

Long-Term Outcome of Psychodynamic Therapy and Cognitive-Behavioral Therapy in Social Anxiety Disorder

Falk Leichsenring, D.Sc.

Simone Salzer, D.Sc.

Manfred E. Beutel, M.D.

Stephan Herpertz, M.D.

Wolfgang Hiller, Ph.D.

Juergen Hoyer, Ph.D.

Johannes Huesing, Dr.Rer.Medic.

Peter Joraschky, M.D.

Bjoern Nolting, M.D.

Karin Poehlmann, Ph.D.

Viktoria Ritter, D.Phil.Nat.

Ulrich Stangier, D.Sc.

Bernhard Strauss, Ph.D.

Susan Tefikow, Ph.D.

Tobias Teismann, Ph.D.

Ulrike Willutzki, Ph.D.

Joerg Wiltink, M.D.

Eric Leibing, D.Sc.

Objective: Relatively few studies have examined the long-term outcome of psychotherapy in social anxiety disorder. The authors previously reported findings of a clinical trial comparing cognitive-behavioral therapy (CBT), psychodynamic therapy, and a wait-list control. The purpose of the present study was to follow the participants' status over the ensuing 24 months.

Method: Outpatients with social anxiety disorder who were treated with CBT (N=209)

or psychodynamic therapy (N=207) in the previous trial were assessed 6, 12, and 24 months after the end of therapy. Primary outcome measures were rates of remission and response.

Results: For both CBT and psychodynamic therapy, response rates were approximately 70% by the 2-year follow-up. Remission rates were nearly 40% for both treatment conditions. Rates of response and remission were stable or tended to increase for both treatments over the 24-month follow-up period, and no significant differences were found between the treatment conditions after 6 months.

Conclusions: CBT and psychodynamic therapy were efficacious in treating social anxiety disorder, in both the short- and long-term, when patients showed continuous improvement. Although in the short-term, intention-to-treat analyses yielded some statistically significant but small differences in favor of CBT in several outcome measures, no differences in outcome were found in the long-term.

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Social anxiety disorder is one of the most prevalent mental disorders, with a lifetime prevalence of 12% and a 12-month prevalence of 7% (1). The disorder has an early onset and a chronic course and can result in severe psychosocial impairments and high socioeconomic costs (2, 3). Social anxiety disorder has secondary effects on other mental disorders (e.g., depression), social role functioning, and help-seeking (3). There is evidence from a large body of studies that cognitive-behavioral therapy (CBT) is beneficial for patients with social anxiety disorder (4, 5). Furthermore, a recent large-scale multicenter randomized controlled trial provided evidence that psychodynamic therapy is efficacious in the treatment of social anxiety disorder as well (6). However, the majority of studies of psychotherapy in social anxiety disorder have assessed only short-term outcome. For example, of the 29 randomized controlled trials examined in the most recent meta-analysis on social anxiety disorder, conducted by Acarturk et al. (5), only seven studies (24%) included follow-up

periods longer than 6 months, with only two studies including follow-up periods longer than 12 months (7, 8). The longest follow-up period applied was 18 months (7).

The Social Phobia Psychotherapy Network was established in order to address some of these limitations (9). The Social Phobia Psychotherapy Network encompasses several interrelated studies of different aspects of social anxiety disorder, including psychotherapy, genetics, neural deviations, and health economics (9). The Social Phobia Psychotherapy Network Study A1 is a large, multicenter randomized controlled trial comparing CBT and psychodynamic therapy in the treatment of social anxiety disorder. Recently, we reported results for short-term outcome (6). In our previous study, both CBT and psychodynamic therapy proved to be superior to a wait-list control with regard to remission and response. There were statistically significant differences in favor of CBT with regard to remission but not response. Between-group effect sizes for remission

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(Cohen's $h=0.22$) and response (Cohen's $h=0.16$) were small and below the a priori-defined threshold of clinical significance (Cohen's $h=0.30$) (6). Secondary outcomes showed significant differences in favor of CBT with regard to measures of social phobia and interpersonal problems but not depression. Again, all differences in terms of between-group effect sizes were small (Cohen's $h=0.18-0.33$) (6).

In order to examine the long-term effects of the treatments, additional follow-up assessments were carried out at 6, 12, and 24 months after treatment. These results are reported in the present study.

