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Group Social Skills Training or Cognitive Group Therapy as the Clinical Treatment of Choice for Generalized Social Phobia?

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Abstract—This study focused on determining whether group social skills training (SST) or cognitive-behavioral group therapy (CBT) works best to treat social anxiety in psychiatric patients. Participants were psychiatric outpatients with a *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) diagnosis of generalized social phobia (GSP). A matching procedure was used to obtain two equivalent samples in both conditions ($N = 48$). It was shown that both SST and CBT were effective in reducing social and general anxiety, decreasing the severity of psychopathology and increasing social skills and self-control. As for differential effects, patients participating in SST experienced a significantly greater reduction of social anxiety and a greater increase in social skills than those in CBT. Moreover, it was shown that social anxiety and social skills scores of the SST group at follow-up reached the level of a normal reference group, whereas those of the CBT participants improved only to that of nonsocially anxious patients with anxiety disorders. Finally, it was revealed that commitment to and satisfaction with treatment of participants in both conditions did not differ. Keeping in mind that this was a quasiexperimental study, the authors concluded that in a clinical setting, group SST may be the best way to treat psychiatric patients with GSP, where comorbidity is the rule rather than the exception. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Social anxiety; Social skills training; Cognitive-behavioral therapy; Psychiatric outpatients

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From the very inception of behavioral therapy, there has been considerable emphasis on using social skills training (SST) to achieve a reduction of social anxiety. Effectiveness of this approach has been demonstrated in individual and group formats in several populations of socially anxious adults (e.g., Corrigan, 1991; Donahoe & Driesenga, 1988; Goldsmith & McFall, 1975; Hayes, Halford, & Varghese, 1995; Monti, Curran, Corriveau, DeLancey, & Hagerman, 1980; Van Dam-Baggen & Kraaimaat, 1986). Notwithstanding this bulk of SST studies, it should be noted that there have been few well-controlled SST studies for social phobia. Most studies on SST with persons with social phobia have failed to include adequate control conditions (Heimberg & Juster, 1995). There are several reasons for the limited attention to SST as the treatment of choice for social phobia. One is that many authors state that persons with social phobia possess adequate social skills but are inhibited in applying them in social situations (e.g., Heimberg & Juster, 1995; Scholing & Emmelkamp, 1995). From the very start of social phobia in the U.S. psychiatric nomenclature (American Psychiatric Association, 1980), anxiety reduction techniques such as exposure have been used to treat the marked and persistent fear in social situations, which according to the *Diagnostic and Statistical Manual of Mental Disorders*, 3rd edition (*DSM-III*), and subsequent editions (American Psychiatric Association, 1980, 1987, 1994), characterizes social phobia. Another reason for diminishing attention to SST for treating social anxiety is that the focus on cognitive techniques for treating social anxiety increased tremendously in the 1980s. In those years, Butler (1985) and Emmelkamp (1982) asserted that cognitive factors are more significant to development and continuation of social phobia than to other anxiety disorders. They also suggested that it is especially important to focus interventions on distorted thoughts and perceptions of persons with social phobia. This resulted in treatments for social phobia in which cognitive methods were emphasized, often in combination with exposure, whereas SST remained undervalued. Recent studies, however, have failed to show the differential effects of exposure and cognitive methods for social phobia, regardless of whether they are in combination with exposure in vivo and SST (Feske & Chambless, 1995; Heimberg & Juster, 1995; Mersch, 1995; Wlazlo, Schroeder-Hartwig, Hand, Kaiser, & Munchau, 1990). One of the explanations given for these equivocal results was that cognitive-behavioral therapy's (CBT's) weaker than expected effects may be attributable to the poor quality of treatment, because CBT requires considerable therapeutic skill (Feske & Chambless, 1995). It should be noted, however, that a contamination of conditions might have occurred in these studies, because instructions on overt behavior were not explicitly excluded from the cognitive procedures used with persons with social phobia. This hindered insight into the differential effects of the procedures applied

