

LITERATURE REVIEW

Cognitive-Behavioral Therapy and Psychodynamic Psychotherapy: Techniques, Efficacy, and Indications

FALK LEICHSENDRING, D.Sc.*

WOLFGANG HILLER, D.Sc.#

MICHAEL WEISSBERG, M.D.†

ERIC LEIBING, D.Sc.‡

In this article, we provide an overview of the techniques and efficacy of the two most commonly used psychotherapeutic treatments of psychiatric disorders in adults: cognitive-behavioral and psychodynamic therapy. Psychotherapeutic techniques, major indications, and empirical evidence will be presented. The focus will be on empirically supported models of treatment.

Context: *Cognitive-behavioral therapy and psychodynamic psychotherapy are the most frequently applied methods of psychotherapy in clinical practice.*

Objective: *To give an up-to-date description of cognitive-behavioral therapy and psychodynamic psychotherapy and to review empirical evidence for efficacy in specific mental disorders.*

Data Sources: *Systematic reviews of psychotherapy outcome research based on evidence-based methods were used. In order to identify more recent trials, Medline, PsycInfo, Pubmed, and Current Contents were searched in addition in July 2005 using database-specific keywords. In October 2005, the search was updated. Text books and journal articles were used as well.*

Study selection: *The authors reviewed the available systematic surveys*

*Clinic of Tiefenbrunn and Clinic of Psychosomatics and Psychotherapy, University of Goettingen, Germany; #Institute of Psychology, University of Mainz, Germany; †University of Colorado, School of Medicine, USA; ‡Clinic of Psychosomatics and Psychotherapy, University of Goettingen, Germany.

Mailing address: University of Goettingen, Clinic of Psychosomatics and Psychotherapy, von Siebold-str. 5, D - 37075 Goettingen, Germany. e-mail: Fleichs@gwdg.de

and meta-analyses as well as the additionally identified studies using established inclusion criteria.

Data extraction: *Following the evidence-based methods of the Canadian Task Force on Preventive Health Care, an established hierarchy of study designs was applied. Using rigorous criteria, only evidence from randomized controlled trials (Type 1 studies) was included. The authors independently assessed for which mental disorders randomized controlled trials provide evidence for the efficacy of cognitive-behavioral therapy or psychodynamic psychotherapy in specific disorders.*

Data synthesis: *The efficacy of cognitive-behavioral in many mental disorders has been demonstrated by a substantial number of randomized controlled trials and several meta-analyses. However, for specific disorders the rates of treatment responders are not yet sufficient. For psychodynamic psychotherapy, clearly less efficacy studies are available. However, the available studies provided evidence that psychodynamic psychotherapy is an effective treatment of specific mental disorders as well.*

Conclusions: *Although there is substantial evidence for the efficacy of cognitive-behavioral therapy and some evidence for the efficacy of psychodynamic psychotherapy, further studies are required to improve the positive outcome rates of treatment responders in specific mental disorders. For psychodynamic psychotherapy further studies of specific forms of treatment in specific mental disorders are required to corroborate the available results.*

DEFINITION OF COGNITIVE-BEHAVIORAL THERAPY

Cognitive-behavioral therapy (CBT) represents a unique category of psychological interventions based on scientific models of human behavior, cognition, and emotion (Dobson, 2000). It includes a wide range of treatment strategies that take the current knowledge about the etiology and maintenance of the different mental disorders into account (Beck, 1995; Beck, 2005; Cutler, Goldyne, Markowitz, Devlin, & Glick, 2004; Hayes, Follette, & Linehan, 2004; Kanfer & Phillips, 1970; Masters, Burish, Hollon, & Rimm, 1987). Patients and therapists work together to identify and understand problems in terms of the relationship between thoughts, feelings, and behavior. The focus lies in the here and now. Individualized, usually time-limited therapy goals are formulated. CBT intends to directly target symptoms, reduce distress, re-evaluate thinking and promote helpful behavioral responses. The therapist supports the patient to tackle problems by harnessing his or her own resources. Specific psychological and practical skills are acquired (e.g., reflecting and re-evaluating the meaning attributed to a situation with subsequent behavior changes) and the therapist actively promotes change with an emphasis on

putting what has been learned into practice between sessions (“homework”). The patient learns to attribute improvement to his or her own efforts (self-efficacy). A trusting and safe therapeutic alliance is viewed as an essential ingredient, but not as the main vehicle of change.

Behavioral interventions are considered as clinical applications of learning theory (Kana et al., 1970; Masters et al., 1987). The most frequently used methods are classical and operant conditioning, often combined with observational learning (“modeling”). For example, patients learn to reward themselves systematically whenever they have been successful in showing new and adequate reactions to crucial situations. Behaviors such as avoidance or reduced activity are problematic because they can act to keep the problems going or worsen. If patients avoid situations that trigger phobias (e.g., crowds, traveling in bus or train), therapists help them feel safe enough to face the feared situation as a means of reducing anxiety and learning new behavioral skills with which they may tackle problems.

Cognitive interventions refer to how patients create meaning about symptoms, situations, and events in their lives, as well as beliefs about themselves, others, and the world (Beck, 1995; Beck, 2005; Dobson, 2000). The therapist assists the patient to become more aware of maladaptive automatic thoughts that spring to mind and evoke negative personal interpretations (e.g., “I’m in danger”). A style of trained questioning (called “Socratic dialogue” or “guided recovery”) gently probes for patient meanings and stimulates alternative viewpoints or ideas. Based on these alternatives, patients carry out behavioral experiments to test the accuracy of alternative behaviors, and thus they adopt new and more realistic ways of perceiving and acting. It should be emphasized that CBT is not about trying to prove the client wrong and the therapist right, but about moving toward a skillful collaboration in which patients come to discover for themselves that there are realistic alternatives. Some important methods and techniques of CBT are summarized in Table 1.

CBT-trained therapists work with individuals, families, and groups. The approach can be used to help anyone irrespective of ability, culture, race, gender, or sexual preference. It can be applied with or without concurrent psychopharmacological medication, depending on the severity or nature of each patient’s problem.