Method

Study Design and Implementation

The aim of this study was to examine the long-term effects of both CBT and psychodynamic therapy. Patients were recruited from April 11, 2007 to April 29, 2009 by the outpatient clinics of the universities of Bochum, Dresden, Göttingen, Jena, and Mainz (in Germany) (6). One clinic at each of these five centers performed CBT, and another performed psychodynamic therapy. An investigator allegiance effect was controlled for by including experts of both CBT and psychodynamic therapy as local investigators at each center (see the Appendix in the data supplement accompanying the online version of this article) (6). The study protocol was approved by the responsible ethics committee and conducted in accordance with the guidelines for good clinical practice (www.ema.europa.eu/ema/). The study was monitored by the Coordination Center for Clinical Trials at Heidelberg (<http://www.klinikum.uni-heidelberg.de/KKS-Heidelberg.2411.0.html>), which is independent of the participating research centers (6, p. 760).

Study Participants

As described in our previous study, the following inclusion criteria were applied (6, p. 760): age range of 18–70 years; a diagnosis of social anxiety disorder according to the Structured Clinical Interview for DSM-IV Axis I and II Disorders (SCID-I and II) (10); a Liebowitz Social Anxiety Scale score >30 (11); and a primary diagnosis of social anxiety disorder according to the Anxiety Disorders Interview Schedule (12). Exclusion criteria were psychotic and acute substance-related disorders; cluster A and B personality disorders; prominent risk of self-harm; organic mental disorders; severe medical conditions; and concurrent psychotherapeutic or psychopharmacological treatment. Participants were required to provide informed consent before inclusion in the study.

Treatments

The treatments used have been described previously (6). The method of CBT applied was based on the model by Clark and Wells (13). We used the German manual by Stangier et al. (14) (also see reference 15). The method for psychodynamic therapy was based on Luborsky's model (16), which was specifically adapted to treat social anxiety disorder (17).

In both CBT and psychodynamic therapy, up to 25 individual (50-minute) treatment sessions were applied. Additionally, up to five preparatory sessions were conducted, which are required in the German health care system. The mean (standard deviation) number of sessions completed was 25.84 (SD=9.13) for CBT and 25.67 (SD=9.61) for psychodynamic therapy (6). The mean duration of treatment was 38.69 weeks (SD=16.03) for CBT and 37.40 weeks (SD=18.03) for psychodynamic therapy (6, 18).

Therapists

All therapists had completed their psychotherapeutic training or were receiving advanced psychotherapeutic training. Fifty-five

cognitive-behavioral therapists conducted CBT (female, $N=37$), and 53 psychodynamic therapists conducted psychodynamic therapy (female, $N=30$). None of the therapists conducted both CBT and psychodynamic therapy. Therapists were specifically trained and closely supervised, and treatment fidelity was ensured (6). Differences between cognitive and psychodynamic therapists with regard to general clinical experience, experience in manualized therapy, and experience with the specific treatment manual were statistically controlled for and did not affect treatment outcome (6).

Assessment and Masking

Assessments were conducted at baseline, at weeks 8 and 15 of treatment, and posttreatment and again at 6, 12, and 24 months after the end of treatment (6, p. 761). Diagnoses were made using SCID I and II (10). The primary (i.e., most severe) mental disorder was assessed using the Anxiety Disorders Interview Schedule. Twenty-three specifically trained and independent assessors (clinical psychologists) masked to the treatment conditions conducted the interviews. High interrater reliability was shown for the Liebowitz Social Anxiety Scale total score, which was used to assess the primary outcomes, defined by rates of remission and response (6). Following recommendations by Liebowitz et al., remission was defined as a score ≤ 30 (11, 19). Response was defined by a 31% reduction (or more) in the total score on this scale, which has been shown to be comparable to a global improvement rating ≤ 2 on the Clinical Global Impressions Scale usually used to define response (20). The Social Phobia and Anxiety Inventory, the Beck Depression Inventory, and the Inventory of Interpersonal Problems (21–23) are well-established self-report instruments applied as secondary outcome measures.

Randomization

Randomization was carried out according to randomization lists that were computer generated by and kept at the Coordination Center for Clinical Trials Heidelberg, which served as a central randomization unit disclosing the allocation after each patient was registered in the study (6).