(e.g., Scholing & Emmelkamp, 1993a). Despite these equivocal results, there is a predominance of largely cognitive explanations for social phobia, hypothesizing that the chief problem for persons with social phobia is a cognitive bias for their own behavior (Clark & Wells, 1995; Leary & Kowalski, 1995; Rapee & Heimberg, 1997). Only recently, since specific social phobia and generalized social phobia (GSP) have been distinguished in fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV*; American Psychiatric Association, 1994), have Beidel and Turner (1998) reviewed evidence from several studies indicating that GSP can be distinguished from specific social phobia by pervasive fear and symptom severity, as well as by other dimensions such as an earlier age of onset and more of a clinical picture, even suggesting a qualitative difference between the two subtypes. Their argument that inadequate social skills result from a long history of a lack of socialization experiences is supported by the positive results of several intervention strategies designed to address these general and specific social skills deficiencies.

Often, effectiveness studies were conducted as controlled studies in research settings and, by limiting the diagnostic categories of persons included, used only a small portion of those screened for participation (Peterson & Halstead, 1998). For example, individuals could be excluded if they had primary or secondary psychiatric diagnoses or medical conditions other than social phobia, whereas it is generally found that people with affective and mood disorders also experience excessive social anxiety (Rapee, 1995). Participants also had to be willing to accept random assignment to treatment and control conditions. In addition, research participants may have different incentives and expectations (e.g., payment) than patients referred to treatment in a clinical nonresearch setting. As far as we know, no studies have been performed on the differential effects of both treatments for GSP *in a clinical setting*.

In this paper, a quasiexperimental design was used to examine the relative effectiveness of group SST in comparison with comprehensive group CBT. Treatments were applied in separate psychiatric outpatient settings with heterogeneous patient groups with GSP as one of their main problems.

METHOD

Treatment Conditions

Two treatment conditions were included in this study: group SST and group CBT. For several practical reasons, the treatments had to be provided in two psychiatric outpatient settings in different parts of the Netherlands. Treatment for both conditions was conducted in groups that met for 1.5-hour sessions, first weekly for 17 weeks and then monthly for 3 months. Therapy

groups consisted of five to eight participants. In both conditions, treatment sessions were similarly structured. Each session started with a discussion of homework assignments. Then, a large part of the session was spent on the session theme, according to the phase of the treatment and the condition. For example, a specific social skill was rehearsed in SST, whereas an alternative problem-solving strategy was rehearsed in CBT. Finally, new homework assignments were given, and participants evaluated what they had learned in the session. In both conditions, the treatment developed gradually from basic exercises and skills to more complex exercises and skills, initially applied to non-social situations, then to social situations inducing moderate fear, and finally to core situations of social fear.

General factors in both conditions were kept as similar as possible. In *both*, the therapists were a licensed senior behavior therapist with extensive experience in SST or CBT and a junior cotherapist, treatment contracts were used (including informed consent), treatment was supported by bibliotherapy, detailed written treatment manuals were used, and treatment was observed through a one-way screen by postgraduate students.

Self-management methods were part of *both* treatment conditions. Self-management skills training in both conditions was derived from Kanfer and Gaelick-Buys (1991) and D'Zurilla (1986) and included self-monitoring, self-evaluation, self-reinforcement, setting realistic standards and (sub)goals, and problem-solving strategies. Participants were taught to practice procedures and skills they had learned independently in their daily life to maintain and expand them. Self-management skills were applied to social skills in SST, whereas these skills were applied to cognitions and beliefs in social situations in CBT.

Further details for each treatment are outlined below.

Social skills training. Methods used for acquiring basic and specific social skills were modeling, behavior rehearsal, successive approximation, and homework assignments. Basic social skills included in SST were observing, listening, giving and receiving feedback, as well as nonverbal components of social behavior such as eye contact, speech volume, and intonation. Specific skills included in SST were social responses such as making and refusing requests, receiving refusals, giving and receiving compliments, stating positive self-assertions, initiating and continuing conversations, giving and receiving criticism, expressing opinions, and standing up for one's rights. Training of these social skills occurred in sessions with behavior rehearsal of social responses in tailor-made future situations (i.e., each participant prepared these situations before the session). Next, these skills were applied in various daily situations with the help of homework assignments. The short- and long-term effectiveness of this group SST has been demonstrated in various randomized

control trials in previous research (e.g., Van Dam-Baggen & Kraaimaat, 1986).