The duration of cognitive-behavioral therapy varies, although it typically is thought of as one of the briefer psychotherapeutic treatments. Especially in research settings, duration of CBT is usually short, between 10 and 20 sessions. In routine clinical practice, duration varies depending

Table I. SOME METHODS AND TECHNIQUES USED IN CBT (DOBSON, 2000; MASTERS ET AL., 1987; BECK, 1995)

Systematic desensitization (counter-conditioning)	The patient learns to gradually weaken anxious reactions by exposing him- or herself in a relaxed state (either through imagination or in the real world); with sufficient repetition, the situation loses its power to make the person severely anxious.
Exposure/response prevention (ERP)	The patient is repeatedly confronted with an anxiety- or stress-provoking stimulus, e.g., snake or elevator, while refraining from avoidance behavior or tension-reducing rituals; he or she experiences anxiety climb, peak and subside, which enables a process of emotional habituation.
Relaxation	Techniques, such as progressive muscle relaxation, are taught and practiced to reduce the physiological arousal level.
Positive and negative reinforcement	Systematic reinforcement (from the person him- or herself or from others) is used to establish new behaviour, e.g. increases in levels of general, social and pleasurable activity; negative consequences may be systematically used to weaken disruptive behaviors such as aggression or impulsivity.
Cognitive modification	Techniques such as identification of maladaptive automatic thoughts and cognitive schemas (e.g., "I'm so fat and so useless") by use of standardized protocols; correcting thinking errors; establishing guiding self-statements (e.g., "stop, think, act") or verbal self-instructions (e.g., "what are all of my options to solve this problem?")
Assertiveness training (social skills training)	Patients learn and practice behavioral techniques to manage interpersonal situations more effectively, e.g., refuse unreasonable requests from others, assert ones rights in a non-aggressive manner, negotiate to get what one wants in relationships with others; assertiveness is an antidote to fear, shyness, passivity and even anger.
Stress management	A combination of strategies to reduce tension and distress, re-examine the importance of current life stressors, prioritize life goals, manage and diffuse anger, resolve interpersonal conflicts, improve time management.
Problem solving	The process of problem identification, description, goal definition, generation of possible solutions, decision-making (weighing costs and benefits), and evaluation of new experiences is taught and practiced.

on patient comorbidity, defined treatment goals, and the specific conditions of the health care system. For example, in Germany the mean duration of CBT in clinical (outpatient) practice is between 40 and 60 sessions; up to 80 sessions of CBT will be paid by the statutory health

insurance, but the treatment must be applied for and an independent expert must check the individual indication and prognosis. The findings of the national institute of mental health study on depression are consistent with this duration of CBT, indicating that 16 to 20 sessions of cognitive-behavioral (and interpersonal therapy or pharmacotherapy of a comparable duration) are insufficient for most patients to achieve lasting remission (Shea et al., 1992).

The historical roots of behavior therapy lie in the classical learning theories derived from the work of Ivan Pavlov—respondent conditioning—and John B. Watson and B. F. Skinner—operant conditioning (Masters et al., 1987). The first generation of behavior therapy changed with the advent of cognitive methods, and cognitive therapy was developed as a movement away from the limitations of psychoanalysis *and* the restrictive nature of behaviourism (Dobson, 2000). Cognitive therapy, developed by Albert Ellis and Aaron T. Beck in the 1950s and 1960s, is the application of the cognitive model to a disorder with the use of different techniques to modify the dysfunctional beliefs (Beck, 1995; Beck, 2005). In combination with behavioral techniques, CBT rapidly became a favorite intervention to study in psychotherapy research in academic settings during the last 25 to 30 years (Dobson, 2000).

In the last years, new (cognitive) behavior therapies have been developed (Hayes et al., 2004). “The new behavior therapies carry forward the behavior therapy tradition, but they (1) abandon a sole commitment to first-order change, (2) adopt more contextualistic assumptions, (3) adopt more experiential and indirect change strategies in addition to direct strategies, and (4) considerably broaden the focus of change” (Hayes, 2004, p. 6). For example, faced with the challenges of patients with personality disorders, Young (1994) developed schema-focused therapy. In the schema-focused model, developmental dimensions of patients’ psychopathology are emphasised, and in the schema-focused therapy, experiential and interpersonal techniques are integrated.

DEFINITION OF PSYCHODYNAMIC PSYCHOTHERAPY

Psychodynamic psychotherapy serves as an umbrella concept for psychotherapeutic treatments that operate on an interpretive-supportive (or expressive-supportive) continuum ([see table 2] Gabbard, 2000; Gill, 1951; Henry, Strupp, Schacht, & Gaston, 1994; Luborsky, 1984; Schlesinger, 1969; Wallerstein, 1989).

Definitions of basic concepts of psychodynamic psychotherapy are given in Table 3. The concept of a supportive-interpretive continuum of

Table II. THE SUPPORTIVE-EXPRESSIVE CONTINUUM OF PSYCHOTHERAPEUTIC INTERVENTIONS (GABBARD, 2000, P. 96; GILL, 1951; LUBORSKY, 1984; SCHLESINGER, 1969; WALLERSTEIN, 1989)

	Interpretation	Confrontation	Clarification	Encouragement to elaborate	Empathic validation	Advice and praise	Affirmation	
Interpretive Pole								Supportive Pole

psychodynamic interventions is empirically based on the data of the psychotherapy research project of the Menninger Foundation (Gill, 1951; Luborsky, 1984; Schlesinger, 1969; Wallerstein, 1989). Interpretive interventions enhance the patient's insight about repetitive conflicts sustaining his or her problems (Luborsky, 1984; Gabbard, 2000). Supportive interventions aim to strengthen abilities that are temporarily inaccessible because of acute stress (e.g. traumatic events) or that have not been sufficiently developed (e.g. impulse control in borderline personality disorder). These abilities are conceptualized in psychodynamic psychotherapy as "ego functions" (Bellak, Hurvich, & Gediman, 1973). Thus, supportive interventions can be described as maintaining or building ego functions (Wallerstein, 1989). Supportive interventions include, for example, fostering a therapeutic alliance, setting of goals, or strengthening of ego functions such as reality testing or impulse control (Gill, 1951; Luborsky, 1984; Schlesinger, 1969; Blanck & Blanck, 1974). In the interpretive-supportive continuum, interpretation marks the one pole, being the most insight-enhancing intervention (Gabbard, 2000) (e.g., "Maybe you do not only want to pass your examination, but you are also afraid of what happens when you are successful"). Advice, praise, and affirmation mark the least interpretive and most supportive pole (Tables 2 and 3). "You should talk to your peers about how they prepare for the exam" may serve as an example for giving advice. Other interventions on the supportive-expressive continuum (e.g., confrontation, clarification, empathic validation) lie between interpretation and advice, praise and affirmation (Gabbard, 2000 [see tables 2 and 3]). The use of more supportive or more interpretive (insight-enhancing) interventions depends on the patient's needs. The more severely disturbed a patient is, or the more acute his or her problem is, the more supportive (and the less expressive) interventions are required and vice versa (Gill, 1951; Luborsky, 1984; Schlesinger, 1969; Wallerstein, 1989). For example, patients suffering from a borderline personality disorder (Gunderson & Links, 2001) may need more supportive interventions to maintain self-esteem, a sense of reality, or other ego