Statistical Analyses

Procedures for statistical analysis and power analysis were described in our previous study (6, p. 761). We expected the difference in response rates for CBT compared with psychodynamic therapy to be 70% compared with 55%. A difference of 15% corresponds to an effect size of 0.30 (24), which we defined a priori as clinically meaningful. Our study was designed to detect a difference of 15% (Cohen's $h=0.30$), with a power of 0.80. We determined that at least 174 patients were required in each active treatment arm when using two-tailed tests with an alpha set at 0.05 (25). The data were analyzed using SAS 9.3 software (SAS Institute, Cary, N.C.). For the analysis of response and remission during the follow-up periods, mixed-effects logistic regression models from posttreatment over 6 months, 12 months, and 24 months were used. Specifically, a multilevel mixed regression model, with therapist and patient as nested random effects and with site, baseline Liebowitz Social Anxiety Scale score, time point, and treatment condition as fixed effects, was fitted to the dichotomous measures of response and remission. Linear contrasts were estimated for changes in scores over time within each treatment condition and for treatment effects at single time points. Contrasts were transformed to odds ratios for reporting. For secondary measures, mixed-effects linear models were applied with the same covariates used for the response and remission models, except for the baseline scores on the scales in lieu of the Liebowitz Social Anxiety Scale.

In order to analyze remission and response at any point in time, an alpha set at 0.05 was adopted (6, p. 761). For comparison of CBT and psychodynamic therapy with regard to the secondary

(dimensional) outcome measures, the alpha value was adjusted for multiple comparisons ($\alpha=0.01, 0.05/4$). For categorical data, between-group differences were assessed using Cohen's h ; for dimensional data, Cohen's d was used, with the d value based on mixed-model analysis adjusted means (24). For intention-to-treat analysis, we applied multiple imputation by chained equations to account for the uncertainty resulting from missing outcomes (26, 27). Multiple imputation is superior to the last-observation-carried-forward procedure for several reasons. First, multiple imputation adequately incorporates the uncertainty arising from missing data and introduces additional variance, leading to larger standard errors. Furthermore, under the assumption of missing at random, multiple imputation yields unbiased and more accurate results than the last-observation-carried-forward procedure (28). To generate conservative estimates, 50 imputations were created, and all available variables were included in the imputation process. For the present study, data for the follow-up assessments were included in the multiple imputation process. This may have led to minor deviations in the present results, when compared with those of our previous analysis, which included only baseline and posttherapy data (6). Additionally, analysis of patients who completed the study per protocol was performed. The per-protocol analysis included patients who participated in both the treatment and the study assessments in accordance with the study protocol.

Results

Patient Flow

Baseline demographic characteristics of the study participants by study center are summarized in Table 1. As reported in our previous study, 495 patients fulfilled the inclusion criteria and did not meet any exclusion criterion (Figure 1) (6). Initially, 209, 207, and 79 patients were randomly assigned to CBT, psychodynamic therapy, or a waiting list, respectively. Posttherapy and at the 6-, 12-, and 24-month follow-up assessments, 159, 142, 127, and 91 patients, respectively, completed the study in the CBT condition per protocol, and 149, 130, 108, and 68 patients, respectively, did so in the psychodynamic condition (Figure 1). According to the intention-to-treat principle, outcome data pertaining to individuals who dropped out of the study were estimated by multiple imputation using the same procedures that were used for the short-term outcome (6). In order to be able to attribute the observed effects to the applied treatments of CBT or psychodynamic therapy, patients who received intercurrent treatments during the follow-up period were considered to have dropped out, which is consistent with the study protocol. Data for other patients who dropped out were estimated by multiple imputation.

Intercurrent treatments. Of the 233 patients for whom 6-month data were available, 11% (15/141) in the CBT group and 17% (22/129) in the psychodynamic therapy group received psychotherapy and/or pharmacotherapy. This was also true for 7% (8/113) of patients receiving CBT and 11% (9/85) of patients receiving psychodynamic therapy during the 12-month follow-up assessment period, as well as for 10% (8/77) of CBT patients and 13% (6/45) of

psychodynamic therapy patients during the 24-month follow-up period. Thirty-two patients (16 patients in both treatment conditions) were treated with antidepressive or anxiolytic pharmacotherapy during the follow-up period, with no differences between treatments. Twenty-two of the CBT patients and 39 of the psychodynamic therapy patients received psychotherapy during the follow-up period.

Outcome

The key outcome data for CBT and psychodynamic therapy are presented in Table 2. Response rates for the CBT group immediately after the end of treatment and 6, 12, and 24 months after therapy were 63%, 72%, 70%, and 69%, respectively (Figure 2). For the psychodynamic therapy group, the response rates immediately after the end of treatment and 6, 12, and 24 months after therapy were 58%, 65%, 64%, and 69%, respectively (Figure 2). Remission rates for the CBT group were 38%, 44%, 44%, and 39%, respectively (Figure 3). For the psychodynamic therapy group, remission rates were 28%, 37%, 37%, and 38%, respectively (Figure 3).