Cognitive-behavioral therapy. This treatment focused on changing dysfunctional cognitions such as beliefs, interpretations, and attitudes common among socially anxious patients. The methods used in CBT to change these dysfunctional cognitions were derived from Ellis and co-authors (e.g., Ellis & Grieger, 1986; Ellis, Gordon, Neenan, & Palmer, 1997), also using the criteria of Maultsby (1984) for rational thinking. These methods include self-monitoring of automatic thoughts and disputing each participant's specific irrational thoughts, beliefs, and misinterpretations in social situations. Disputing dysfunctional cognitions was effected in several ways, including using a Socratic dialogue to teach patients to analyze their thoughts by replacing them with rational beliefs, by practicing some general semantic methods, by focusing on the disadvantages of maintaining them and the advantages of giving them up, by supplanting them with alternative problem-solving methods, and so forth (Ellis & Grieger, 1986). Strategies and styles for disputing dysfunctional thoughts were varied (see Ellis, Gordon, Neenan, & Palmer, 1997). An educational model was used that taught patients to analyze and reformulate their irrational thoughts in ABCDE schemata, first during the session with the therapist's help and later at home. In addition, exercises were used to teach patients consecutively to distinguish between situational features and their thoughts, to detect irrational cognitions, to debate these cognitions with criteria for rational thinking, and to discriminate irrational from rational beliefs. The exercises for each part of this process were first applied to daily life situations and then gradually tailored to patient's specific misinterpretations and judgmental biases in feared social situations. Homework assignments elaborating on the above steps in the procedure were also part of the treatment. Behavioral techniques such as rehearsal of social skills and explicit exposure in vivo procedures and instructions were excluded. The therapist focused on changing the dysfunctional thoughts that elicited anxiety.

Therapists

One argument in the literature is that CBT may be ineffective as a consequence of poor treatment delivery and that it should be given by an experienced therapist (Feske & Chambless, 1995). In addition, because this study was carried out with psychiatric outpatients with GSP, we decided that licensed senior behavior therapists with considerable experience with both of these approaches would serve as therapists and that junior behavior therapists would act as cotherapists. The integrity of treatment was ensured by the use of detailed written treatment manuals in each condition as well as observation by postgraduate students through a one-way screen.

Patients

Referral. Patients were referred to treatments by psychiatrists and clinical psychologists in or involved with the psychiatric outpatient setting. All patients underwent the same assessment procedure, which consisted of a semi-structured interview by an experienced independent psychiatrist, a comprehensive battery of self-report inventories, and a clinical behavioral interview by a clinical psychologist. The same criteria for participation were used for both conditions: patients had to be between 18 and 65 years old and had to meet the criteria for either a primary or a secondary *DSM-IV* diagnosis of GSP. The diagnosis GSP was assessed by the aforementioned clinical psychologist. It should be noted that there was perfect agreement between the preliminary Present State Examination (PSE; Wing, Cooper, & Sartorius, 1974) and the Anxiety Disorders Schedule-Revised (ADIS-R; Bouman & De Ruiter, 1991) diagnoses of social phobia and the independent GSP assessment by the clinical psychologist. Excluded from the selection procedure were patients with psychotic disorders (manifest form), organic mental disorders, and alcohol and drug abusers. These inclusion and exclusion criteria ensured that a heterogeneous sample with mixed diagnoses and comorbidity was admitted to the treatments.

Matching. Because treatments had to be given in two psychiatric settings in different parts of the Netherlands, random assignment to the conditions was not feasible, which necessitated the use of a procedure for matching the patients in the two conditions. Patients from the pool of participants in the CBT condition were consecutively matched to participants in the SST condition on age (range, 2 years) and gender (precise), and severity of psychopathology (Symptom Checklist-90 [SCL-90; Derogatis, 1977] total scores converted into standard scores). This procedure resulted in the following equivalent samples:

1. Twenty-four patients in SST, 13 men and 11 women with a mean age of 34.7 years ($SD = 9.4$; range, 21–51 years). Approximately 80% of the participants had a high school education or less, and 50% had a partner. Fifteen patients received GSP as the primary *DSM-IV* diagnosis and nine received GSP as a secondary *DSM-IV* diagnosis. Comorbidity figures were as follows (revised *DSM-III* [*DSM-III-R*] diagnoses available from PSE-Revised [PSE-R; Van den Brink, Koeter, Ormel, Dijkstra, Giel, Slooff, & Wohlfarth, 1989]; see Measures):¹ eight patients received one diagnosis, GSP, and 16 patients received two or more diagnoses such as nonpsychotic mood disorders, anxiety disorders other than GSP, adjustment disorder, and somatization disorder.