Table III. CONCEPTS OF PSYCHODYNAMIC PSYCHOTHERAPY (GABBARD, 2000, P. 89-114; LUBORSKY, 1984)

Interpretation (most insight-enhancing)	The most interpretive form of intervention: Making something conscious that was previously unconscious, e.g. "Maybe you do not only want to pass your examination, but you are also afraid of what happens when you are successful."
Confrontation	Drawing the patients' attention to a psychic phenomenon, e.g. "You seem to avoid to face your feelings towards X."
Clarification	Asking the patient to describe a phenomenon more in detail.
Encouragement to elaborate	Request for information about a topic. e.g. "Can you tell me more about that?"
Empathic validation	Empathic conveying of the patient's internal state, e.g. "It hurts when you are treated that way."
Advice and praise	Advice: Suggesting what to do, e.g. "You should talk to your peers about how they prepare for the exam." Praise: Expressing overt approval, e.g. "I think it was very good that you talked to your peers about how they prepare for the exam."
Affirmation (least interpretive)	Comment supporting the patient's behavior, e.g. "Yes, I see what you mean."
Working through	Both the process and result of repeated circles of confrontation, clarification and interpretation including linking a pattern to new contexts, e.g. a pattern of transference to current relationships outside the transference or to past relationships.
Abstinence	Withholding gratification of (certain) transference wishes, referring particularly to physical gratification.
Neutrality	Non-judgmental stance regarding the patient's behaviors, wishes or feelings. Not to be misunderstood as coldness or aloofness.
Therapeutic/ working alliance	Patient's capacity to collaborate with the therapist and to perceive him or her as a helpful person.
Free association (basic rule)	Saying everything that comes to one's mind. Useful in highly interpretive therapies, the less useful the more supportive therapies are. In more supportive therapies, patients are told that they decide what they will talk about in a session.
Transference	Repetition of past experiences in present object relations, but also including a quest for a new reparative object experience.
Counter- Transference	The therapist's emotional responses to the patient, which may be specific responses to the patient's conflicts (diagnostically relevant), but may also include the therapist's resistance or his transference to the patient (to be controlled for).
Regression	Shift to less mature (autobiographically earlier) modes of psychological functioning during psychotherapy. Promoted in long-term interpretive therapy, restricted in short-term and supportive therapy.
Resistance	Although willing to cooperate with the therapist, patients also want to avoid experiencing painful feelings and fantasies, thus trying to preserve the status quo. Resistance is treated by understanding it using clarification, confrontation, and interpretation.

functions (Blanck & Blanck, 1974; Gill, 1951; Luborsky, 1984; Schlesinger, 1969). Reality testing, for example, may be maintained by the following intervention: "When you heard these voices talking about you, did you really see someone?" Healthy subjects in an acute crisis or following a traumatic event may need more supportive interventions (e.g., stabilization, providing a safe and supportive environment). Thus, a broad spectrum of psychiatric problems and disorders, ranging from milder adjustment disorders or stress reactions to severe personality disorders, such as borderline personality disorder or psychotic conditions, can be treated with psychodynamic psychotherapy (Bateman & Fonagy, 1999, 2001; Blanck & Blanck, 1974; Clarkin, Levy, Lenzenweger, & Kernberg, 2004a,b; Gabbard, 2000; Gill, 1951; Luborsky, 1984; Schlesinger, 1969). The emphasis psychodynamic psychotherapy places on the relational aspects of transference is a key technical difference between it and cognitive-behavioral therapies (Cutler et al., 2004). Transference, defined as the repetition of past experiences in present interpersonal relations, consists of patterns of feelings and behavior that arise from early ontogenetical experiences and impinge on everyday reality and relationships (Gabbard, 2000; Gabbard, 2003; Luborsky, 1984). In psychodynamic psychotherapy, transference is regarded as a primary source of understanding and therapeutic change (Gabbard, 2000; Gabbard, 2003; Luborsky, 1984).

The role of insight as a factor of therapeutic success is qualified in current concepts of psychodynamic therapy. Not only the insight-enhancing, but also the relational dimension of an intervention (e.g. not only what the therapist says, but the way he or she says it), is regarded as an important corrective factor (Gabbard, 2003). For example, a therapist who empathically interprets a patient's aggressive, sexual, or perverse wish also conveys to the patient that he accepts him in spite of these wishes, thus increasing the patient's capability to tolerate and accept these wishes himself. In this process, identification with the therapist may play an important therapeutic role. "If the therapy accepts me in spite of these wishes, maybe I can accept them as well."

Psychodynamic psychotherapy can be carried either as a short-term or as a long-term treatment. Short-term treatment is time limited, usually 16 to 30 sessions with a range of 7 to 40 sessions (Messer, 2001). Duration of long-term treatment ranges from a few months to several years (Gabbard, 2004; Luborsky, 1984). Several manual-guided models of psychodynamic psychotherapy have been developed (Busch, Milrod, & Singer, 1999; Clarkin, Yeomans, & Kernberg, 1999; Horowitz & Kaltreider, 1979;

Luborsky, 1984; Piper, McCallum, Joyce, & Ogrodniczuk, 2001; Shapiro, Barkham, Rees, Hardy, Reynolds, & Startup, 1994; Strupp & Binder, 1984).

Treatment manuals describe the interventions specific to the respective approach and its indications. They facilitate both the implementation of the treatment into clinical practice and its empirical test. The various models of psychodynamic psychotherapy and comparisons between them have been described in several overviews (Barber & Crits-Christoph, 1995; Messer & Warren, 1995).

EMPIRICAL EVIDENCE FOR EFFICACY

METHODS

Data Sources:

Systematic reviews of psychotherapy outcome research based on evidence-based methods were used (Chambless & Ollendick, 2001; DeRubeis & Crits-Christoph, 1998; Nathan & Gorman, 2002; Roth & Fonagy, 2005). In order to identify more recent trials, Medline, PsycInfo, Pubmed, and Current Contents were searched in July 2005 in addition using database-specific keywords such as cognitive-behavioral therapy, psychodynamic psychotherapy, mental disorders, efficacy, randomized controlled trials, meta-analysis. In October 2005, the search was updated. In addition, text books and journal articles were used.

Study selection:

The authors reviewed the available systematic surveys and meta-analyses as well as the additionally identified studies using established inclusion/exclusion criteria. Only studies of adult patients were included.

Data extraction:

Following the evidence-based methods of the Canadian Task Force on Preventive Health Care (Woolf, Battista, Anderson, Logan, & Wang, 1990), an established hierarchy of study designs was applied. Using rigorous criteria, only evidence from randomized controlled trials (Type 1 studies) was included. The authors independently assessed for which mental disorders randomized controlled trials provide evidence for the efficacy of cognitive-behavioral therapy or psychodynamic psychotherapy in the respective disorder. Disagreements were resolved by consensus.

