



COMPARATIVE EFFECTS OF SHORT-TERM PSYCHODYNAMIC PSYCHOTHERAPY AND COGNITIVE-BEHAVIORAL THERAPY IN DEPRESSION: A META-ANALYTIC APPROACH

Falk Leichsenring

University of Göttingen

ABSTRACT. *This article reviews the efficacy of short-term psychodynamic psychotherapy (STPP) in depression compared to cognitive-behavioral therapy (CBT) or behavioral therapy (BT). In this review, only studies in which at least 13 therapy sessions were performed have been included, and a sufficient number of patients per group were treated ($N \geq 20$). With regard to outcome criteria, the results were reviewed for improvements in depressive symptoms, general psychiatric symptoms, and social functioning. Six studies met the inclusion criteria. Results: In 58 of the 60 comparisons (97%) performed in the six studies and their follow-ups, no significant difference could be detected between STPP and CBT/BT concerning the effects in depressive symptoms, general psychiatric symptomatology, and social functioning. Furthermore, STPP and CBT/BT did not differ significantly with regard to the patients that were judged as remitted or improved. According to a meta-analytic procedure described by R. Rosenthal (1991) the studies do not differ significantly with regard to the patients that were judged as remitted or improved after treatment with STPP or CBT/BT. The mean difference between STPP and CBT/BT concerning the number of patients that were judged as remitted or improved corresponds to a small effect size (post-assessment: $\phi = 0.08$, follow-up assessment: $\phi = 0.12$). Thus, STPP and CBT/BT seem to be equally effective methods in the treatment of depression. However, because of the small number of studies which met the inclusion criteria, this result can only be preliminary. Furthermore, it applies only to the specific forms of STPP that were examined in the selected studies and cannot be generalized to other forms of STPP. Further studies are needed to examine the effects of specific forms of STPP in both controlled and naturalistic settings. Furthermore, there are findings indicating that 16–20 sessions of both STPP and CBT/BT are insufficient for most patients to achieve lasting remission. Future studies should address the effects of longer treatments of depression. © 2001 Elsevier Science Ltd.*

Correspondence should be addressed to Dr. Falk Leichsenring, University of Göttingen, Department of Psychosomatics and Psychotherapy, Von Sieboldstr. 5, D-37075 Göttingen, Germany.

KEY WORDS. Efficacy, Short-term psychodynamic psychotherapy, Cognitive-behavioral therapy, Depression.

VARIOUS META-ANALYSES HAVE recently addressed the efficacy of short-term psychodynamic psychotherapy (Crits-Christoph, 1992; Grawe, Donati, & Bernauer, 1994; Svartberg & Stiles, 1991). The meta-analyses of Svartberg and Stiles (1991) and Grawe et al. (1994) found cognitive-behavioral therapy (CBT) to be significantly more effective than short-term psychodynamic psychotherapy (STPP). According to Svartberg and Stiles (1991) this is especially true with regard to the treatment of major depression. However, the result of a meta-analysis depends significantly on the studies included: The meta-analysis of Svartberg and Stiles included only four studies, in which patients with major depression were treated. Furthermore, both the meta-analyses of Svartberg and Stiles, and of Grawe et al. included studies suffering from serious restrictions distorting the results of the meta-analyses (Leichsenring, 1996; Messer & Warren, 1995; Tschuschke & Kächele, 1996). The studies included by Svartberg and Stiles and by Grawe et al. overlap considerably: Almost 50% (8 of 19) of the studies included by Svartberg and Stiles were also included by Grawe et al. Results of Svartberg and Stiles and Grawe et al. are opposed to those of Crits-Christoph's (1992) meta-analysis, which used methodologically more rigorous inclusion criteria (e.g., specific forms of STPP as represented in a treatment manual or a minimum of 12 therapy sessions), and did not find significant differences between STPP and other forms of psychotherapy or medication. STPP demonstrated large effects compared to untreated control groups (Crits-Christoph, 1992). The Crits-Christoph meta-analysis did not evaluate efficacy of STPP in specific disorders. To demonstrate that STPP is effective, and as effective as other forms of treatment is quite unspecific. More specific questions still remain open, especially which forms of STPP of which duration lead to which effects in which diagnostic groups (Ursano & Hales, 1986).

This review aims to contribute answers to some of these questions. It addresses the efficacy of STPP in DSMIII major depression (Diagnostic and Statistical Manual of Mental Disorders, DSMIII, American Psychiatric Association, 1980, 1983) and especially the comparative efficacy of STPP and CBT/BT. Comparisons with a rival treatment provide the most stringent test of efficacy, because they not only control for common factors, but also involve tests between rival specific mechanisms (Chambless & Hollon, 1998). The aim of this review is to assess the effects of STPP on specific outcome measures: As in the Crits-Christoph (1992) meta-analysis, target symptoms (depression), general level of psychiatric symptoms, and social functioning were chosen as outcome criteria. Thus, outcome criteria go beyond the assessment of symptoms and include more general measures of functioning, which is consistent with Chambless and Hollon (1998) and their discussion of empirically supported treatments. This review is the first attempt to assess the efficacy of STPP compared to CBT/BT in a specific psychiatric disorder.

METHODS: SELECTION OF THE STUDIES

Search for Studies

In addition to the usual search for studies via reviews, meta-analyses, and textbooks, a computerized search was carried out using Medline and PsycLIT with the following

key words: Depression, psychotherapy, psychodynamic/psychoanalytic, study. The search was carried out for the following periods: 1966–12/1998 (Medline) and 1977–12/1998 (PsycLIT). Fifteen articles were identified describing empirical results of STPP compared to CBT and/or BT in depression (Barkham et al., 1996; Covi & Lipman, 1987; Elkin et al., 1989; Gallagher & Thompson, 1982; Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990; Gallagher-Thompson & Steffen, 1994; Hersen, Himmelhoch, & Thase, 1984; Kornblith, Rehm, O'Hara, & Lamparski, 1983; McLean & Hakstian, 1979, 1990; Shapiro et al., 1994; Shapiro, Rees, Barkham, & Hardy, 1995; Shea et al., 1992; Steuer et al., 1984; Thompson, Gallagher, & Steinmetz-Breckenridge, 1987). These 15 articles include 4 follow-up (FU) studies published in separate articles (Gallagher-Thompson et al., 1990; McLean & Hakstian, 1990; Shapiro et al., 1995; Shea et al., 1992;). Thus, 11 independent studies were identified. In these studies STPP was used as a label that included different concepts of brief psychodynamic therapy. This is also true for CBT/BT. Reviews of the different forms of STPP are given by Ursano and Hales (1986) and Messer and Warren (1995). The interpersonal therapy of Klerman, Weissman, Rounsaville, & Chevron (1984), applied in the National Institutes of Mental Health (NIMH) study of depression (Elkin et al., 1989), was included in this review as a form of psychodynamic therapy because the NIMH Treatment of Depression Collaborative Research Program (Elkin, Parloff, Hadley, & Autry, 1985, p. 307) identified the interpersonal therapy within the psychodynamic domain and contrasted it to CBT. Furthermore, only therapists who had psychodynamic training were selected to perform the interpersonal therapies in that study. Thus, Elkin et al. (1989, p. 978) concluded: "...it is impossible in this study to separate treatments from the therapists carrying out these treatments." For this reason also, Crits-Christoph (1992) included the interpersonal therapy in his meta-analysis of STPP.¹