¹ Because PSE-R and ADIS-R were used in clinical settings, *DSM-III-R* diagnoses had to be used for comorbidity figures.

2. Twenty-four patients in CBT, 12 men and 12 women with a mean age of 36.6 years ($SD = 10.5$; range, 22–57 years). Approximately 63% had a high school education or less, and 50% had a partner. Fourteen patients received GSP as the primary *DSM-IV* diagnosis and 10 received GSP as a secondary *DSM-IV* diagnosis. Comorbidity figures were as follows (*DSM-III-R* diagnoses available from ADIS-R [Bouman & De Ruiter, 1991]; see Measures):¹ nine patients received one diagnosis, GSP, and 15 patients received two or more diagnoses such as nonpsychotic mood disorders, anxiety disorders other than GSP, adjustment disorder, and somatization disorder.

Dependent Measures

In both treatment locations, descriptive psychiatric diagnoses were assessed as a standard procedure by an independent psychiatrist before referral to treatment. The PSE (Wing, Cooper, & Sartorius, 1974) was used at one treatment location and the ADIS-R (Bouman & De Ruiter, 1991) was used at the other. The extensive PSE-R criteria (Van den Brink, Koeter, Ormel, Dijkstra, Giel, Slooff, & Wohlfarth, 1989) contains extra sections for anxiety disorders, mood disorders, posttraumatic stress disorders, adjustment disorders, somatization disorders, and eating disorders. The PSE-R made it possible to deduce diagnoses according to the *DSM-III-R*. The ADIS-R is designed to make differential diagnoses of anxiety disorders and affective disorders according *DSM-III-R* criteria. It also provides sufficient information for classifying psychotic disturbances, somatization disorders, and alcohol and drug abuse. A section on eating disorders according to *DSM-III-R* criteria was added to the ADIS-R.

To participate in the present study, patients had to meet the *DSM-IV* criteria for the diagnosis of GSP, which were assessed by a clinical psychologist using a behavioral interview.

Assessments were made before treatment (pretest), immediately after treatment (at the end of the weekly sessions: posttest) and 3 months later (at the end of the monthly sessions: follow-up test). The Inventory of Interpersonal Situations (IIS; Van Dam-Baggen & Kraaimaat, 1987, 1990, 1999) for measuring social anxiety on the Discomfort Scale and frequency of social responses on the Frequency Scale, was used to assess *direct* effects. The IIS Discomfort and Frequency Scales consist of the same 35 items, which are responses in social situations rated with 5-point Likert scales in relation to the amount of discomfort and frequency of response. Adequate reliability and validity of the IIS Scales were demonstrated on all levels. For example, there was high internal consistency of the Discomfort Scale ($\alpha > .93$) and Frequency Scale ($\alpha > .91$) in several treated and untreated samples of psychiatric patients, good temporal stability over a 6-week interval (Discomfort Scale, $r =$

.84; Frequency Scale, $r = .86$) in a healthy sample and adequate sensitivity to change in several treated samples of psychiatric patients (effect sizes more than 1.00 for the Discomfort Scale and more than 0.89 for the Frequency Scale). It should be noted that the Frequency Scale was found to be indicative of overt behavior in social situations as was reflected in the scale's high predictive validity for a set of relevant overt behaviors (for an overview of psychometric research on the IIS see Van Dam-Baggen & Kraaimaat, 1999).

Three measures were used to establish *indirect* effects: (a) the SCL-90 (Derogatis, 1977) as an index of psychopathology severity, (b) the Fear Survey Schedule III (FSS-III; Wolpe & Lang, 1964) as an index of general fear or anxiety, and (c) the Scale for Internal-External Locus of Control (Rotter, 1966) as an index of self-control.