DATA SYNTHESIS

EVIDENCE FOR COGNITIVE-BEHAVIORAL THERAPY

The results of our research show that there is evidence from a substantial number of randomized controlled trials and several meta-analyses that cognitive-behavioral therapy is effective in the treatment of the following mental disorders:

- major depressive disorder (Craighead, Hart, Wilcoxon Craighead, & Ilardi, 2002; Chambless & Ollendick, 2001; DeRubeis & Crits-Christoph, 1998; DeRubeis, Gelfand, Tang, & Simons, 1999; Gloaguen, Cottraux, Cucherat, & Blackburn, 1998; Nathan & Gorman, 2002; Roth & Fonagy, 2005; Pampallona, Bollini, Tibaldi, Kupelnick, & Munizza, 2004; Parker, Roy, & Eysers, 2003; Thase, Greenhouse, Frank, Reynolds, Pilkonis, Hurley, Grochocinski, & Kupfer, 1997),
- panic disorder with and without agoraphobia (Bakker, van Balkom, Spinhoven, Blauw, & van Dyk, 1998; Barlow, Raffa, & Cohen, 2002; Chambless & Ollendick, 2001; Clum, Clum, & Surls, 1993; Deacon & Abramowitz, 2004; DeRubeis & Crits-Christoph, 1998; Heuzenroeder, Donnelly, Haby, Mihalopoulos, Rossell, Carter, Andrews, & Vos, 2004; Mattick, Andrews, Hadzi-Pavlovic, & Christensen, 1990; Nathan & Gorman, 2002; Roth & Fonagy, 2005; van Balkom, Bakker, Spinhoven, Blauw, Smeenk, & Ruesink, 1997),
- social phobia (Barlow et al., 2002; Chambless & Ollendick, 2001; Deacon & Abramowitz, 2004; DeRubeis & Crits-Christoph, 1998; Fedoroff & Taylor, 2001; Nathan & Gorman, 2002; Rodebaugh, Holaway, & Heimberg, 2004; Roth & Fonagy, 2005; Taylor, 1996; Zaider & Heimberg, 2003),
- specific phobias (Barlow et al., 2002; Chambless & Ollendick, 2001; DeRubeis & Crits-Christoph, 1998; Nathan & Gorman, 2002; Roth & Fonagy, 2005),
- obsessive-compulsive disorder (Abramowitz, 1997; Chambless & Ollendick, 2001; Cox, Swinson, Morrison, & Lee, 1993; Deacon & Abramowitz, 2004; DeRubeis & Crits-Christoph, 1998; Eddy, Dutra, Bradley, & Westen, 2004; Franklin & Foa, 2002; Kobak, Greist, Jefferson, Katzelnick, & Henk, 1998; Nathan & Gorman, 2002; Roth & Fonagy, 2005),
- bulimia nervosa (Bacaltchuk, Trefiglio, Oliveira, Hay, Lima, & Mari, 2000; Bacaltchuk, Trefiglio, Oliveira, Lima, & Mari, 1999; Chambless & Ollendick, 2001; DeRubeis & Crits-Christoph, 1998; Fairburn & Harrison, 2003; Hay, Bacaltchuk, & Stefano, 2004; Lewan-

dowski, Gebing, Anthony, & O'Brien, 1997; Nathan & Gorman, 2002; Roth & Fonagy, 2005; Wilson & Fairburn, 2002),

- posttraumatic stress disorder (Bisson & Andrew, 2005; Bradley, Greene, Russ, Dutra, & Westen, 2005; Chambless & Ollendick, 2001; Deacon & Abramowitz, 2004; DeRubeis & Crits-Christoph, 1998; Foa, 2000; Nathan & Gorman, 2002; Roth & Fonagy, 2005; Sherman, 1998),
- schizophrenia (improvements in prosocial behaviors, social skills) (Chambless & Ollendick, 2001; DeRubeis & Crits-Christoph, 1998; Furukawa, 2001; Gould, Mueser, Bolton, Mays, & Goff, 2001; Jones, Cormac, Silveira da Mota Neto, & Campell, 2004; Kopelowicz, Liberman, & Zarate, 2002; Nathan & Gorman, 2002; Pilling, Bebbington, Kuipers, Garety, Geddes, Martindale, Orbach, & Morgan, 2002; Pilling, Bebbington, Kuipers, Garety, Geddes, Orbach, & Morgan, 2002; Roth & Fonagy, 2005; Sensky, 2005; Tarrier & Wykes, 2004).
- There is also evidence that cognitive-behavioral therapy added to anti-psychotic pharmacotherapy significantly reduces positive symptoms of schizophrenia (Zimmermann, Favrod, Trieu, & Pomini, 2005). However, data concerning reduction of relapse by cognitive-behavioral therapy are less conclusive (Jones et al., 2004).

Recent neuroimaging studies have demonstrated neural changes in depressive and anxiety disorders after cognitive-behavioral and interpersonal therapy (Roffman, Marci, Glick, Dougherty, & Rauch, 2005). Furthermore, there is evidence from a limited number of randomized, controlled trials that cognitive-behavioral therapy is effective in the treatment of the following mental disorders:

- generalized anxiety disorder (Barlow et al., 2002; Chambless & Ollendick, 2001; Deacon & Abramowitz, 2004; DeRubeis & Crits-Christoph, 1998; Gould, Otto, Pollak, & Yap, 1997; Heuzenroeder et al., 2004; Nathan & Gorman, 2002; Roth & Fonagy, 2005),
- somatoform and chronic pain disorder (Malone, Strube, & Scogin, 1988; Morley, Eccleston, & Williams, 1999; Simon, 2002),
- borderline personality disorder (Bohus et al., 2004; Crits-Christoph & Barber, 2002; Leichsenring & Leibing, 2003; Lieb, Zanarini, Schmahl, Linehan, & Bohus, 2004; Linehan, Dimeff, Reynolds, Comtois, Welch, Heagerty, & Kivlahan, 2002),
- alcohol abuse disorders (Finney & Moos, 2002),
- hypochondriasis (Barsky & Ahern, 2004; Simon, 2002),

- specific sleep disorders (Edinger, Wohlgenuth, Radtke, Marsh, & Quillian, 2001; Nowell, Buysse, Morin, Reynolds, & Kupfer, 2002),
- bipolar disorders. In bipolar disorders CBT (and psychoeducation) used as adjuncts to medication improve medication adherence, mechanisms for coping, quality of life, and reduce relapses and hospitalizations (Craighead, Miklowitz, Frabk & Vajk, 2002; Vieta & Colom, 2004).

For the treatment of anorexia nervosa, however, evidence-based treatments are scarce (Fairburn, 2005; Wilson & Fairburn, 2002).