There was a general tendency of an increase over time in success rates for both CBT and psychodynamic therapy. However, when we adjusted the level of significance for multiple testing to protect against type-I error inflation ($0.008=0.05/6$ comparisons), changes did not achieve statistical significance. Thus, rates of response and remission can be regarded as stable over time for both treatment conditions.

For rates of remission, pairwise comparisons from a multilevel mixed logistic regression model including study center, baseline Liebowitz Social Anxiety Scale scores, and therapists as covariates showed that there were no significant differences between the treatment conditions at the 6-month (Cohen's $h=0.16$), 12-month (Cohen's $h=0.16$), and 24-month (Cohen's $h=0.01$) follow-up assessments (6-month: odds ratio=1.38, 95% confidence interval [CI]=0.80–2.39; 12-month: odds ratio=1.36, 95% CI=0.77–2.40; 24-month: odds ratio=1.03, 95% CI=0.57–1.85). This was also true for response rates (6-month: Cohen's $h=0.23$, odds ratio=1.48, 95% CI=0.86–2.56; 12-month: Cohen's $h=0.20$, odds ratio=1.42, 95% CI=0.80–2.53; 24-month: Cohen's $h=0.02$, odds ratio=1.04, 95% CI=0.54–1.98).

In order to examine whether estimating missing data by multiple imputation had an effect on the comparison of psychodynamic therapy and CBT with regard to remission and response, we included missing or not missing (0/1) as a covariate in an additional analysis. Whereas the per-protocol analysis takes into account only data for the per-protocol patients, this analysis includes both the per-protocol patients and the group of patients who dropped out with data that were estimated by multiple imputation. The analysis examines whether the comparison of CBT and psychodynamic therapy is affected by estimating missing data by multiple imputation. Results were corroborated

TABLE 1. Baseline Characteristics of Patients With Social Anxiety Disorder and Recruitment According to Study Center

Study Center and Characteristic	Cognitive-Behavioral Therapy Group (N=209)		Psychodynamic Therapy Group (N=207)		All Participants (N=495) ^a	
	N	%	N	%	N	%
University of Bochum	44	50.0	29	33.0	88	17.8
University of Göttingen	37	43.0	33	38.4	86	17.4
University of Dresden	45	41.3	46	42.2	109	22.0
University of Jena	40	36.7	52	47.7	109	22.0
University of Mainz	43	41.8	47	45.6	103	20.8
	Mean	SD	Mean	SD	Mean	SD
Age (years)	34.85	12.03	34.37	12.12	35.23	12.18
Female sex	113	54.1	111	53.7	270	54.6

^a Seventy-nine participants were randomly assigned to a waiting list.

for the three follow-up assessments, with no significant differences between CBT and psychodynamic therapy. Thus, estimating missing data by multiple imputation had no significant effect on the comparison of CBT and psychodynamic therapy.

Analysis for patients who completed the study per protocol corroborated the results, with somewhat higher rates of remission and response in both treatment conditions. For CBT, rates of remission immediately after the end of treatment and 6, 12, and 24 months after therapy were 42%, 54%, 58%, and 49%, respectively. For psychodynamic therapy, the rates were 30%, 44%, 49%, and 56%, respectively. For response, the corresponding rates for CBT were 66%, 79%, 78%, and 80%, respectively. The corresponding rates for psychodynamic therapy were 57%, 66%, 66%, and 81%, respectively.

With regard to continuous measures, there were no significant changes across the four times of assessment for CBT in the total score on the Liebowitz Social Anxiety Scale and in scores on the Beck Depression Inventory, the Inventory of Interpersonal Problems, and the Social Phobia and Anxiety Inventory. This result was also true for psychodynamic therapy with regard to the Liebowitz Social Anxiety Scale total score and ratings on the Beck Depression Inventory and Social Phobia and Anxiety Inventory. Again, the level of significance was adjusted to 0.0083. However, for interpersonal problems (Inventory of Interpersonal Problems), the psychodynamic therapy group achieved further significant improvements between postassessment and the 12-month follow-up ($p=0.008$, Cohen's $d=0.26$) and between postassessment and the 24-month follow-up ($p=0.004$, Cohen's $d=0.28$) and eventually showed the same level of interpersonal problems as the CBT group (Table 2).

Planned pairwise comparisons comparing follow-up data by linear effects models, including study center and baseline scores as fixed covariates and therapists and patients as nested random covariates, did not reveal significant differences between the treatment conditions with regard to any of the secondary outcome measures. This was true for the 6-month, 12-month, and 24-month assessments (Table 2). All between-group effects sizes were small (Cohen's $d=0.01-0.17$),

with proportions of variance explained by treatment condition below 1% (24, p. 22).