Inclusion Criteria

Dose. According to the results of Howard, Kopta, Krause, and Orlinsky (1986, p. 163), 53% of the depressive patients had improved after 8 sessions, and 60% of the depressive patients had improved after 13 sessions. However, "improvement" does not mean that these patients achieved maximum benefits (Howard et al., 1986, p. 163) or returned to normal functioning (Kopta, Howard, Lowry, & Beutler, 1994). After 20 sessions, not more than 65% of the depressive patients had improved (Howard et al., 1986, pp. 160, 163). According to these results, all studies in which less than 13 sessions of STPP were carried out in the treatment of depressives, can be regarded as questionable. However, the criterion of 13 sessions of STPP is a minimum threshold rather than an optimal one. Studies in which less than 13 sessions were carried out were excluded from further evaluation. Of the 11 studies identified and mentioned above, this applies to the studies of McLean and Hakstian (1979, 1990; 10 sessions), Covi and Lipman (1987), and to certain aspects of the studies of Shapiro et al. (1994, 1995) and Barkham et al. (1996). For this reason, the studies of McLean and Hakstian (1979, 1990) were excluded from this review. In the studies of Shapiro et al. (1994, 1995) and Barkham et al. (1996), both 8 and 16 sessions of STPP were carried out and compared to 8 and/or 16 CBT sessions. In this review, only the results of the 16-session conditions

¹As some researchers may not agree including interpersonal therapy as a form of STPP, results were also assessed separately excluding interpersonal therapy.

of these studies were included. In the study of Covi and Lipman (1987) it is not clear from the data reported how many patients really completed the different treatments. In the "end point sample," whose results were reported, patients who had completed only 5 sessions of (group) therapy (Covi & Lipman, 1987, p. 175) were included. Consequently, the study of Covi and Lipman was excluded from this review.²

Sample size. In order to control for type I and type II error (Cohen, 1988; Kazdin & Bass, 1989), and to ensure that equivalent groups were constructed by randomization (Hsu, 1989; Kazdin, 1994) only studies with sufficiently large samples were included in this review: In order to detect a medium effect size of $d = 0.65$ in a comparison of STPP and CBT/BT with a power of $1 - \beta = 0.80$ at a liberal criterion of $\alpha = 0.10$ in a one-tailed test, $N = 23$ patients per group are necessary (Cohen, 1988, p. 54). According to Hsu (1989, p. 133), the probability to attain equivalent groups by randomization is relatively high in a two-group comparison only if at least 20 subjects per group are examined. This is true, however, only if the number of nuisance variables is small. For these reasons, studies with considerably less than $N = 20$ patients per treatment group were excluded from this review. This criterion is less stringent than the one set by Chambless and Hollon (1998), with $N = 25-30$ per condition. Again, a minimum threshold rather than an optimal one was set for this review.

Applying this criterion to the studies selected, the studies of Gallagher and Thompson (1982; $N_1 = 10$, $N_2 = 10$, $N_3 = 10$), Steuer et al. (1984; $N_1 = 10$, $N_2 = 10$ completers), and Kornblith et al. (1983; $N_1 = 5$, $N_2 = 11$, $N_3 = 12$, $N_4 = 11$) were excluded from this review. Thus, 6 (of 11) independent studies remain, of which all but one (Hersen et al., 1984) were complemented by follow-ups. In the study of Hersen et al. STPP and BT were followed by a maintenance treatment. However, as only $N = 15$ patients were included for STPP maintenance treatment, the data of the maintenance treatment was not included in this review. This review is based on these six studies, which meet stringent criteria for methodological rigor (Table 1) It is worthy noting that effectiveness studies are not necessarily excluded by these criteria. However, no effectiveness studies comparing CBT/BT and STPP in depression were identified in the search for studies. This is also true for studies of STPP and CBT in which they were combined with antidepressant medication. On the other hand, the meta-analysis of Wexler and Cicchetti (1992) indicated that combined treatment offers no advantage over only psychotherapy or pharmacotherapy.

The six studies mentioned above were reviewed with regard to the diagnostic criteria applied, patient population, duration of depression, concept of STPP and CBT/BT, number of sessions, comparison groups, and results (Table 1). These six studies meet the following criteria set by Chambless and Hollon (1998) to define empirically supported therapies: comparison with rival treatment (or no treatment), clear sample description, assessing outcome beyond symptoms, inclusion of follow-up studies (except for Hersen et al., 1984), the use of treatment manuals (except for Hersen et al.), training of therapists, monitoring procedures, ascertaining adherence and/or competence, and assessment of clinical significance.

Patient population. In the six studies included in this review, it was exclusively outpatients who were treated for depression. Except for the study of Hersen et al. (1984),

²Furthermore, the manual developed for STPP has not been published, no concept of STPP was specified and treatment integrity was not demonstrated (Covi & Lipman, 1987).

patients were treated who were diagnosed as having a Major Depressive Disorder (MDD) according to Research Diagnostic Criteria (RDC; Spitzer, Endicott & Robins, 1978) or the *Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM-III;* American Psychiatric Association, 1980, 1983). The majority of the patients were female and the mean age was between 30 and 40 years, except for the studies of explicitly older patients (Gallagher-Thompson & Steffen, 1994; Thompson et al., 1987). Information about comorbidity was not given in all studies. In the Shapiro et al. (1994) and Barkham et al. (1996) studies, 83% and 75% of the patients, respectively, were diagnosed as having a generalized anxiety disorder and/or panic disorder in addition to MDD. Contrary to this, panic disorders were excluded from the sample of the NIMH study of depression (Elkin et al., 1989, S. 872). In 74% of the NIMH sample, a personality disorder according to *DSM-III* was diagnosed (Shea et al., 1990).

The total number of patients treated in the six studies included in this review with either STPP or CBT/BT is $N = 416$. In each of the six studies the patients were randomly assigned to the treatment conditions.

Applied forms of STPP and CBT/BT. In the six studies included in this review STPP according to Horowitz and Kaltreider (1979), Mann (1973), Rose and DelMaestro (1990), Shapiro and Firth (1985), and interpersonal therapy according to Klerman et al. (1984) were applied (Table 1). Apart from conceptual and technical differences (e.g., Messer & Warren, 1995), there are some therapeutic elements these forms of (STP) psychotherapy have in common: With regard to formal characteristics, they are time-limited (usually 16–20 sessions), performed in a face-to-face setting, with one or two sessions a week. The therapeutic techniques are elaborations and modifications of general principles of psychodynamic psychotherapy. Contrary to CBT and BT, they do not include cognitive or behavioral interventions aimed to reduce the depressive symptomatology directly, such as challenging dysfunctional thoughts or increasing daily pleasant events. In these forms of STPP, therapists foster the development of a therapeutic alliance and a positive transference. With regard to transference, the emphasis is more on the here-and-now dimension of transference. The forms of STPP discussed here focus on specific conflicts or themes. The focus is on the patients' experiences here and now, including their symptoms, though some forms also include historical explorations and working through preexisting conflicts (Horowitz & Kaltreider, 1979; Mann, 1973; Rose & DelMaestro, 1990). One major focus is on the interpersonal conflicts connected with depression, respectively on the intrapsychic representations of these conflicts. In most of these forms of STPP these conflicts are worked through in the therapist-patient relationship (Horowitz & Kaltreider, 1979; Mann, 1973; Rose & DelMaestro, 1990). Corrective emotional experience is regarded as an important factor of change.

With regard to CBT, the most frequently applied form of therapy was CBT, according to Beck, Rush, Shaw, and Emery (1979). Shapiro et al. (1994) and Barkham et al. (1996) used a form of CBT which was described by the authors as more behaviorally oriented than CBT according to Beck (Shapiro et al., 1994, p. 535). In two studies, behavior therapy (BT) according to Lewinsohn (1974) was used (Table 1) Hersen et al. (1984) used a "social skill training." In the studies with older depressive patients, specific concepts for older patients (Gallagher & Thompson, 1981) were applied in addition to CBT according to Beck et al. (1979), and BT according to Lewinsohn et al. (1974; Table 1).