There is also evidence from a limited number of randomized controlled trials that behavioral or cognitive-behavioral methods are beneficial treatments of specific conditions, such as:

- incontinence in women (Burgio, Locher, Goode, Hardin, McDowell, Dombrowski, & Candid, 1998; Goode, Burgio, Locher, Roth, Umlauf, Richter, Varner, & Lloyd, 2003),
- chronic fatigue syndrome (Whiting, Bagnall, Sowden, Cornell, Mulrow, & Ramirez, 2001),
- fibromyalgia (Goldenberg, Burckhardt, & Crofford, 2004),
- arthritis. Cognitive-behavioral methods are reported to be beneficial with regard to pain and functional outcomes in arthritis (Lin, Katon, Von Korff, Tang, Williams, Kroenke, Hunkeler, Harpole, Hegel, Arean, Hoffing, Della Penna, Langston, & Unutzer, 2003; Mullen, Laville, Biddle, & Lorig, 1987).

With regard to primary care, randomized controlled trials have shown that the inclusion of behavior therapy improves the management of late-life depression (Unutzer et al., IMPACT Investigators, 2002; Lin et al., IMPACT Investigators, 2003). However, only limited improvements induced by psychotherapy compared to antidepressant medication were reported (Williams et al., 2000).

Another fertile area of research is the role of psychotherapy in the adjunctive treatment of medical conditions, e.g. coronary infarction. However, the results reported for the ENRICHD trial (Enhancing Recovery in Coronary Heart Disease) were less convincing than expected with regard to cognitive-behavioral therapy (Berkman, Blumenthal, Burg, Carney, Catellier, Cowan, Czajkowski, DeBusk, Hosking, Jaffe, Kaufmann, Mitchell, Norman, Powell, Raczynski, & Schneiderman, 2003). The effect of CBT on depression was modest, but there were no effect on reinfarction-free survival after acute myocardial infarction. The methodological flaws of this study were discussed elsewhere (Frasure-Smith & Lesperance, 2003; Sheps, Freedland, Golden, & McMahon, 2003).

Apart from the available evidence for cognitive-behavioral therapy, further studies of cognitive-behavioral therapy in specific psychiatric disorders are required. For example, with regard to personality disorders, only the treatment of borderline and avoidant personality disorders has been studied (Alden, 1989; Bohus et al., 2004; Crits-Christoph & Barber, 2002; Leichsenring & Leibing, 2003; Lieb et al., 2004; Linehan et al., 2002). For borderline personality disorder it has not yet been demonstrated that changes in the core features of the personality disorder (beyond parasuicidal behaviour and drug abuse as well as in general symptom severity and social functioning) can be achieved by cognitive-behavioral therapy (Bohus et al., 2004; Crits-Christoph & Barber, 2002; Leichsenring & Leibing, 2003; Lieb et al., 2004; Linehan et al., 2002) only one randomized controlled study of cognitive-behavioral therapy for avoidant personality disorder presently exists (Alden, 1989). Thus, further studies are required to form an evidence-based approach for the psychotherapeutic treatment of personality disorders (Livesley, 2005). Furthermore, even in depressive and anxiety disorders, the response rates of cognitive-behavioral therapy are often not sufficiently high from a clinical point of view, an aspect that will be taken up again in the discussion section.

EVIDENCE FOR PSYCHODYNAMIC PSYCHOTHERAPY

Clearly fewer efficacy studies exist for psychodynamic psychotherapy compared to cognitive-behavioral therapy (Chambless & Ollendick, 2001; Fonagy, Roth, & Higgitt, 2005; Leichsenring, 2005; Roth & Fonagy, 2005; Task Force on Promotion and Dissemination of Psychological Procedures, 1995). Nevertheless, randomized controlled trials of manual-guided psychodynamic psychotherapy in specific mental disorders are available (Fonagy et al., 2005; Leichsenring, 2005). These studies provided some evidence that psychodynamic psychotherapy is efficacious in the treatment of the following:

- depressive disorders (Barkham, Rees, Shapiro, Stiles, Agnew, Halstead, Culverwell, & Harrington, 1996; Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990; Gallagher-Thompson & Steffen, 1994; Hersen, Himmelhoch, & Thas, 1984; Leichsenring, 2001; Maina, Forner, & Bogetto, 2005; Shapiro, Barkham, Rees, Hardy, Reynolds, & Startup, 1994; Shapiro, Rees, Barkham, & Hardy, 1995; Thompson, Gallagher, & Steinmetz-Breckenridge, 1987),
- social phobia (Bögels, Wijts, & Sallaerts, 2003),

- generalized anxiety disorder (Crits-Christoph, Connolly Gibbons, Narducci, Schamberger, & Gallop, 2005),
- panic disorder (Milrod et al., in press),
- post traumatic stress disorder (Brom, Kleber, & Defares, 1989),
- borderline personality disorder (Bateman & Fonagy, 1999, 2001; Clarkin, Levy, Lenzenweger, & Kernberg, 2004a,b; Munroe-Blum & Marziali, 1995),
- DSM-IV Cluster C personality disorders (e.g. avoidant or obsessive-compulsive personality disorder) (Svartberg, Stiles, & Seltzer, 2004),
- bulimia nervosa (Bachar, Latzer, Kreidler, & Berry, 1999; Fairburn, Kirk, O'Connor, & Cooper, 1986; Fairburn, Norman, Welch, O'Connor, Doll, & Peveler, 1995; Garner, Rockert, Davis, Garner, Olmsted, & Eagle, 1993),
- anorexia nervosa (Dare, Eisler, Russel, Treasure, & Dodge, 2001; Gowers, Norton, Halek, & Vrisp, 1994),
- somatoform disorders (Guthrie, Creed, Dawson, & Tomenson, 1991; Hamilton, Guthrie, Creed, Thompson, Tomenson, Bennett, Moriarty, Stephens, & Liston, 2000; Monsen & Monsen, 2000; Svedlund, Sjödin, Ottosson, & Dotevall, 1983),
- moderate alcohol dependence (Sandahl, Herlitz, Ahlin, & Rönnerberg, 1998),
- opiate dependence (Woody, Luborsky, McLellan, & O'Brien, 1990, 1995).

In the two randomized controlled trials studying the treatment of opiate dependence, psychodynamic psychotherapy added to drug counseling was superior to drug counseling alone (Woody et al., 1990, 1995). However, this does not apply to cocaine dependence: in a treatment study of cocaine dependence, psychodynamic psychotherapy combined with group drug counseling was as effective as cognitive-behavioral therapy which was also combined with group drug counseling (Crits-Christoph et al., 1999). However, both psychodynamic psychotherapy and cognitive-behavioral therapy each combined with group drug counseling were not more effective than group drug counseling alone, and they were both inferior to individual drug counseling with regard to outcome measures related to the extent of drug-use (Crits-Christoph et al., 1999).