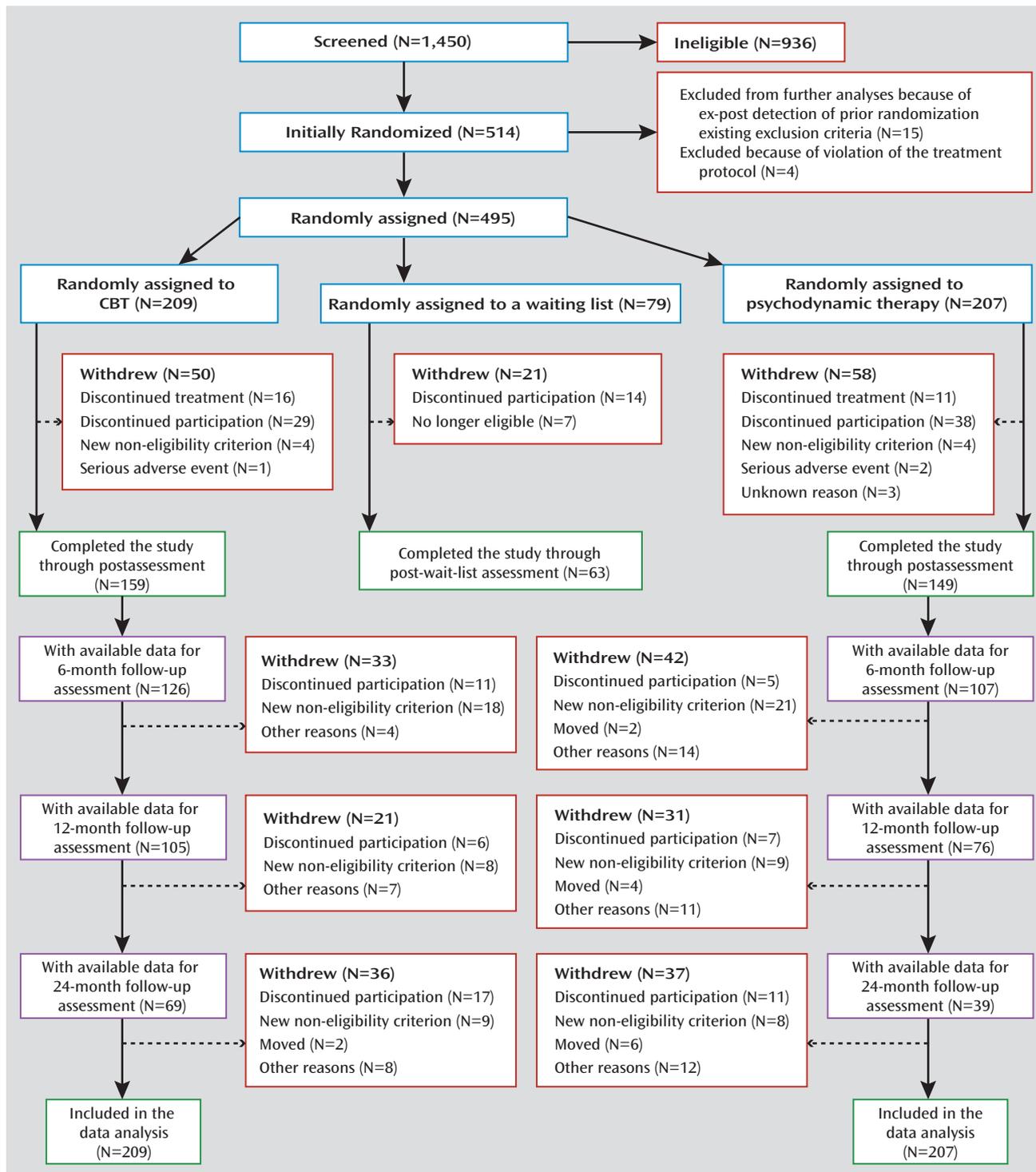
Discussion

In a multicenter randomized controlled trial, we examined both the short- and long-term outcome of psychodynamic therapy and CBT in social anxiety disorder. As previously reported, both treatment conditions were superior to a wait-list control in the short-term after treatment (6). Immediately following treatment, no statistically significant differences between CBT and psychodynamic therapy were found with regard to response and the reduction of depression (6). With regard to remission, there was a statistically significant but small difference in terms of between-group effect sizes in favor of CBT, which was below the a priori threshold for clinical significance. Furthermore, there were statistically significant differences in favor of CBT with regard to self-reported symptoms of social anxiety and interpersonal problems, which again were small in terms of between-group effect sizes.