Therapy integrity. In all but one study (Hersen et al., 1984) STPP and CBT/BT were applied according to treatment manuals or manual-like guides, and/or it was demon-

TABLE 1. Studies Comparing the Effects of STPP and CBT in the Treatment of Depression

Studies	Diagnosis	Population	Duration of depression	Concept of STPP/ BT/CBT	Sessions	Comparison	Patients improved (%)	Comparison STPP vs CBT
Hersen, Himmelhoch & Thase, 1984	Feighner Raskin ≥ 7	Outpatients 100% women mean age: 30.4 Randomization STPP: $N = 22$ CBT: $N = 25$ Amitriptyline: $N = 14$ CBT+ Amitriptyline: $N = 21$	4.2 years	STPP: no information BT: Social Skill Training	12 +6–8 maintenance treatment	STPP + Placebo, Social Skill + Placebo, Amitriptyline, Social Skill + Amitriptyline	BDI + HRSD ≤ 10 : Post: STPP: 45 BT: 64 Amitriptyline: 43 6MFU: ^a STPP: 60 BT: 67 Amitriptyline: 58 = n^b	6MFU: STPP = CBT 7/7 Measures
Thompson, Gallagher & Steinmetz-Breckenridge, 1987	RDC-MDD BDI ≥ 17 HRSD ≥ 14	Outpatients 67% women mean age: 67 Randomization STPP: $N = 24$ CBT: $N = 27$ BT: $N = 25$	67% ≥ 1 year	STPP: Horowitz & Kaltreider CBT: Beck BT: Lewinsohn Gallagher & Thompson	16–20	STPP, BT, CBT	Post: SADS: BT = 80 CBT = 62 STPP = 70 = n^b	STPP = BT = CBT 18/18 Measures
Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990	"	IYFU, 2YFU ^c sample of Thompson et al., 1987	"	"	"	STPP, BT, CBT	IYFU: SADS ^d BT = 65 CBT = 79 STPP = 76 2YFU: BT = 71 CBT = 81 STPP = 83 = n^b	STPP = CBT = BT 2/2 Measures: 1YFU, 2YFU (% SADS)

Elkin et al., 1989	RDC-MDD HRSD ≥ 14	Outpatients 70% women mean age: 35 Randomization IPT ^c : $N = 47$ CBT: $N = 37$ Imipramine: $N = 37$ Placebo: $N = 34$	41%: ≤ 6 months 24%: 6 months- 1 year 35%: > 1 year	IPT: Klerman, Weissmann CBT: Beck.	16-20	IPT, CBT, Imipramine + CM, Placebo + CM ^f	HRSD $\leq 6^g$ IPT: 55 CBT: 51 IMI + CM: 57 BDI ≤ 9 IPT: 70 CBT: 65 IMI + CM: 69 = ns^b	IPT = CBT = IMI + CM: 4/4 Measures
Shea et al., 1992	"	18-month-FU of Elkin et al., 1989	"	"	"	"	MDD-RDC: IPT = 26 CBT = 30 IMI + CM = 19 = ns^b	IPT = CBT = IMI + CM 1/1 Measure (% MDD-RDC)
Shapiro et al., 1994	DSM-III-MDD PSE ≥ 5 BDI ≥ 16	Outpatients 52% women mean age: 41 Randomization STPP: $N = 58$ CBT: $N = 59$	≤ 2 years	STPP: Hobson, Shapiro & Firth CBT: Shapiro & Firth	8 vs. 16	STPP, CBT	16 Sessions Post: BDI ≤ 8 : STPP = 54 CBT = 60 = ns^h	16 Sessions STPP = CBT 6/6 Measures
Shapiro, Rees, Barkham, & Hardy, 1995	"	1 YFU of Shapiro et al. 1994	"	"	"	"	16 Sessions 1 YFU: BDI ≤ 8 : STPP = 54 CBT = 73 = ns^i	STPP = CBT 5/5 Measures

(continued)

TABLE 1. Continued

Studies	Diagnosis	Population	Duration of depression	Concept of STPP/ BT/CBT	Sessions	Comparison	Patients improved (%)	Comparison STPP vs CBT
Gallagher-Thompson & Steffen, 1994	RDC: 68% major depression 30% minor, 2% intermittent BDI \geq 10	Family caregivers 92% women mean age: 62 Randomization STPP: $N = 30$ CBT = $N = 36$?	STPP: Mann, Rose & DelMaestro CBT: Beck BT: Lewinsohn, Gallagher & Thompson	16–20	STPP, CBT, BT	Post: SADS: ^j STPP = 67 CBT = 87 3MFU: SADS: STPP = 65 CBT = 85 = ns^b	Post, 3 MFU: STPP = CBT % BDI, % HRSD % SADS-MDD
Barkham et al., 1996	DSM-III-MDD PSE \geq 5	Outpatients 67% women mean age: 39 Randomization STPP: $N = 18$ CBT: $N = 18$	\leq 2 years	STPP: Hobson, Shapiro & Firth CBT: Shapiro & Firth	8 vs. 16	STPP, CBT	No information	STPP = CBT 11/12 (12 = 4 measures \times 3 times: Post, 3 MFU, 1 YFU) Post: IIP: STPP < CBT 3MFU, 1YFU: IIP: STPP = CBT

STPP = short-term psycho dynamic psychotherapy; CBT = cognitive behavioral therapy; BT = behavioral therapy; BDI = Beck Depression Inventory; HRSD = Hamilton Rating Scale for Depression; RDC = Research Diagnostic Criteria; MDD = Major Depressive Disorder; PSE = Present State Examination.

^a6MFU = 6-month follow-up.

^b ns = not significant according to the authors of the study.

^c1YFU = 1-year follow-up, 2YFU: 2-year follow-up.

^dSADS = Schedule for Affective Disorders and Schizophrenia (Endicott & Spitzer, 1978). Percentages were calculated by the author (FL) from Table 1, p. 372 of Gallagher-Thompson et al. (1990). Tests of significance according to Gallagher-Thompson et al. (1990, p. 372).

^eIPT = interpersonal psychotherapy.

^fCM = Clinical Management; IMI + CM: Imipramine + Clinical Management.

^gResults of the patients who completed the treatment ("Completers").

^hCalculation of the author (FL) from Table 4, p. 383 of Shapiro et al. (1995).

ⁱCalculation of the author (FL) from Table 4, p. 383 of Shapiro et al. (1995).

^jCalculation of percentages of the author (FL) from Table 1, p. 545 Gallagher-Thompson & Steffen (1994). Tests of significance by Gallagher-Thompson & Steffen (1994, p. 545).

strated that the therapies were carried out in accord with the theoretical concepts or manuals. Various measures were carried out to ascertain therapy integrity, that is, training of therapists, supervision of therapy sessions, assessment of therapy adherence, or competence.

RESULTS

This review is based on the results reported by the authors of the original studies, unless otherwise stated. The results of the studies were reviewed with regard to three aspects: statistically significant effects, effect sizes, and clinical significance (percentages of patients remitted or improved).