In the studies listed above, duration of psychodynamic psychotherapy ranged from 7 to 46 sessions except for two studies of borderline personality disorder (Bateman & Fonagy, 1999, 2001; Clarkin et al., 2004a,b). In these two studies, treatment duration was one year or 18 months, respectively (Bateman & Fonagy, 1999, 2001; Clarkin et al., 2004a,b). Psychody-

namic psychotherapy of 24 sessions or less is usually regarded as short-term psychotherapy (Gabbard, 2000, 2004). Eight of the studies listed above refer to treatments continuing longer than 24 sessions, with treatment duration ranging from 26 to 46 sessions (Bachar et al., 1999; Bögels et al., 2003; Crits-Christoph et al., 1999; Monsen & Monsen, 2000; Svartberg et al., 2004; Woody et al., 1990), respectively, with a treatment duration of one year or 18 months (Bateman & Fonagy, 1999, 2001; Clarkin et al., 2004a,b).

Some of the studies listed above included comparisons between psychodynamic psychotherapy and cognitive-behavioral therapy. In most of these studies, the two methods of treatment were reported as equally effective (Barkham et al., 1996; Bögels et al., 2003; Brom et al., 1989; Crits-Christoph et al., 1999; Gallagher-Thompson et al., 1990; Munroe-Blum & Marziali, 1995; Sandahl et al., 1998; Thompson et al., 1987; Svartberg et al., 2004; Woody et al., 1990). However, there were some exceptions: in one study of depression treatment, both 8 and 16 sessions of psychodynamic psychotherapy and cognitive-behavioral therapy were used (Shapiro et al., 1994; Shapiro et al., 1995). While there were no differences in outcome between the methods of treatment in the 16-session programs, cognitive-behavioral therapy was shown to be superior to psychodynamic psychotherapy in the 8-session programs, especially at one-year follow up (Shapiro et al., 1994; Shapiro et al., 1995). In two studies of bulimia nervosa, short-term psychodynamic psychotherapy was as effective as cognitive-behavioral therapy in the central, disorder-specific outcome measures (bulimic episodes, self-induced vomiting) (Fairburn et al., 1986; Fairburn et al., 1995; Garner et al., 1993). Apart from that, cognitive-behavioral therapy was superior to short-term psychodynamic psychotherapy in some specific measures of psychopathology (Fairburn et al., 1986; Garner et al., 1993). However, in a follow-up of the Fairburn et al. study (1986) using a longer follow-up period, both forms of therapy proved to be equally effective and were superior to a behavioral form of therapy in some measures (Fairburn et al., 1995). Accordingly, for a valid evaluation of the efficacy of psychodynamic psychotherapy in bulimia nervosa, longer-term follow-up studies seem to be necessary. Furthermore, one of the studies listed above reported psychodynamic psychotherapy to be superior to pure cognitive therapy (Bachar et al., 1999). In a recent study by Milrod et al. (in press), psychodynamic therapy was found to be superior to applied relaxation training.

According to a recent meta-analysis, which applied rigorous inclusion criteria (e.g. randomized controlled studies, manual-guided treatments,

reliable outcome measures), psychodynamic psychotherapy yielded large and stable therapeutic effects that significantly exceeded those in the no-treatment groups or treatment-as-usual groups (Leichsenring, Rabung & Leibing, 2004). Furthermore, no differences in efficacy were found between psychodynamic psychotherapy and other forms of psychotherapy (Leichsenring et al., 2004). It can be shown that this is also true if psychodynamic therapy is compared specifically to CBT: no differences in effect sizes were found. Thus, in that meta-analysis, psychodynamic psychotherapy and cognitive-behavioral therapy were found to be equally effective in the treatment of specific mental disorders. However, this result cannot be generalized to all mental disorders. For some mental disorders no randomized controlled trials of psychodynamic psychotherapy are presently available (e.g. for specific personality disorders such as narcissistic personality disorder). As was noted above, for both cognitive-behavioral therapy and psychodynamic psychotherapy, it is necessary to further refine treatments to improve the rates of treatment responders, e.g. for eating disorders (Dare et al., 2001). Furthermore, in the studies reported above, different models of psychodynamic psychotherapy were used. There was not even one psychiatric disorder for which the same model of psychodynamic psychotherapy was tested in two studies by independent research groups (Leichsenring, 2005). The same result was reported by the Task Force on Promotion and Dissemination of Psychological Procedures of the Division 12 (Clinical Psychology) of the American Psychological Association 10 years ago (1995). It still holds true.

DISCUSSION

Cognitive-behavioral and psychodynamic therapy are the most commonly used psychotherapeutic treatments of mental disorders in adults (Goisman et al., 1999). There is evidence from randomized controlled studies that cognitive-behavioral therapy is an efficacious treatment of many mental disorders. Although cognitive-behavioral therapy yields beneficial results in many mental disorders, the rates of positive outcomes for treatment responders in specific disorders are not satisfactory, especially if long-term outcome is considered. This is true for depressive disorders (Davidson et al., 2004), and for some of the anxiety disorders, such as social phobia or generalized anxiety disorder (Davidson et al., 2004; Rodebaugh et al., 2004; Zaider & Heimberg, 2003). Thus, it remains necessary to further improve psychotherapeutic techniques in order to treat some patients more successfully. Furthermore, for many mental disorders, data on long-term effects and maintenance of gain are not

available for psychotherapy and psychopharmacology (Eddy et al., 2004; Gould, Buckminster, Pollak, Otto, & Yap, 1997).

For psychodynamic therapy, clearly, less efficacy studies are available compared to cognitive-behavioral therapy. The available randomized controlled trials have provided some evidence that psychodynamic psychotherapy is superior to control conditions (treatment-as-usual or waitlist), and on the whole were as effective as already established treatments (e.g. cognitive-behavioral therapy) for specific mental disorders. However, evidence is limited for several reasons. For some psychiatric disorders, no randomized controlled trials of psychodynamic psychotherapy exist at all (e.g. for obsessive-compulsive disorder). Thus, the results provided by the available studies cannot be generalized to psychiatric disorders in general. Furthermore, in the available randomized controlled trials, different models of psychodynamic psychotherapy were applied (Leichsenring, 2005; Leichsenring et al., 2004). Thus, it is not clear if the results yielded for one model can be generalized to others. However, an interesting question for future research will be if and how the “different” models of psychodynamic psychotherapy “really” differ empirically: “Brand names of therapy can be misleading” (Ablon & Jones, 2002, p. 775). Studies addressing this problem are relevant for considering if (some of) the “different” models of psychodynamic psychotherapy are close enough to be grouped together. Ablon and Jones (2002) recently compared the cognitive-behavioral and interpersonal therapies as they were performed in the NIMH treatment of depression study (Elkin et al., 1989). According to the results, both forms of therapy adhered most strongly to the ideal prototype of cognitive-behavioral therapy. In addition, adherence to the cognitive-behavioral therapy prototype yielded more positive correlations with outcome measures across both types of treatment. However, psychodynamic psychotherapy was not included in this comparison. Thus, it is not clear how psychodynamic psychotherapy, cognitive-behavioral therapy, and interpersonal therapy empirically differ with regard to therapist behavior. Empirically comparing prototypic sessions of different variants of psychodynamic psychotherapy would be a very interesting and promising research project. Other forms of therapy (e.g., cognitive-behavioral therapy) should be included.