Five 5-point rating scales were used at posttest assessment to assess the *patient's commitment to and satisfaction with treatment* (see Van Dam-Baggen & Kraaimaat, 1986): active participation in the treatment, satisfaction with the number of treatment sessions or length of treatment, satisfaction with the way treatment was attuned to the mechanisms of their problem behavior, satisfaction with the amount of practice in the sessions and understanding of what inadequate and adequate social behaviors or dysfunctional and functional thoughts are.

RESULTS

Several actions were taken for optimum reduction of bias in the results as a consequence of nonrandom assignment (see, e.g., Shadish & Ragsdale, 1996). First, the assessment procedure, including admission criteria, was the same for both treatments, and second, the patients in the two conditions were matched on demographic variables of age and gender and on severity of psychopathology. To be able to conclude that matching resulted in two fairly equivalent samples, it was required that no differences were found on the matching variables (criterion value $p > .20$, two-tailed). Table 1 gives the means and standard deviations of the self-report inventories at pretest, posttest, and follow-up test for both conditions. It was revealed that the samples in both treatment conditions did not differ statistically significantly at the .20 level in the demographic variables (age, gender, educational level, and marital status), primary and secondary psychiatric diagnoses, and severity of psychopathology. Furthermore, the conditions did not differ significantly in any of the other effect measures at pretest. This means that participant matching resulted in two fairly equivalent samples.

Separate analyses of variance for repeated measures on the two direct and three indirect measures were used to control for the effectiveness of both treatments. Any overall treatment effects were revealed by significant time effects. Treatment resulted in an overall improvement of social anxiety (Discomfort Scale, $F(2,44) = 30.4$, $p < .001$), social skills (Frequency Scale,

TABLE 1
 MEANS AND STANDARD DEVIATIONS OF THE SCORES OF GROUP SOCIAL SKILLS TRAINING AND GROUP COGNITIVE-BEHAVIORAL THERAPY SELF-REPORT INVENTORIES
 AT PRETEST, POSTTEST, AND FOLLOW-UP TEST AS WELL AS EFFECT SIZES OF THE CHANGE BETWEEN PRETEST AND FOLLOW-UP TEST

	Social Skills Training				Cognitive-Behavioral Therapy			
	Pretest	Posttest	Follow-up	Effect Size	Pretest	Posttest	Follow-up	Effect Size
IIS Discomfort								
<i>M</i>	97.2	72.9	68.7	1.44	94.6	88.9	82.7	0.57
<i>SD</i>	22.2	20.7	17.1		21.7	18.3	20.3	
IIS Frequency								
<i>M</i>	90.5	109.2	112.2	1.60	98.1	102.8	103.3	0.35
<i>SD</i>	13.6	14.5	13.6		13.7	12.1	16.1	
FSS								
<i>M</i>	169.1	141.3	134.9	0.83	154.8	147.3	136.3	0.59
<i>SD</i>	46.7	38.8	36.0		33.9	28.2	29.3	
I-E								
<i>M</i>	20.1	15.9	17.1	0.43	18.7	17.0	16.0	0.44
<i>SD</i>	6.4	5.4	7.7		5.4	5.7	7.1	
SCL-90								
<i>M</i>	191.6	157.4	145.6	0.85	202.4	171.8	161.2	0.66
<i>SD</i>	59.9	58.1	48.7		52.0	31.0	72.5	

Note. IIS = Inventory of Interpersonal Situations; FSS = Fear Survey Schedule; I-E = Internal-External Locus of Control Scale; SCL-90 = Symptom Checklist-90.

$F(2,44) = 19.7, p < .001$), general anxiety (FSS, $F(2,43) = 8.9, p = .001$), self-control (Scale for Internal-External Locus of Control, $F(2,43) = 9.4, p < .001$), and severity of psychopathology (SCL-90, $F(2,41) = 16.2, p < .001$).

The research question was whether effectiveness of the two treatments differed. Any differential treatment effects of SST and CBT were revealed by significant condition by time interaction effects.