Statistically Significant Effects

Depressive symptoms. Five of the six studies provide information about statistically significant reductions of depressive symptoms after STPP (Barkham et al., 1996; Elkin et al., 1989; Hersen et al., 1984; Shapiro et al., 1994; Thompson et al., 1987). All five studies reported statistically significant reductions of depressive symptoms at the end of STPP. Follow-ups were carried out in all of the five studies. In these five studies the length of the follow-up phase was between 6 months (Hersen et al., 1984) and 2 years (Gallagher-Thompson et al., 1990). With the exception of the NIMH follow-up (Shea et al., 1992), a stable reduction of the depressive symptoms after STPP was reported (Barkham et al., 1996; Gallagher-Thompson et al., 1990; Hersen et al., 1984; Shapiro et al., 1995). In these studies the following instruments were used to assess depression: Beck Depression Inventory (BDI), Hamilton Rating Scale for Depression (HRSD), Raskin Eligibility Scale, Lubin Depression Adjective Check List, Geriatric Depression Scale (GDS), Brief Symptom Inventory-Depression (BSI-D), Symptom-Check-List SCL-90-Depression (SCL-90-D), Research Diagnostic Criteria (RDC), and the Longitudinal Interview Follow-up Evaluation (LIFE).³

General level of psychiatric symptoms. In all six studies, further psychiatric symptoms were examined in addition to the depressive symptoms. In five of these studies, global symptom indicators were used, for example, the total scores of the Hopkins-Symptom-Check-List, of the SCL-90-R, or of the Brief Psychiatric Rating Scale (Barkham et al., 1996; Elkin et al., 1989; Hersen et al., 1984; Shapiro et al., 1994; Thompson et al., 1987). In some studies specific symptoms were also examined, such as anxiety (Thompson et al.), neuroticism (Hersen et al.), and self-esteem or interpersonal problems (Shapiro et al., Barkham et al.). In all studies mentioned a significant reduction of general psychiatric symptoms and, as far as examined, of specific symptoms could be demonstrated in depressive patients after STPP (Barkham et al., Elkin et al., Hersen et al., Shapiro et al., Thompson et al.). Where these effects were examined in follow-ups, they proved to be stable (Barkham et al., Hersen et al., Shapiro et al.).

Social functioning. In three of the six studies, changes in the social functioning of depressive patients were examined. (Elkin et al., 1989; Shapiro et al., 1994; Thompson et al., 1987). In all three studies, a significant improvement in the social functioning of

³With regard to the references of diagnostic instruments, please refer to the original studies.

depressive patients after STPP could be demonstrated. The Global Assessment Scale and the Social Adjustment Scale were used in these studies to assess social functioning.

Effect sizes. Only three of the selected studies provide the data necessary to calculate effect sizes in the form of Cohen's (1988, p. 62) d statistic (Hersen et al., 1984; Shapiro et al., 1994; Thompson et al., 1987). On the basis of data published by Hersen et al. (1984, p. 30), Thompson et al. (1987, p. 388) and Shapiro et al. (1994, pp. 533–534), I assessed effect sizes separately for each instrument used in the two studies. Effect sizes were calculated according to Cohen (1988, p. 62) as pre- minus post-assessment, or follow-up assessment means divided by the pooled standard deviation of all groups before therapy (Shapiro et al., 1994, p. 525).⁴ For the Hersen study, effect sizes were calculated only for the initial treatment, because, as mentioned above, the sample size of the STPP group at the end of maintenance treatment was only $N = 15$. In the Shapiro et al. study only the 16-session condition meets the criterion of at least 13 sessions, and effect sizes were calculated only for this condition. Results: In the Hersen et al. study STPP yielded (pre-post) effect sizes between 0.94 (Lubin Depression Adjective Checklist) and 2.44 (BDI; HRSD: 2.18) for the depressive symptoms. For general psychiatric symptoms, STPP yielded an effect size of 1.71 (Hopkins-Symptom-Check-List). For Neuroticism (Eysenck Personality Inventory) the effect size was 0.79. In the Thompson et al. study, STPP yielded (pre-post) effect sizes between 0.90 (BSI-Depression) and 2.49 (HRSD) for the depressive symptoms.⁵ For general psychiatric symptoms STPP yielded effect sizes between 1.09 (BSI-Global-Severity) and 1.29 (BPRS). For anxiety (BSI-Anxiety) the effect sizes were 0.89 for STPP. For social functioning, STPP yielded effect sizes between 0.65 (SAS) and 1.88 (GAS). The effect sizes reported by Thompson et al. clearly exceed those of the delayed controls (HRSD: 0.09, BSI-Depression: 0.10, BSI-Global-Severity: 0.12, BSI-Anxiety: 0.03). In the Shapiro et al. study, STPP yielded pre-post effect sizes between 2.02 (SCL-90-R-Depression) and 2.80 (BDI) for the depressive symptoms (3 months follow-up: 2.23 and 2.55).⁶ With regard to general psychiatric symptoms STPP yielded pre-post effect sizes between 1.75 (SCL-90-R-GSI) and 2.65 (Present State Examination; 3 months follow-up: SCL-90-R-GSI: 1.70). With regard to social functioning (Social Adjustment Scale), STPP yielded a pre-post effect size of 1.55 (3 months follow-up: 1.69). For interpersonal problems (IIP-total) and self-esteem (Rosenberg Self-Esteem) the effect sizes of STPP were 1.29 and 1.33 (3 months follow-up: 1.50 and 1.40). Most of the effect sizes yielded by STPP are large, according to Cohen (1988).

If the effect sizes of the Hersen et al. (1984), Thompson et al. (1987), and Shapiro et al. (1995) studies are converted into percentages of nonoverlap of the distributions (Cohen, 1988; Roth & Fonagy, 1996, p. 380), the average depressive patient is better off after completing an STPP than 82–100% of the depressive patients before therapy ($d = 0.90$ – 2.80). With regard to other psychiatric symptoms he or she is better off after completing an STPP than 82–100% ($d = 0.89$ – 2.65) of the depressive patients before therapy. With regard to social functioning, this is true for 75–96% ($d = 0.65$ – 1.88).

⁴For the Hersen et al. (1984) study, pooled standard deviations were calculated using only the standard deviations of the BT and STPP groups before therapy, because the data of the other two groups are not relevant for the comparison of BT and STPP.

⁵Calculation of the author (FL) from Table 2 and Table 4 of Thompson et al. (1987, pp. 387–388).

⁶Calculation of the author (FL) from the appendix of Shapiro et al. (1994, pp. 533–534).

Clinical significance (improvement rates). The percentage of patients remitted or improved after therapy is of particular importance. In five of the six studies these percentages were assessed (Elkin et al., 1989; Gallagher-Thompson & Steffen, 1994; Hersen et al., 1984; Shapiro et al., 1994; Thompson et al., 1987). In these studies different criteria were used. Some authors have pointed out that specific instruments like the BDI favor the CBT rather than STPP (Steuer et al., 1984, p. 187): "... cognitive-behavioral therapy may 'teach' the scale." In a similar way Shapiro et al. (1994, p. 529) cautioned against the use of the BDI in comparative outcome research of STPP and CBT: "... the BDI may be sufficiently grounded in a CB model [cognitive-behavioral, F.L.] of depression to predispose this instrument to favour CB therapy". On the contrary, psychiatric criteria such as the Research Diagnostic Criteria (RDC), which were used in the studies of Gallagher-Thompson et al. (1990), Gallagher-Thompson and Steffen (1994), Shea et al. (1992), and Thompson et al. (1987), are more independent of the specific form of therapy.