Most of the randomized controlled trials reported in this review refer to short-term psychodynamic psychotherapy of 24 sessions or less. This is also true for CBT. Only eight randomized controlled trials of longer-term psychodynamic psychotherapy were included. Further research on long-term psychodynamic psychotherapy is urgently needed.

The available randomized controlled trials that fulfilled rigorous inclusion criteria provided some evidence that psychodynamic psychotherapy and cognitive-behavioral therapy may be equally effective in the treatment of specific mental disorders (Leichsenring et al., 2004). If further studies and meta-analyses corroborate these results, the question arises if equivalent outcome is achieved by common factors or by treatment-specific mechanisms of change.

In this review, we have restricted ourselves to cognitive-behavioral therapy and psychodynamic psychotherapy. Interpersonal therapy (Klerman, Weissman, Rounsaville, & Chevron, 1984) is another form of psychotherapy that is increasingly frequently used. Interpersonal therapy focuses on the interpersonal problems associated with the patient's mental symptoms (Klerman et al., 1984). Originally developed for the treatment of depression (Elkin et al., 1989; Klerman et al., 1984; Weissman, Markowitz, & Klerman, 2000), interpersonal therapy has been successfully applied, for example, to the treatment of eating disorders (Fairburn et al., 1995; Agras, Walsh, Fairbrun, Wilson, & Kraemer, 2000), or bipolar I disorders (Frank et al., 2005). However, in the treatment of bulimia nervosa, interpersonal therapy seems to be slower in achieving effects than cognitive-behavioral therapy (Agras et al., 2000), and in the treatment of complicated grief, it was less efficacious than a novel complicated grief treatment (Shear, Frank, Houck, & Reynolds, 2005).

The evidence for psychotherapy reported above comes from randomized controlled trials, that is, from experimental settings. At present, it is unknown if the treatments that proved to be effective in experimental settings are equally effective in routine clinical practice. Research on that has only just begun (Chambless & Ollendick, 2001). First results have shown that in routine clinical practice patients did not profit from specific methods of therapy to the same extent as was reported in the randomized controlled trials. Furthermore, therapies were carried out for a longer time, or that additional elements of therapy were added, e.g., psychopharmacological therapy (Chambless & Ollendick, 2001, p. 711). Usually, the internal validity of well-controlled, randomized trials is high. However, due to measures applied to ensure internal validity, their external validity may be restricted (Rothwell, 2005). For this reason it is necessary to judge if the treatments, patients, and settings of a specific, randomized controlled trial are representative for the conditions of clinical practice (Rothwell, 2005). The less representative the patients, treatments, and settings of a randomized controlled trial are, the less the results can be generalized from experimental settings to clinical practice. For this reason, it may be

necessary to test if a method of psychotherapy that has been shown to work under controlled experimental conditions equally works well in routine clinical practice. The National Institute of Mental Health in the United States has specifically called for more effectiveness research (Krupnick et al., 1996). Patients in clinical practice are usually multimorbid, i.e. they rarely suffer from an isolated mental disorder. For this reason, the manual-guided treatments tested under the experimental conditions of randomized controlled trials have to be adapted to the treatment of multimorbid patients, i.e. to the treatment of patients with complex psychiatric disorders. Future studies should also address the combination of psychotherapy and medication including parallel and sequential combinations particularly in treatment resistant patients.

Furthermore, there is evidence from empirical studies that psychotherapy is a cost-effective treatment of mental disorders (Creed et al., 2003; Gabbard, Lazar, Hornberger, & Spiegel, 1997; Guthrie et al., 1999; Heuzenroeder et al., 2004). However, further cost-effectiveness studies comparing, for example, psychotherapy to pharmacotherapy are required (Barrett, Byford, & Knapp, 2005).

Acknowledgments: We would like to thank Drs. Stefan Vormfelde and Brian G. Dwinell for their helpful comments to an earlier draft of this paper.

REFERENCES

- Ablon, J.S., & Jones, E.E. (2002). Validity of controlled clinical trials of psychotherapy: findings from the NIMH Treatment of Depression Collaborative Research Program. *American Journal of Psychiatry*, 159, 775-83.
- Abramowitz, J.S. (1997). Effectiveness of psychological and pharmacological treatments for obsessive-compulsive disorder: a quantitative review. *Journal of Consulting and Clinical Psychology*, 65, 44-52.
- Agras, W.S., Walsh, T., Fairburn, C.G., Wilson, G.T., & Kraemer, H.C. (2000). A multicenter comparison of cognitive-behavioral therapy and interpersonal psychotherapy for bulimia nervosa. *Archives of General Psychiatry*, 57, 459-466.
- Alden, L. (1989). Short-term structured treatment for avoidant personality disorder. *Journal of Consulting and Clinical Psychology*, 57, 756-764.
- Bacaltchuk, J., Trefiglio, R.P., de Oliveira, I.R., Lima, M.S., & Mari, J.J. (1999). Antidepressants versus psychotherapy for bulimia nervosa: a systematic review. *Journal of Clinical Pharmacy and Therapeutics*, 24, 23-31.
- Bacaltchuk, J., Trefiglio, R.P., Oliveira, I.R., Hay, P., Lima, M.S., & Mari, J.J. (2000). Combination of antidepressants and psychological treatments for bulimia nervosa: a systematic review. *Acta Psychiatrica Scandinavica*, 101, 256-264.
- Bachar, E., Latzer, Y., Kreidler, S., & Berry, E.M. (1999). Empirical comparison of two psychological therapies. Self psychology and cognitive orientation in the treatment of anorexia and bulimia. *Journal of Psychotherapy Practice and Research*, 8, 115-128.
- Bakker, A., van Balkom, A.J., Spinhoven, P., Blauuw, B.M., & van Dyck, R. (1998). Follow-up on the treatment of panic disorder with or without agoraphobia: a quantitative review. *Journal of Nervous and Mental Disease*, 186, 414-419.