At the 6-, 12-, and 24-month follow-up assessments after the end of treatment, no significant differences between the treatment conditions were found in response and remission or in secondary measures. Results of intention-to-treat analysis were corroborated by per-protocol analysis. At the follow-up assessments, the absolute differences in rates of remission and response between psychodynamic therapy and CBT were small. For remission, the rates ranged between 1% and 7%. For response, the rates ranged between 0% and 7%. In summary, four out of 24 comparisons carried out posttherapy or during the follow-up assessment period yielded statistically significant differences between treatments (17%). These results are consistent with a recent meta-analysis reporting psychodynamic therapy to be as efficacious as other established treatments in treating anxiety disorders (29).

Differences in success rates can be transformed into other measures of effect size or clinical significance. The significant difference in remission of 10% in favor of CBT that we found at the end of therapy corresponds to a

FIGURE 1. Enrollment and Study Flow of Patients With Social Anxiety Disorder Randomly Assigned to Cognitive-Behavioral Therapy (CBT), Psychodynamic Therapy, or a Waiting List^a



^a Some patients who were not available for a scheduled examination may have taken part in a later examination; therefore, the frequencies of (terminal) withdrawals may deviate from the difference between the available patients on two consecutive assessments.

number needed to treat of 10 (30, p. 992). For comparison, small, medium, and large effect sizes in terms of Cohen's *d* correspond to the numbers needed to treat of 8.89, 3.62, and 2.33 (30, p. 992). The larger the difference in effect size, the less patients have to be treated to achieve one more

treatment success. If one treatment is not successful at all and the other is successful in every case (100% difference in success rates), the number needed to treat is 1 (30). Another measure of clinical significance is provided by the area under the receiver operation characteristic curve indicating

TABLE 2. Outcomes for Patients With Social Anxiety Disorder Randomly Assigned to Cognitive-Behavioral Therapy (CBT) or Psychodynamic Therapy (Intention-to-Treat Sample)^a

Outcome, Assessment Scale, and Time of Evaluation	CBT Group (N=209)			Psychodynamic Therapy Group (N=207)		
	%		95% CI	%		95% CI
Remitted^b						
Posttherapy	38		30–45	28		21–35
Six-month follow-up	44		34–53	37		27–46
Twelve-month follow-up	44		32–55	37		25–48
Twenty-four-month follow-up	39		25–42	38		22–54
Responded^c						
Posttherapy	63		55–71	58		49–67
Six-month follow-up	72		62–81	65		55–75
Twelve-month follow-up	70		58–82	64		52–76
Twenty-four-month follow-up	69		53–84	69		54–84
	Mean	SD	95% CI	Mean	SD	95% CI
Liebowitz Social Anxiety Scale score^d						
Baseline	72.06	22.39	20.43–24.77	73.26	22.18	20.23–24.55
Posttherapy	41.43	35.00	36.65–46.21	46.70	36.84	41.64–51.76
Six-month follow-up	38.08	43.30	32.16–44.00	42.94	43.91	36.91–48.97
Twelve-month follow-up	38.28	54.10	30.88–45.67	42.69	58.09	34.71–50.67
Twenty-four-month follow-up	39.14	63.86	30.41–47.87	40.16	72.27	30.23–50.09
Social Phobia and Anxiety Inventory score^e						
Baseline	90.05	19.17	87.43–92.67	90.40	19.11	87.77–93.02
Posttherapy	64.48	31.55	60.16–68.79	73.18	28.68	69.24–77.12
Six-month follow-up	62.51	34.55	57.79–67.24	68.10	33.47	63.50–72.70
Twelve-month follow-up	63.52	35.88	58.61–68.42	67.28	39.16	61.90–72.66
Twenty-four-month follow-up	64.85	40.56	59.30–70.39	66.39	46.08	60.06–72.72
Beck Depression Inventory score^f						
Baseline	14.44	8.83	13.24–15.65	13.70	9.57	12.38–15.01
Posttherapy	8.27	8.35	7.13–9.41	9.80	9.35	8.51–11.08
Six-month follow-up	8.12	9.19	6.87–9.38	9.27	9.50	7.96–10.57
Twelve-month follow-up	8.20	9.34	6.93–9.48	8.82	9.16	7.57–10.08
Twenty-four-month follow-up	8.52	9.11	7.27–9.76	9.46	10.97	7.95–10.96
Inventory of Interpersonal Problems score^g						
Baseline	14.27	3.77	13.75–14.78	14.02	3.91	13.48–14.56
Posttherapy	10.94	5.36	10.21–11.67	12.29	5.56	11.53–13.06
Six-month follow-up	10.32	6.34	9.46–11.19	11.05	6.01	10.22–11.87
Twelve-month follow-up	10.21	6.21	9.36–11.06	10.82	6.35	9.95–11.69
Twenty-four-month follow-up	10.58	6.57	9.68–11.48	10.65	7.18	9.67–11.64

^a All analyses were performed with data from the intention-to-treat sample using multiple imputation.