Percentage of patients remitted or improved after therapy varied considerably in the different studies, depending on both the criteria applied and on the times of assessment (Table 1): For STPP, they range between 45% (Hersen et al., 1984) and 70% (Elkin et al., 1989; Thompson et al., 1987) at post-therapy assessment. Follow-up rates between 26% (Shea et al., 1992) and 83% (Gallagher-Thompson et al., 1990) were reported. For CBT/BT, percentages between 51% (Elkin et al., 1989) and 87% (Gallagher-Thompson & Steffen, 1994) at post-therapy assessment were reported, and between 30% (Shea et al., 1992) and 86% (Gallagher-Thompson & Steffen, 1994) in follow-ups. In all of the selected studies, no significant superiority of either form of therapy was found with respect to the percentages of patients remitted or improved. This brings us to the comparative effectiveness of STPP and CBT/BT.

Comparative effectiveness of STPP and CBT/BT. In three of the six studies, no significant differences were found with regard to the comparative effectiveness of STPP and CBT/BT on any measure, or at any time of assessment (Elkin et al., 1989; Hersen et al., 1984; Thompson et al., 1987). This applies to the depressive symptoms, other psychiatric symptoms, and social functioning. STPP and CBT/BT proved to be equally effective, not only on the average but also, as already mentioned, with regard to the percentages of patients remitted or improved. No differences were found in the follow-ups of these three studies (Gallagher-Thompson et al., 1990; Shapiro et al., 1995; Shea et al., 1992).

In one of the three studies that reported differences, Shapiro et al. (1994)⁷ found CBT more effective than STPP on only one of seven measures; the BDI. However, this result is based on the effects of the 8- and 16-session conditions combined. The difference between STPP and CBT may be due to the 8-session condition of STPP (see Table 3), which was less effective on the BDI than both 8 sessions of CBT and 16 sessions of STPP at follow-up (Shapiro et al., 1995). Furthermore, the difference on the BDI was not supported by results of other self-report instruments, and at 1-year follow-up STPP was arithmetically, but not significantly more effective on the BDI than CBT. As already mentioned, the BDI may favor CBT rather than STPP (Shapiro et al., 1994, p. 529), and this seems to be true especially for short-term effects. When levels of severity were taken into account, CBT was significantly more effective on the Present State Ex-

⁷The information for the Shapiro et al. (1994) study was provided by Shapiro et al. (1995).

amination (PSE) than STPP at moderate levels of severity. At high levels of severity STPP was arithmetically, but not significantly more effective than CBT. However, again the 8- and 16-session conditions were combined, and the difference in favor of CBT seems to be due to the 8-session condition of STPP (Table 3).

In one of the other studies in which a difference was found (Barkham et al., 1996), STPP was equally as effective as CBT in 11 of 12 assessments (4 measures \times 3 times of assessment). CBT was only significantly more effective than STPP on one single measure (Inventory of Interpersonal Problems; IIP) and only at one time of assessment (posttreatment). However, this superiority did not persist in the two follow-ups 3 months and 1 year after the end of therapy (Barkham et al., 1996). This corresponds to the results of Shapiro et al. (1994, 1995), who did not find a superiority of the CBT with regard to the IIP, at either the post-therapy assessment or in the 1-year follow-up.

The third study which reported differences was that of Gallagher-Thompson and Steffen (1994), where the effects of STPP and CBT in depressive family caregivers were examined. Gallagher-Thompson and Steffen did not find significant differences between STPP and CBT with regard to the percentages of patients remitted or improved. However, longer-term caregivers improved significantly more in the CBT condition in comparison to shorter-term caregivers, who improved significantly more in the STPP condition.

Thus, in three of the six studies no significant differences in effectiveness between STPP and CBT/BT could be detected. In one of the other three studies an advantage for CBT was found only on the BDI post-therapy, but not at follow-up (Shapiro et al., 1994). In another study an advantage for CBT was found only on one single measure (IIP) immediately after the end of therapy, but again not at follow-up (Barkham et al., 1996). In the third study, depending on patient variables, STPP was superior in one case, and CBT in the other case (Gallagher-Thompson & Steffen, 1994).

Box scores. The results of the comparisons described above can be expressed in a box score as Luborsky, Singer, and Luborsky (1975) did in their famous "dodo-verdict" review. For the different measures and times of assessment of the six studies including their follow-ups, I counted in how many cases a statistically significant superiority was found on the level of means for either form of therapy. By this kind of evaluation, the problem of combining information of heterogeneous outcome measures was avoided because no average effect sizes were calculated (Rosenthal & Rubin, 1986). Those results of Gallagher-Thompson and Steffen (1994) and Shapiro et al. (1994), which depended on patient features, were not included in the box score evaluation: Only main effects were considered here, no interaction effects.⁸ With regard to Gallagher-Thompson and Steffen (1994), only post-therapy and follow-up data were included in the box scores, and no data that was assessed from on-going therapies.

If the different realms of functioning (depression, general and specific symptoms, social functioning) are not differentiated, and if all measures and times of assessment are compiled, the result is the following: Of 60 comparisons that were carried out between STPP and CBT/BT via the different measures and times of assessment in the six studies,

⁸However, if interaction effects were included, the results would essentially be the same: In the Gallagher-Thompson and Steffen (1994) study the comparisons ended in a tie. The superiority of CBT on the PSE at moderate levels of severity in the Shapiro et al. (1994) study is based on the combination of 8 and 16 sessions, and seems to be due to the 8-session condition (Table 3).

TABLE 2. Number of Comparisons of STPP and CBT

	All measures ^a	Depression ^b	General psychiatric symptoms	Specific psychiatric symptoms	Social functioning
STPP = CBT	58/60 (97)	28/29 (97)	10/10 (100)	16/17 (94)	4/4 (100)
STPP < CBT	2/60 (3)	1/29 (3)	0/10 (0)	1/17 (6)	0/4 (0)
STPP > CBT	0/60 (0)	0/29 (0)	0/10 (0)	0/17 (0)	0/4 (0)

Note. The figure after the stroke refers to the number of comparisons, and the figure before it to the number of comparisons in which there were significant differences (percent).

STPP = short-term psychodynamic therapy; CBT = cognitive behavior therapy.

^aAll measures that were assessed in the selected studies (depressive symptoms, general symptoms, specific symptoms, personality features, social functioning etc).

^bChanges of self-esteem were subsumed in the category of depressive symptoms (depression).

including their follow-ups, 58 comparisons did not show a significant difference between STPP and CBT/BT (Table 2). Thus, in 97% of all comparisons STPP and CBT proved to be equally effective. With regard to depression, in 28 out of 29 comparisons (97%), no significant difference was found between STPP and CBT/BT. In the case of general symptoms and social functioning all comparisons ended in a tie (Table 2). It can be shown that the results of this review are the same if the interpersonal psychotherapy (IPT), which was applied in the NIMH study of depression, is excluded.

