social Avoidance and Distress Scale and the Social Phobia subscale of the Fear Questionnaire. They also tended ( $p < .06$ ) to report less depression than ES patients. Analyses of within-group changes from pretreatment to long-term followup are reported in Table I.

### *Individualized Behavioral Test*

*Subjective Anxiety and Performance Quality.* In the original study, CBGT patients reported less anxiety than ES patients at posttreatment and 6-month followup, both before and during the individualized behavioral test. At long-term followup, however, CBGT and ES patients did not differ in their mean SUDS ratings during the anticipatory (CBGT,  $M = 16.38$ ,  $SD = 16.74$ ; ES,  $M = 28.48$ ,  $SD = 13.72$ ) or performance phases (CBGT,  $M = 18.53$ ,  $SD = 15.66$ ; ES,  $M = 32.74$ ,  $SD = 19.75$ ) of the individualized behavioral test or in their ratings of maximum anxiety (CBGT,  $M = 31.25$ ,  $SD = 24.60$ ; ES,  $M = 52.14$ ,  $SD = 32.39$ ) or performance quality (CBGT,  $M = 69.38$ ,  $SD = 24.56$ ; ES,  $M = 71.43$ ,  $SD = 24.10$ ) after the test. With the exception of performance quality, the direction of the means favored CBGT, but the magnitude of difference was not significant. In general, long-term followup ratings suggested slightly more discomfort than was reported at posttreatment or 6-month followup assessments.

*Cognitive Assessment.* In the original study, CBGT patients reported more positive self-statements and fewer negative self-statements after the 6-month followup behavioral test than ES patients. However, at the long-term followup assessment, there were no differences between groups on any measure derived from the thought-listing task. CBGT patients reported 46% positive self-statements and 34% negative self-statements compared to 32% and 42%, respectively, for ES patients.

*Behavioral Measures.* Judges' ratings at long-term followup did discriminate between patients who received CBGT or ES 5 years earlier.

Table 1. Self-Report Measures of Anxiety and Depression: Comparison of Patients Receiving CBGT and ES at Long-Term Followup<sup>a,b</sup>

Measure	Pretreatment	Posttreatment	6-Month followup	Long-term followup	F <sup>c</sup>	<i>p</i> <sup>d</sup>
SADS						
CBGT	14.00	10.00	6.63	8.00	4.69 <sup>e</sup>	1.92 <sup>f</sup>
ES	19.33	16.67	15.50	18.22		0.59
FNE						
CBGT	22.00	16.13	11.75	15.00	<1	2.59 <sup>e</sup>
ES	24.00	22.44	20.25	18.22		1.94 <sup>f</sup>
FQ-Social						
CBGT	18.40	9.38	7.00	9.50	3.95 <sup>e</sup>	4.26 <sup>g</sup>
ES	18.56	13.67	12.00	15.56		1.11
PRCS						
CBGT	23.60	13.63	10.50	12.40	1.38	4.19 <sup>g</sup>
ES	23.11	18.38	16.75	16.78		2.17 <sup>f</sup>
BDI						
CBGT	10.40	2.50	2.00	5.90	2.93 <sup>f</sup>	1.89 <sup>f</sup>
ES	11.11	6.33	5.00	12.11		0.44

<sup>a</sup>Numbers in parentheses are standard deviations. CBGT = Cognitive-Behavioral Group Therapy, ES = Educational-Supportive Group Psychotherapy, SADS = Social Avoidance and Distress Scale, FNE = Fear of Negative Evaluation Scale, FQ-Social = Social Phobia subscale of the Fear Questionnaire, PRCS = Personal Report of Confidence as a Speaker, BDI = Beck Depression Inventory.

<sup>b</sup>CBGT *n* = 10, ES *n* = 9.

<sup>c</sup>*F*-ratios based on 1 and 16 degrees of freedom for main effect of treatment, analyses of covariance of long-term followup scores with pretreatment scores as covariates, one-tailed test of significance.

<sup>d</sup>Within-group *t*-tests evaluating significance of change from pretreatment to long-term followup assessment.

<sup>e</sup>*p* < .10.

<sup>f</sup>*p* < .05.

<sup>g</sup>*p* < .01.

analyses of covariance of long-term followup scores with pretreatment scores as covariates, one-tailed test of significance.

Within-group *t*-tests evaluating significance of change from pretreatment to long-term followup assessment.

*p* < .10.

*p* < .05.

*p* < .01.