^b Values represent the proportion of patients who remitted, defined as a score <30 on the Liebowitz Social Anxiety Scale.

^c Values represent the proportion of patients who had a response to therapy, defined as a reduction in the Liebowitz Social Anxiety Scale score by $\geq 31\%$.

^d Scores on the Liebowitz Social Anxiety Scale range from 0 to 144, with higher scores indicating greater pathology.

^e Scores on the Social Phobia and Anxiety Inventory range from 0 to 132, with higher scores indicating greater pathology.

^f Scores on the Beck Depression Inventory range from 0 to 63, with higher scores indicating greater pathology.

^g Scores on the Inventory of Interpersonal Problems range from 0 to 32, with higher scores indicating greater pathology.

the probability that a patient treated with treatment 1 achieves a better outcome than a patient treated with treatment 2 (30). A difference in remission rates of 10% indicates a probability of 0.55 that a patient treated with CBT achieves a higher remission rate at the end of treatment than a patient treated with psychodynamic therapy. By a probability of 0.5, equal efficacy is indicated. Accordingly, a strong recommendation of CBT over psychodynamic psychotherapy in the treatment of social anxiety disorder is not warranted (15), in particular if the results of the follow-up assessment period are taken into account. It is of note that the method of manual-guided psychodynamic therapy

for social anxiety disorder was only developed in 2007 (17) and tested for the first time in the present study. We will conduct further research to enhance the efficacy of the psychodynamic therapy approach in social anxiety disorder.

Rates of response and remission were stable and tended to increase in the long-term in both CBT and psychodynamic therapy. For psychodynamic therapy, improvements in interpersonal problems increased significantly during the follow-up period, suggesting that after the end of treatment, patients treated with psychodynamic therapy continued to work on their interpersonal problems. This result seems

FIGURE 2. Response Rates for Cognitive-Behavioral Therapy (CBT) and Psychodynamic Therapy in Patients With Social Anxiety Disorder

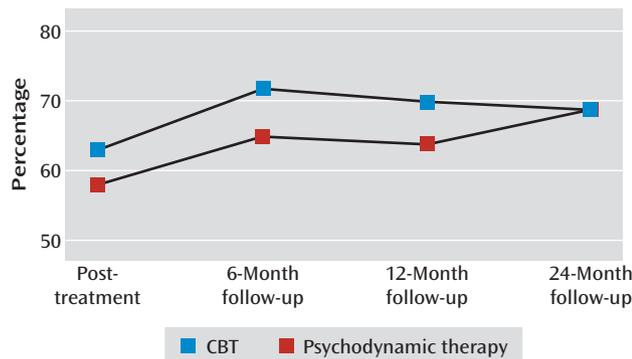
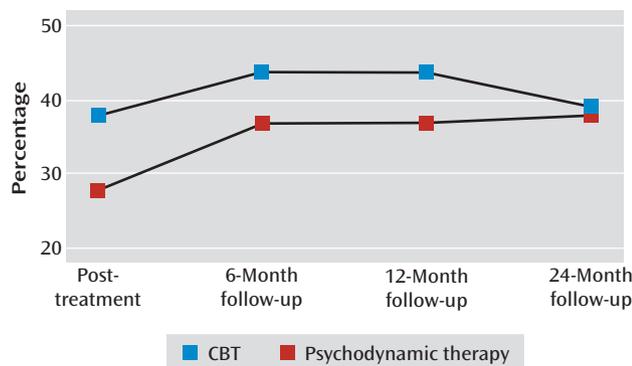


FIGURE 3. Remission Rates for Cognitive-Behavioral Therapy (CBT) and Psychodynamic Therapy in Patients With Social Anxiety Disorder



to demonstrate what Brom et al. (31) referred to as the “incubation effect.” Thus, CBT appears to improve interpersonal problems faster, whereas in psychodynamic therapy, improvements seem to take time to emerge following the end of therapy, but eventually the same level of interpersonal problems as in CBT is achieved.