META-ANALYTIC EVALUATION: DIFFERENCES IN EFFECT SIZES AND MEAN SUCCESS RATES OF STPP AND CBT/BT

As already mentioned, only three of the six studies provided the data to assess effect sizes in form of Cohen's *d* (Cohen, 1988). However, the success rates reported can be used to assess an effect size estimator (Rosenthal & Rubin, 1982; Rosenthal, 1995). These data were provided by all but one study (Barkham et al., 1996, see Table 1). As a measure of effect size I calculated the ϕ -correlation for the resulting 2×2 or 2×3 frequency tables. The ϕ -correlation is identical to the effect size estimator *w* in case of a $2 \times k$ table (Cohen, 1988, p. 224). In a first step I tested for each of the five studies whether STPP and CBT/BT differed significantly with regard to the patients that were judged as remitted or improved. In order to avoid the problem of using data of correlated measures, I followed the recommendations given by Rosenthal (1991, pp. 26–27): Only one primary measure per study was used in this evaluation, and the data of post and follow-up assessments were evaluated separately. The results are presented in Table 3. For each of the five studies the ϕ -correlation is insignificant for both the post-assessment and the follow-up assessment (Table 3): STPP and CBT/BT did not differ significantly with regard to the patients that were judged as remitted or improved. This result is consistent with the findings reported by the authors of the original studies. In order to test if the ϕ -correlations differ significantly between the studies, I used the procedure described by Rosenthal (1991, p. 73–74): The ϕ -correlations were transformed into Fisher *z* values, and the statistical significance of the heterogeneity of the

ϕ s was to be obtained by χ^2 (Rosenthal, 1991, p. 73–74). The results are the following: For the post-assessment, the χ^2 value is 1.41 ($df = 4$), for the follow-up assessments it is 1.23 ($df = 3$). Both χ^2 values are not significant. Thus, the studies do not differ significantly with regard to the patients that were judged as remitted or improved after treatment with STPP or CBT/BT. The mean difference between STPP and CBT/BT concerning the patients that were judged as remitted or improved can be expressed by calculating the mean ϕ -correlation for the selected studies using the Fisher z values of the ϕ s weighted by its df ($N - 3$, Rosenthal, 1991, p. 87). The mean Fisher z value was transformed to ϕ . According to the results, the mean ϕ -correlation is $\phi = 0.08$ (post-assessment), and $\phi = 0.12$ (follow-up assessment), respectively. These differences correspond to small effect sizes (small effect size: $\phi = w \leq 0.10$, Cohen, 1988). As the correlation is equivalent to the difference in success rates (Rosenthal, 1995; Rosenthal & Rubin, 1982), the difference in success rates between STPP and CBT/BT is 8% and 12%, respectively. Applying the Binomial Effect Size Display (Rosenthal, 1995; Rosenthal & Rubin, 1982) to these data, the mean success rates of STPP and CBT/BT are 46% and 54% ($0.50 \pm \phi / 2$), respectively, for the post-assessment, and 44% and 56% for the follow-up assessment.

Table 3. Comparison of Percentages of Patients Judged as Remitted or Improved After STPP and CBT/BT in the Selected Studies: Criterion of Outcome, N , χ^2 , ϕ -correlations, Fisher z

Studies	Criterion of outcome	N	χ^2	ϕ	Fisher z
Post assessment					
Hersen, Himmelhach, & Thase, 1984	BDI + HRSD ≤ 10	47	1.63	0.19	0.18
Thompson, Gallagher, & Steinmetz-Breckenridge, 1987	SADS-Change, RDC	91	2.56	0.17 ^a	0.17
Elkin et al., 1989	HRSD $\leq 6^b$	84	0.13	0.04	0.04
Shapiro et al., 1994	BDI ≤ 8	49	0.17	0.06	0.06
Gallagher-Thompson & Steffen, 1994	SADS-Change, RDC	52	3.13	0.25	0.26
Follow-up assessment					
Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990	SADS-Change, RDC	74	1.24 ^c	0.13	0.13
Shea et al., 1992	LIFE-II, MDD	99	0.20	0.05	0.05
Shapiro, Rees, Barkham, & Hardy, 1995	BDI ≤ 8	49	1.16 ^d	0.15	0.15
Gallagher-Thompson & Steffen, 1994	SADS-Change, RDC	48	2.83	0.24	0.25

STPP = short-term psychodynamic psychotherapy; CBT = cognitive behavior therapy; BT = behavior therapy; BDI = Beck Depression Inventory; HRSD = Hamilton Rating Scale for Depression; SADS = Schedule for Affective Disorders RDC = Research Diagnostic Criteria; LIFE = Longitudinal Interview Follow-up Evaluation; MDD = Major Depressive Disorder.

^aFor 2×3 table, Cramer's ϕ' is identical to ϕ (Cohen, 1988, p. 224).

^bIn order to avoid the problem of using data of correlated measures, only one measure (HRSD) was used for this evaluation. However, using BDI ≤ 9 as a criterion of success does not change the results significantly ($\phi = 0.06$).

^cResult of 2-year FU; Result of 1-year FU: $\chi^2 = 1.47$. $\phi = 0.14$.

^dGain maintainers: patients with BDI ≤ 8 end of treatment, 3 months, and 1 year with no further treatment (Shapiro, Rees, Barkham, & Hardy, 1995, p. 383, Table 4).

DISCUSSION

This review is the first attempt to carry out a comparison of the efficacy of STPP and CBT/BT for a specific psychiatric disorder: (major) depression. Unfortunately, not more than six studies currently exist, which meet the applied inclusion criteria. In the six studies included in this review, the total number of patients treated with either STPP or CBT/BT is $N = 416$. This means about 200 patients were treated with STPP and about another 200 patients were treated with CBT/BT.

According to the results of the six studies included in this review, STPP and CBT/BT yielded equivalent results in the treatment of depression. The improvement rates reported for STPP were between 45% and 87% (post-therapy), and exceed the 35% improvement rate which was assessed for STPP by the Depression Guidelines Panel (1993). Results of the six studies are consistent with the meta-analyses of Nietzel, Russell, Hemmings, and Gretter (1987), Robinson, Berman, and Neimeyer (1990), Steinbrueck, Maxwell, and Howard (1983), and Zeiss and Steinmetz-Breckenridge (1997). They also correspond to the result of Crits-Christoph's (1992) diagnostically nonspecific meta-analysis of STPP. The results are also consistent with both the study of Reynolds et al. (1996), who found that CBT and psychodynamic-interpersonal psychotherapy were rated equivalently positive by depressive patients at the end of treatment, and with the result of Goldfried, Raue, and Castonguay (1998), who found relatively few differences between CBT and psychodynamic-interpersonal psychotherapy with regard to the therapeutic focus in significant sessions of master therapists.

However, conclusions that can be drawn from this review can only be preliminary. The major limitation is the relatively small number of studies that could be included. By requiring rigorous criteria, STPP studies were selected that included treatment manuals and structured procedures. Furthermore, there were no effectiveness studies that could be included which examined the comparative efficacy of STPP and CBT/BT in actual practice. Thus, the forms of STPP applied in the selected studies may deviate from typical STPP procedures used in clinical practice. However, this applies likewise to efficacy studies of CBT and BT. This is the price paid for the rigorous experimental controls applied in efficacy studies (Persons & Silberschatz, 1998; Seligman, 1995, 1996).

The six studies included refer to outpatients with *DSM-III* MDD. In these studies different subgroups of patients with MDD were treated for depression (e.g., depressed adults, depressed women, depressed older people, or a specifically defined population—depressed caregivers). These subgroups are encompassed by the general population of patients with *DSM-III* MDD. However, for those studies in which specific subgroups of depressives were treated, future studies will have to show if the results can be generalized to the general population of MDD-depressives. Results of Shapiro et al. (1994, 1995) and Barkham et al. (1996) refer to depressive patients who could also have a concomitant diagnosis of a generalized anxiety disorder and panic disorder, whereas Elkin et al. (1989) excluded patients with panic disorders. Results of the NIMH study of depression are valid for depressive patients with a concomitant diagnosis of a *DSM-III* personality disorder (Shea et al., 1990). Currently, there are no systematic treatment studies of patients with double depression (MDD and dysthymic disorder), or of patients with depressive personality disorder (Phillips, Hirschfeld, Shea, & Gunderson, 1993). Risk of relapse is greatest in patients with dysthymic disorder (Roth & Fonagy, 1996).

In this review, STPP was evaluated in terms of outcome measures that do not refer to the central focus of this form of therapy (e.g., dynamic conflicts, transference, and

relationship patterns). One might expect to find differences on measures more specifically related to the particular treatments (Crits-Christoph, 1992; Elkin et al., 1989). For CBT this could be demonstrated with regard to the BDI.