Judges rated CBGT patients ( $M = 28.88$ ,  $SD = 9.48$ ) as significantly less anxious during the individualized behavioral test than ES patients ( $M = 46.57$ ,  $SD = 17.99$ ),  $t(13) = -2.43$ ,  $p < .03$ . Similarly, judges rated the behavioral performance of CBGT patients ( $M = 83.86$ ,  $SD = 11.70$ ) superior to the behavioral performance of ES patients ( $M = 68.00$ ,  $SD = 12.51$ ),  $t(10) = 2.25$ ,  $p < .05$ .<sup>4</sup>

## DISCUSSION

In this study, we sought to evaluate the long-term maintenance of treatment gains achieved by social phobic patients who had received CBGT 4.5–6.25 years earlier. CBGT patients were compared to patients who had received a credible alternative treatment (ES) on self-report measures, independent assessor ratings, and measures derived from an individualized behavioral test. In fact, CBGT patients appeared less anxious and less impaired on several of these measures. They were also more frequently improved in comparison to their own pretreatment scores than ES patients.

CBGT patients were evaluated as less anxious than ES patients by themselves, the independent assessor, and the behavior test judges. The specific scores achieved by CBGT patients on self-report and independent assessor measures suggest that they were not only less anxious or impaired than ES patients but that they were functioning with minimal anxiety in an absolute sense. The mean Clinician's Severity Rating of 1.89 describes an individual who is barely symptomatic and who would not meet DSM criteria at initial presentation. The mean score for ES patients of almost 4.0 suggests a need for continuing treatment. Similarly, CBGT patients' mean scores on the Social Avoidance and Distress Scale and the Fear Questionnaire were very close to means reported for normal samples (Heimberg, 1988; Mizes & Crawford, 1986), and their mean score on the Beck Depression Inventory was in the nondepressed range (Kendall, Hollon, Beck, Hammen, & Ingram, 1987).

These results suggest that CBGT is an effective and durable approach to the treatment of social phobia. However, it is important to consider limitations on this conclusion. The original trial of CBGT and ES (Heimberg et al., 1990) began with 49 patients, 40 of whom completed the trial, and 34 of whom participated in the 6-month followup. The long-term followup effort began with 37 patients, of whom only 19 participated. With this de-

<sup>4</sup>Judges' ratings of anxiety were available for all 15 patients who completed the behavioral test. However, only 12 subjects were included in the analysis of performance quality since poor sound quality of three videotapes made rating of performances difficult.

gree of attrition, it became important to establish the degree of similarity or difference between patients who participated in the long-term followup and those who did not. These analyses suggested that our long-term followup sample differed from the remaining patients in several ways. First, they appeared to be less impaired prior to treatment on three measures. Second, they appeared to be less impaired on several measures at the 6-month followup. Third, they viewed the treatment they received as more credible than nonparticipants, regardless of whether they received CBGT or ES.

To summarize these analyses, the long-term followup participants were not fully representative of the original study sample. Rather, they tended to be less severely impaired both before and after treatment. However, none of these analyses suggest differences between long-term followup participants who received CBGT or ES. In fact, CBGT and ES patients differed minimally. We conclude that CBGT appears to have had long-term effectiveness for patients who were initially less severely impaired. Statements about the long-term effectiveness of CBGT with more impaired patients await further research.

It is interesting to examine where CBGT patients appeared less anxious or impaired than ES patients and where they did not. CBGT patients were superior to ES patients in their own global self-evaluations and in other persons' (independent assessor, behavioral test judges) evaluation of their anxiety, performance, or impairment. However, they did not outperform ES patients on measures of self-reported anxiety during the individualized behavioral test (SUDS) or on the thought-listing task, although most group means in these analyses were in the appropriate direction. Closer examination of the analyses of thought-listing measures is required because (1) they represent the hypothesized mechanism of change in CBGT, i.e., that change in anxiety and behavior is associated with change in the content (or other aspects) of cognition, and (2) CBGT patients showed more positive and fewer negative self-statements than ES patients at 6-month followup. Inspection of group means on these measures suggests that CBGT patients' frequency of positive self-statements was similar at long-term and 6-month followups (46% at long-term followup vs. 47% at 6-month followup), but they listed a higher frequency of negative self-statements (34% vs. 5%). ES patients showed a tendency toward improvement on self-statement measures (e.g., 32% positive self-statements vs. 15% at 6-month followup; 42% negative self-statements vs. 48%), rendering the ANCOVAs nonsignificant. CBGT patients maintained an internal dialogue several years later that was predominantly positive but less so than at 6-month followup. They had continued to function well since the end of treatment several years prior. However, over that interval, they may have reduced

the frequency with which they relied upon the formal cognitive coping skills they learned in treatment. Bruch, Heimberg, and Hope (1991) showed that the nature of the internal dialogue was significantly related to improvement in CBGT and ES at the 6-month followup. However, the continuing role of the internal dialogue as patients develop new patterns of behavior over an extended period of time requires further examination.

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