A limitation of our study may be seen in the attenuation of the sample during the follow-up period. Because the data analysis was based on an intention-to-treat sample, no loss in statistical power was implied. However, the more data that are missing, the less accurate the estimates can be expected to be. Under the assumption of missing at random, multiple imputation yields unbiased and more accurate results than the last-observation-carried-forward procedure (28). Because multiple imputation leads to more conservative estimates than using only the existing values or the last-observation-carried-forward approach, we examined through additional analysis whether estimating missing data by multiple imputation affected the comparison of psychodynamic therapy and CBT. According to our analysis, this was not the case. Nevertheless, high rates of dropout represent a problem for any data analysis. There is no “right” answer to this problem. We chose a strategy for data analysis that seemed best under the given conditions. Nevertheless, reducing the dropout rate in long-term follow-up studies is desirable. In future

studies, measures should be taken to minimize dropout during the follow-up period (e.g., remaining in contact with the patients).

The small differences in outcome between CBT and psychodynamic therapy in the treatment of social anxiety disorder suggest that it may be useful to examine whether there are patients who benefit more in one treatment condition over the other. We will conduct further analyses to identify predictors of treatment outcome. As an advantage, the Social Phobia Psychotherapy Network Study is large enough to allow for such analyses. As noted above, the Social Phobia Psychotherapy Network Study is sufficiently powered to detect small differences between established treatments (32). There are several randomized controlled trials of psychodynamic therapy that are sufficiently powered to detect small or at least moderate differences (18, 33–39). A randomized controlled trial conducted by Bateman and Fonagy (39) examined mentalization-based therapy compared with a structured clinical management condition.

As shown by the rates of remission reported in the present study, there is still room for improvement. Patients who did not achieve remission may need a different form of treatment that is more specific, more intensive, or of longer duration. The research group of Abbas et al. (40, 41) presented treatments specifically tailored to treatment-resistant depressive and/or anxiety disorders. For the psychodynamic treatment of social anxiety disorder, implementing a specific treatment module for patients at risk of nonresponse has been suggested (42). The risk of nonresponse may also be reduced by using feedback from patient progress during treatment (43). Another approach suggests that outcome in both social anxiety disorder and anxiety disorders in general may be improved by integrating effective treatment components of empirically supported treatment approaches within a unified protocol. For CBT, several unified protocols for anxiety disorders are available (44). For psychodynamic therapy, a unified protocol for the transdiagnostic treatment of anxiety disorders was recently presented (45). Another psychodynamic protocol extends the treatment for panic disorder to the treatment of other anxiety disorders (46). The latter approach represents a transdiagnostic, but not unified, protocol, with evidence for panic disorder presently in the literature (47). These developments represent a promising approach for improving treatments not only for anxiety disorders but for other mental disorders as well. However, evidence that unified protocols are more efficacious than disorder-specific treatments has yet to be established. Thus, further research regarding such protocols is required.

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Psychosomatic Medicine and Psychotherapy, University Medicine, Georg-August University Göttingen, Göttingen, Germany; the Clinic of Psychosomatic Medicine and Psychotherapy, University Medical Center, Johannes Gutenberg University Mainz, Mainz, Germany; the Clinic of Psychosomatic Medicine and Psychotherapy, LWL-University Clinic Bochum, Bochum, Germany; the Ruhr University Bochum, Bochum, Germany; the Clinical Psychology and Psychotherapy, Johannes Gutenberg University Mainz, Mainz, Germany; the Clinical Psychology and Psychotherapy, Technical University Dresden, Dresden, Germany; the Coordination Center for Clinical Trials, University of Heidelberg, Heidelberg, Germany; the Clinic for Psychotherapy and Psychosomatic Medicine, Technical University Dresden, Dresden, Germany; the Clinical Psychology and Psychotherapy, Goethe University Frankfurt, Frankfurt, Germany; the Institute of Psychosocial Medicine and Psychotherapy, Jena University Hospital, Jena, Germany; the Clinical Psychology and Psychotherapy, Ruhr University Bochum, Bochum, Germany. Address correspondence to Dr. Leichsenring (Falk.Leichsenring@psycho.med.uni-giessen.de).

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Clinical Guidance: Outcomes of Dynamic Therapy and CBT in Social Anxiety

Long-term results of cognitive-behavioral therapy (CBT) and psychodynamic therapy are similar in patients with social anxiety disorder. Leichsenring et al. found no differences at 6, 12, or 24 months after the end of treatment. The remission rate for CBT was higher immediately after treatment (*Am J Psychiatry* 2013; 170:759–767), but patients in the dynamic therapy group continued to improve after the intervention. In an editorial, Clarkin (p. 1027) describes how the two therapies approach the same pathology, e.g., negative self-image, in different ways, and the review by Høglend (p. 1056) explores the patient-therapist relationship.