To conclude from this review that all forms of STPP and CBT/BT are equally effective in the treatment of depression (in all groups of patients) would be premature. In the studies included in this review, STPP according to Horowitz and Kaltreider (1979), Mann (1973), Rose and DelMaestro (1990), and Shapiro and Firth (1985), and IPT after Klerman et al. (1984) proved to be equally as effective as CBT/BT. These results cannot be generalized to other concepts of STPP. With regard to the criteria of empirically supported treatments (Chambless & Hollon, 1998), STPP according to Horowitz and Kaltreider (1979), Mann (1973), Rose and DelMaestro (1990), and Shapiro and Firth (1985) can be considered as possibly empirically supported concerning the treatment of depression.⁹ To date there are no two studies of independent research groups demonstrating equal effectiveness of the same form of STPP compared to CBT/BT in the treatment of depression. This result is consistent with the general (diagnostically unspecific) result of the Task Force on Promotion and Dissemination of Psychological Procedures (1995), who regarded STPP as a possibly efficacious treatment. Future studies, which address the question as to which specific form of STPP is most helpful for which patients, are necessary (Ursano & Hales, 1986, p. 1515). Thus, future studies should focus on specific versions of STPP rather than on a broadly defined model of STPP.

Efficacy of CBT and BT for the treatment of depression was demonstrated not only in the studies included in this review, but also in a great number of other studies (Dobson, 1989; Roth & Fonagy, 1996). The studies included in this review demonstrated the efficacy of CBT and BT according to the concepts of Beck et al. (1979), Firth and Shapiro (1985), Lewinsohn (e.g., Lewinsohn, Hoberman, Teri, & Hautzinger, 1985) and Gallagher and Thompson (1981). However, according to the results of the NIMH study of depression (Shea et al., 1992), only 24% of the total sample was free of symptoms for both 8 weeks after the end of therapy and during the 18-month follow-up period (no MDD according to RDC). Here, no significant differences between CBT, STPP, and pharmacotherapy could be found (Shea et al., 1992, p. 784). According to these results, 16–20 sessions of interpersonal therapy, CBT, and psychopharmacotherapy of a comparable duration are insufficient for most patients to achieve lasting remission. In the studies included in this review not more than 16–20 sessions were performed. Future studies should address the effects of longer therapies for depression.

REFERENCES

- American Psychiatric Association (1980, 1983). *Diagnostic and statistical manual of mental disorders*. Third Edition. Washington, D.C.: APA.
- Barkham, M., Rees, A., Shapiro, D. A., Stiles, W. B., Agnew, R. M., Halstead, J., Culverwell, A., & Harrington, V. M. G. (1996). Outcomes of time-limited psychotherapy in applied settings: Replication of the second Sheffield psychotherapy Project. *Journal of Consulting and Clinical Psychology*, *64*, 1079–1085.
- Beck, A. T., Rush, J., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford.

⁹IPT can be regarded as an empirically supported treatment for depression (DeRubeis & Crits-Christoph, 1998).

- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported treatments. *Journal of Consulting and Clinical Psychology, 66*, 7–18.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.
- Covi, L., & Lipman, R. S. (1987). Cognitive-behavioral group psychotherapy combined with Imipramine in major depression. *Psychopharmacology Bulletin, 23*, 173–176.
- Crits-Christoph, P. (1992). The efficacy of brief dynamic psychotherapy: A meta-analysis. *American Journal of Psychiatry, 149*, 151–158.
- Depression Guidelines Panel. (1993). *Depression in primary care: Vol. 2. Treatment of major depression. Clinical practice guideline No. 5. (AHCPR publication No. 93-0551)*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research.
- DeRubeis, R. J., & Crits-Christoph, P. (1998). Empirically supported individual and group psychological treatments for adult mental disorders. *Journal of Consulting and Clinical Psychology, 66*, 37–52.
- Dobson, K. S. (1989). A meta-analysis of the efficacy of cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 57*, 414–419.
- Elkin, I., Parloff, M. B., Hadley, S. W., & Autry, J. H. (1985). NIMH Treatment of Depression Collaborative Research Program. *Archives of General Psychiatry, 42*, 305–316.
- Elkin, I., Shea, T., Watkins, J. T., Imber, S. D., Sotsky, S. M., Collins, J. F., Glass, D. R., Pilkonis, P. A., Leber, W. R., Docherty, J. P., Fiester, S. J., & Parloff, M. B. (1989). National Institutes of Mental Health Treatment of Depression Collaborative Research Program. *Archives of General Psychiatry, 46*, 971–982.
- Firth, J. A., & Shapiro, D. A. (1985). *Prescriptive therapy manual for the Sheffield Psychotherapy Project (SAPU Memo 734)*. Sheffield, England: University of Sheffield.
- Gallagher, D., & Thompson, L. W. (1981). *Depression in the elderly: A behavioral treatment manual*. Los Angeles: University of Southern California Press.
- Gallagher, D. E., & Thompson, L. W. (1982). Treatment of major depressive disorder in older adult outpatients with brief psychotherapies. *Psychotherapy: Theory, Research and Practice, 19*, 482–490.
- Gallagher-Thompson, D. E., Hanley-Peterson, P., & Thompson, L. W. (1990). Maintenance of gains versus relapse following brief psychotherapy for depression. *Journal of Consulting and Clinical Psychology, 58*, 371–374.
- Gallagher-Thompson, D. E., & Steffen, A. M. (1994). Comparative effects of cognitive-behavioral and brief psychodynamic psychotherapies for depressed family caregivers. *Journal of Consulting and Clinical Psychology, 62*, 543–549.
- Goldfried, R. M., Raue, P. J., & Castonguay, L. G. (1998). The therapeutic focus in significant sessions of master therapists: A comparison of cognitive-behavioral and psychodynamic-interpersonal interventions. *Journal of Consulting and Clinical Psychology, 66*, 803–810.
- Grawe, K., Donati, R., & Bernauer, F. (1994). *Psychotherapie im Wandel. Von der Konfession zur Profession*. Göttingen, Germany: Hogrefe.
- Hersen, M., Himmelhoch, J. M., & Thase, M. E. (1984). Effects of social skill training, Amitriptyline and psychotherapy in unipolar depressed women. *Behavior Therapy, 15*, 21–40.
- Horowitz, M., & Kaltreider, N. (1979). Brief therapy of the stress response syndrome. *Psychiatric Clinics of North America, 2*, 365–377.
- Howard, K. I., Kopta, S. M., Krause, M. S., & Orlinsky, D. E. (1986). The dose-effect relationship in psychotherapy. *American Psychologist, 41*, 159–164.
- Hsu, L. M. (1989). Random sampling, randomization and equivalence of contrasted groups in psychotherapy outcome research. *Journal of Consulting and Clinical Psychology, 57*, 132–137.
- Kazdin, A. E. (1994). Methodology, design, and evaluation in psychotherapy research. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change*, 4th ed. (pp. 19–71). New York: Wiley.
- Kazdin, A. E., & Bass, D. (1989). Power to detect differences between alternative treatments in comparative psychotherapy outcome research. *Journal of Consulting and Clinical Psychology, 57*, 138–147.
- Klerman, G. L., Weissman, M. M., Rounsaville, B. J., & Chevron, E. S. (1984). *Interpersonal psychotherapy of depression*. New York: Basic Books.
- Kopta, S. M., Howard, K. I., Lowry, J. L., & Beutler, L. E. (1994). Patterns of symptomatic recovery in psychotherapy. *Journal of Consulting and Clinical Psychology, 62*, 1009–1016.
- Kornblith, S. J., Rehm, L. P., O'Hara, M. W., & Lamparski, D. M. (1983). The contribution of self-reinforcement training and behavior assignments to the efficacy of self-control therapy for depression. *Cognitive Therapy and Research, 6*, 499–528.
- Leichsenring, F. (1996). Zur Meta-Analyse von Grawe [A critique of the meta-analysis of Grawe]. *Gruppenpsychotherapie und Gruppendynamik, 32*, 205–234.
- Lewinsohn, P. (1974). A behavioral approach to depression. In R. Friedman & M. Katz (Eds.), *The psychology of depression: Contemporary theory and research* (pp. 157–176). New York: Wiley.