With respect to *direct* effects of the treatments, significant interaction effects for conditions and time were revealed on the Discomfort Scale ($F(2,44) = 5.8, p < .01$) and the Frequency Scale of the IIS ($F(2,44) = 7.4, p = .01$). Contrast analyses demonstrated significant differences for SST and CBT in amount of change between pretest and posttest for both measures (Discomfort, $F(1,45) = 11.6, p = .001$; Frequency, $F(1,45) = 11.2, p < .01$), whereas the differences for SST and CBT between the follow-up test and the preceding test moments were only significant on the Frequency Scale ($F(1,45) = 7.1, p < .05$) and nearly significant on the Discomfort Scale ($F(1,45) = 3.5, p = .07$). That is to say, SST participants improved more in terms of social anxiety and social skills than CBT participants during and after treatment. The greater improvement for SST compared with CBT is also illustrated by the effect sizes of the change between pretest and follow-up test (see Table 1). It should be noted that SST participants not only improved more than CBT participants, but also achieved a lower social anxiety level and a higher social skills level (see Table 1). The scores of SST participants at follow-up were approximately equal to the mean of a normal reference group, whereas the scores of CBT participants improved only to a level slightly above the mean of a reference group of nonsocially anxious patients with anxiety disorders (Van Dam-Baggen & Kraaimaat, 1987, 1990). In short, SST produced a much greater effect than CBT in reducing discomfort in social situations and increasing social skills.

With respect to *indirect* treatment effects, significant interaction effects for conditions and time were found on the FSS ($F(2,43) = 3.9, p = .03$), whereas significant interaction effects were not found on the Scale for Internal-External Locus of Control ($F(2,43) = 2.2, p = .13$) and the SCL-90 ($F(2,41) = 0.03, p = .97$). Contrast analysis for the FSS demonstrated a significant difference between SST and CBT in amount of change between pretest and posttest ($F(1,44) = 7.6, p < .01$), whereas there was no significant difference revealed between the follow-up test and the preceding test moments ($F(1,44) = 0.5, p = .49$). Although SST participants improved more than CBT participants in reported level of general anxiety at posttest, this difference proved diminished in the follow-up test. It was found that SST and CBT participants improved approximately the same amount on self-control and severity of psychopathology. The amount of change in indirect measures for SST and CBT is also illustrated by the effect sizes of the change between pretest and follow-up test (see Table 1).

TABLE 2
 MEANS, STANDARD DEVIATIONS, AND *t* VALUES OF THE COMPARISONS OF
 RATING SCALES FOR SOCIAL SKILLS TRAINING AND
 COGNITIVE-BEHAVIORAL THERAPY

	Social Skills Training		Cognitive-Behavioral Therapy		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Active participation	4.0	0.6	4.0	0.7	-0.2
Length of treatment	3.5	1.0	2.8	1.1	2.2*
Content of the therapy	3.8	0.9	4.2	0.9	-1.3
Amount of practice	3.9	0.9	3.5	0.7	1.8
Insight	4.6	0.6	4.3	0.7	1.8

Note. * $p < .05$.

Table 2 gives means and standard deviations of the rating scales for *patients' commitment to and satisfaction with treatment*. Differences were not found between conditions in the rating scales, except for satisfaction with the number of sessions. The CBT participants were found slightly less satisfied with the length of treatment.

DISCUSSION

Since publication of the *DSM-III*, relatively little attention has been given to SST in patients with social phobia. The main reason is that it was hypothesized that persons with social phobia possess adequate social skills but are inhibited by anxiety or cognitive factors in applying them. As a consequence of emphasis on the role of cognitive factors in the development and continuation of social phobia, much emphasis has been given to cognitive therapy as the treatment of choice, more often than not in combination with exposure. Recently, however, Beidel and Turner (1998) stated that it is very likely that persons with GSP develop social skill deficits as a result of a long history of lack of socialization experiences. The positive results of several intervention strategies designed to address these skill deficits support their view. The present study was designed to contribute to this discussion about the importance of the role of skill deficits and cognitive factors. It addressed the question of which treatment was best for treating social anxiety in psychiatric patients with GSP, i.e., group SST or comprehensive group CBT. The effectiveness of the SST program had already been revealed in controlled studies with heterogeneous samples of socially anxious psychiatric patients (e.g., Van Dam-Baggen & Kraaimaat, 1986). The cognitive therapy used in this study was a

comprehensive program derived from Ellis' rational emotive therapy. Self-management procedures were part of both treatment programs. Participants in treatment had to meet criteria for GSP, and they were treated in clinical outpatient settings. This was the main reason the design of the study was a quasiexperimental.