- Lewinsohn, P., Hoberman, H., Teri, L., & Hautzinger, M. (1985). An integrative theory of depression. In S. Reiss & R. R. Bootzin (Eds.), *Theoretical issues in behavior therapy* (pp. 331–359). New York: Academic Press.
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapy. *Archives of General Psychiatry*, *32*, 995–1008.
- Mann, J. (1973). *Time-limited psychotherapy*. Cambridge, MA: Harvard University Press.
- McLean, P. D., & Hakstian, A. R. (1979). Clinical depression: Comparative efficacy of outpatient treatments. *Journal of Consulting and Clinical Psychology*, *47*, 818–836.
- McLean, P. D., & Hakstian, A. R. (1990). Relative endurance of unipolar depression treatment effects: Longitudinal follow-up. *Journal of Consulting and Clinical Psychology*, *58*, 482–488.
- Messer, S. B., & Warren, C. S. (1995). *Models of brief psychodynamic therapy: A comparative approach*. New York: Guilford.
- Nietzel, M. T., Russell, R. L., Hemmings, K. A., & Gretter, M. L. (1987). Clinical significance of psychotherapy for unipolar depression: A meta-analytic approach to social comparison. *Journal of Consulting and Clinical Psychology*, *55*, 56–161.
- Persons, J. B., & Silberschatz, G. (1998). Are results of randomized trials useful to psychotherapists? *Journal of Consulting and Clinical Psychology*, *66*, 126–135.
- Phillips, K. A., Hirschfeld, R. M. A., Shea, M. T., & Gunderson, J. G. (1993). Depressive personality disorder: Perspectives for DSM-IV. *Journal of Personality Disorders*, *7*, 30–42.
- Reynolds, S., Stiles, W. B., Barkham, M., Shapiro, D. A., Hardy, G. E., & Rees, A. (1996). Acceleration of changes in session impact during contrasting time-limited psychotherapies. *Journal of Consulting and Clinical Psychology*, *64*, 577–586.
- Robinson, L. A., Berman, J. S., & Neimeyer, R. A. (1990). Psychotherapy for the treatment of depression: A comprehensive review of controlled outcome research. *Psychological Bulletin*, *108*, 30–49.
- Rose, J., & DelMaestro, S. (1990). Separation-individuation conflict as a model for understanding distressed caregivers: Psychodynamic and cognitive case studies. *Gerontologist*, *30*, 693–697.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. London: Sage Publications.
- Rosenthal, R. (1995). Progress in clinical psychology: Is there any? *Clinical Psychology: Science and Practice*, *2*, 133–149.
- Rosenthal, R., & Rubin, D. B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology*, *74*, 166–169.
- Rosenthal, R., & Rubin, D. B. (1986). Meta-analytic procedures for combining studies with multiple effect sizes. *Psychological Bulletin*, *99*, 400–406.
- Roth, A., & Fouagy, P. (1996). *What works for whom? A critical review of psychotherapy research*. New York: Guilford Press.
- Seligman, M. E. P. (1995). The effectiveness of psychotherapy. The Consumer Reports study. *American Psychologist*, *50*, 965–974.
- Seligman, M. E. P. (1996). Science as an ally of practice. *American Psychologist*, *51*, 1072–1079.
- Shapiro, D. A., Barkham, M., Rees, A., Hardy, G. E., Reynolds, S., & Startup, M. (1994). Effects of treatment duration and severity of depression on the effectiveness of cognitive-behavioral and psychodynamic-interpersonal psychotherapy. *Journal of Consulting and Clinical Psychology*, *62*, 522–534.
- Shapiro, D. A., & Firth, J. A. (1985). *Exploratory therapy manual for the Sheffield Psychotherapy Project* (SAPU Memo 733). Sheffield, England: University of Sheffield.
- Shapiro, D. A., Rees, A., Barkham, M., & Hardy, G. E. (1995). Effects of treatment duration and severity of depression on the maintenance of gains after cognitive-behavioral and psychodynamic-interpersonal psychotherapy. *Journal of Consulting and Clinical Psychology*, *63*, 378–387.
- Shea, T., Elkin, I., Imber, S. D., Sotsky, S. M., Watkins, J. T., Collins, J. F., Pilkonis, P. A., Backham, E., Glass, D. R., Dolan, R. T., & Parloff, M. B. (1992). Course of depressive symptoms over follow-up. Findings from the National Institutes of Mental Health Treatment of Depression Collaborative Research Program. *Archives of General Psychiatry*, *49*, 782–787.
- Shea, T., Pilkonis, P. A., Backham, E., Collins, J. F., Elkin, I., Sotsky, S. M., & Docherty, J. P. (1990). Personality disorders and treatment outcome in the NIMH Treatment of Depression Collaborative Research Program. *American Journal of Psychiatry*, *147*, 711–718.
- Steinbrueck, S. M., Maxwell, S. E., & Howard, G. S. (1983). A meta-analysis of psychotherapy and drug therapy in the treatment of unipolar depression with adults. *Journal of Consulting and Clinical Psychology*, *51*, 856–863.
- Steuer, J. L., Mintz, J., Hammen, C. L., Hill, M. A., Jarvik, L. F., McCarley, T., Motoike, P., & Rosen, R. (1984). Cognitive-behavioral and psychodynamic group psychotherapy in treatment of geriatric depression. *Journal of Consulting and Clinical Psychology*, *52*, 180–189.

- Svartberg, M., & Stiles, T. C. (1991). Comparative effects of short-term psychodynamic psychotherapy: A meta-analysis. *Journal of Consulting and Clinical Psychology, 59*, 704–714.
- Task Force on Promotion and Dissemination of Psychological Procedures. (1995). Training and dissemination of empirically-validated psychological treatments. Report and recommendations. *Clinical Psychologist, 48*, 3–23.
- Thompson, L. W., Gallagher, D., & Steinmetz-Breckenridge, J. (1987). Comparative effectiveness of psychotherapies for depressed elders. *Journal of Consulting and Clinical Psychology, 55*, 385–390.
- Tschuschke, V., & Kächele, H. (1996). What do psychotherapies achieve? A contribution to the debate centered around differential effects of different treatment concepts. In U. Esser, W. Pabst, & G.-W. Speierer (Eds.), *The power of the person-centered approach—New challenges, perspectives, answers* (pp. 159–181). Köln, Germany: Gesellschaft für wissenschaftliche Gesprächspsychotherapie (GwG).
- Ursano, R. S., & Hales, R. E. (1986). A review of brief individual psychotherapies. *American Journal of Psychiatry, 143*, 1507–1517.
- Wexler, B. E., & Cicchetti, D. V. (1992). The outpatient treatment of depression. Implications of outcome research for clinical practice. *Journal of Nervous and Mental Disease, 180*, 277–286.
- Zeiss, A. M., & Steinmetz-Breckenridge, J. (1997). Treatment of late life depression: A response to the NIMH Consensus Conference. *Behavior Therapy, 28*, 3–21.