It was shown that group SST produced considerably greater change than group CBT in the target behaviors of anxiety in social situations and social skills in psychiatric outpatients with GSP. Moreover, it was shown that at follow-up, the social anxiety and social skills scores of the SST group even reached the level of a reference healthy population. With respect to indirect effects, the treatments did not appear to differ: both SST and CBT decreased general anxiety and severity of psychopathology and increased self-control to approximately the same degree. It may be assumed that the self-management procedures for both treatments were responsible for the maintenance and enhancement of the effects at follow-up (see Van Dam-Baggen & Kraaimaat, 1986).

What do these clinical results mean for the discussion of determining factors in social phobia? First, it should be noted that the present group CBT was shown to be effective in changing social anxiety and social skills in psychiatric patients with GSP. This result is in line with the literature (Scholing & Emmelkamp, 1993a, 1993b) and supports the cognitive conception of social phobia as underlined by Butler (1985) and Emmelkamp (1982). This finding is even more important in the light of the fact that behavioral techniques such as behavior rehearsal as well as explicit exposure instructions were excluded from the treatment. It should be noted, however, that the effects of exposure in the present CBT cannot be ruled out because participating in a group during the sessions implies a certain degree of exposure. In addition, results of this study show that group SST was more effective in diminishing social anxiety and increasing social skills than group CBT. It can be questioned, however, whether this effect can be attributed to results of SST itself, because at least part of the effect may also be attributed to exposure in vivo (Emmelkamp, Mersch, Visia, & Van der Helm, 1985; Scholing & Emmelkamp, 1993a, 1993b). To answer this question, it must be remembered that the present SST program focused on emotional, cognitive, and behavioral aspects of social anxiety. Several types of learning were combined because it is our contention that situational anxiety and social behavior are interwoven. Because many patients not only fear situations but are also afraid to exhibit social behavior, exposure should focus on situations *and* behavior. It should be noted that training and the practice of social skills include exposure to situations as a matter of course, whereas it cannot be assumed that exposure to situations enhances social skills.

Some of the strengths of our study were its focus on a heterogeneous sample of psychiatric patients with GSP admitted on broad-based inclusion criteria, the use of experienced licensed senior therapists, and clinical settings.

Also, this is to our knowledge the first study in which group SST was compared with group CBT without behavioral instructions. However, several limitations of our study should also be noted. Because treatments were given in clinical nonresearch settings, use of behavioral tests was not feasible, and self-report data indicative of social skill performance had to be used. Despite the fact that the IIS Frequency Scale was found to have high predictive validity for a set of relevant overt behaviors in previous research, our conclusion with respect to patients' acquisition of social skills in the present study is inferential. In addition, cognitive measures were not part of the dependent measures. It should be noted that the target of treatment was to change social anxiety and social skills. This means that only outcome measures designed to measure these target behaviors were used. Next, because both treatments were applied in groups, results cannot be generalized to SST and CBT in individual treatment format. In addition, the GSP diagnoses were either primary or secondary, and high comorbidity figures were found in both samples. However, the too small sample sizes prevent data analyses from exploring treatment effects of those with primary or secondary GSP diagnoses. Finally, use was made of a matching procedure. Although this procedure resulted in rather equivalent samples at pretest, our study should be considered an approximation of a randomized experiment (see Shadish & Ragsdale, 1996). With this in mind, as well as the limitation stated above that the participants in many controlled studies may represent only a small percentage of socially anxious patients seen in clinical practice, our conclusion is that comprehensive group SST may be the best way to treat social anxiety in a clinical setting among a psychiatric patient population with GSP in which comorbidity is the rule rather than the exception.

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