- Barber, J.P., & Crits-Christoph, P. (1995). *Dynamic therapies for psychiatric disorders (Axis I)*. New York: Basic Books.
- Barkham, M., Rees, A., Shapiro, D.A., Stiles, W.B., Agnew, R.M., Halstead, J., Culverwell, A.L., & 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.
- Barrett, B., Byford, S., & Knapp, M. (2005). Evidence of cost-effective treatments for depression: a systematic review. *Journal of Affective Disorders*, 84, 1-13.
- Barlow, D.A., Raffa, S.D., & Cohen, E.M. (2002). Psychosocial treatments for panic disorder, phobias, and generalized anxiety disorder. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 301-336). New York: Oxford University Press.
- Barsky, A.J., & Ahern, D.K. (2004). Cognitive behavior therapy for hypochondriasis: a randomized controlled trial. *Journal of the American Medical Association*, 291, 1464-1470.
- Bateman, A., & Fonagy, P. (1999). The effectiveness of partial hospitalization in the treatment of borderline personality disorder: A randomized controlled trial. *American Journal of Psychiatry*, 156, 1563-1569.
- Bateman, A., & Fonagy, P. (2001). Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalization: an 18-month follow-up. *American Journal of Psychiatry*, 158, 36-42.
- Beck, J.S. (1995). *Cognitive Therapy—Basics and Beyond*. New York: Guilford Press.
- Beck, A.T. (2005). The current state of cognitive therapy. *Archives of General Psychiatry*, 62, 953-959.
- Bellak, L., Hurvich, M., & Gediman, H. (1973). *Ego functions in schizophrenics, neurotics, and normals*. New York: Wiley.
- Berkman, L.F., Blumenthal, J., Burg, M., Carney, R.M., Catellier, D., Cowan, M.J., Czajkowski, S.M., DeBusk, R., Hosking, J., Jaffe, A., Kaufmann, P.G., Mitchell, P., Norman, J., Powell, L.H., Raczynski, J.M., & Schneiderman, N. (2003). Enhancing Recovery in Coronary Heart Disease Patients Investigators (ENRICH). Effects of treating depression and low perceived social support on clinical events after myocardial infarction: the Enhancing Recovery in Coronary Heart Disease Patients (ENRICH) Randomized Trial. *Journal of the American Medical Association*, 289, 3106-3116.
- Bisson, J., & Andrew, M. (2005). Psychological treatment of post-traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*, 18.
- Blanck, R., & Blanck, G. (1974). *Ego psychology: Theory and Practice*. New York: Columbia University Press.
- Bohus, M., Haaf, B., Simms, T., Limberger, M.F., Schmah, C., Unckel, C., Lieb, K., & Linehan, M.M. (2004). Effectiveness of inpatient dialectical behavioral therapy for borderline personality disorder: a controlled trial. *Behaviour Research and Therapy*, 42, 487-499.
- Bögels, S., Wijts, P., & Sallaerts, S. (2003). Analytic psychotherapy versus cognitive-behavioral therapy for social phobia. Paper presented at: European Congress for Cognitive and Behavioural Therapies; September 2003; Prague.
- Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry*, 162, 214-227.
- Brom, D., Kleber, R.J., & Defares, P.B. (1989). Brief psychotherapy for posttraumatic stress disorders. *Journal of Consulting and Clinical Psychology*, 57, 607-612.
- Burgio, K.L., Locher, J.L., Goode, P.S., Hardin, J.M., McDowell, B.J., Dombrowski, M., & Candid, D. (1998). Behavioral vs drug treatment for urge urinary incontinence in older women: a randomized controlled trial. *Journal of the American Medical Association*, 280, 1995-2000.
- Busch, F.N., Milrod, B.L., & Singer, M.B. (1999). Theory and technique in psychodynamic treatment of panic disorder. *Journal of Psychotherapy Practice and Research*, 8, 234-242.
- Chambless, D.L., & Ollendick, T.H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, 52, 685-716.
- Clarkin, J.F., Levy, K.N., Lenzenweger, M.F., & Kernberg, O.F. (2004). The Personality Disorders Institute/Borderline Personality Disorder Research Foundation randomized control trial for borderline personality disorder: Progress report. Paper presented at the Annual Meeting of the Society of Psychotherapy Research, Rome, Italy.
- Clarkin, J.F., Levy, K.N., Lenzenweger, M.F., & Kernberg, O.F. (2004). The Personality Disorders Institute /Borderline Personality Disorder Research Foundation randomized control trial for

- borderline personality disorder: rationale, methods, and patient characteristics. *Journal of Personality Disorders*, 18, 52-72.
- Clarkin, J.F., Yeomans, F.E., & Kernberg, O.F. (1999). *Psychotherapy for borderline personality*. New York: Wiley.
- Clum, G.A., Clum, G.A., & Surls, R. (1993). A meta-analysis of treatments for panic disorder. *Journal of Consulting and Clinical Psychology*, 61, 317-326.
- Cox, B.J., Swinson, R.P., Morrison, B., & Lee, P.S. (1993). Clomipramine, fluoxetine, and behavior therapy in the treatment of obsessive-compulsive disorder: a meta-analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, 24, 149-153.
- Creed, F., Fernandes, L., Guthrie, E., Palmer, S., Ratcliffe, J., Read, N., Rigby, C., Thompson, D., & Tomenson, B. (2003). North of England IBS Research Group. The cost-effectiveness of psychotherapy and paroxetine for severe irritable bowel syndrome. *Gastroenterology*, 124, 303-317.
- Craighead, W.E., Hart, A.B., Wilcoxon, A., Craighead, L., & Ilardi, S.S. (2002). Psychosocial treatments for major depressive disorder. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 245-262). New York: Oxford University Press.
- Craighead, W.E., Miklowitz, D.J., Frabk, E., & Vajk, F.C. (2002). Psychosocial treatments for bipolar disorder. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 263-276). New York: Oxford University Press.
- Crits-Christoph, P., & Barber, J. (2002). Psychological treatments for personality disorders. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed., (pp. 611-624). New York: Oxford University Press.
- Crits-Christoph, P., Connolly Gibbons, M.B., Narducci, J., Schamberger, M., & Gallop, R. (2005). Interpersonal Problems and the outcome of interpersonally oriented psychodynamic treatment of GAD. *Psychotherapy: Theory/Research/Practice/Training*, 42, 211-224.
- Crits-Christoph, P., Siqueland, L., Blaine, J., Frank, A., Luborsky L., Onken, L.S., Muenz, L.R., Thase, M.E., Weiss, R.D., Gastfriend, D.R., Woody, G.E., Barber, J.P., Butler, S.F., Daley, D., Salloum, I., Bishop, S., Najavits, L.M., Lis, J., Mercer, D., Griffin, M.L., Moras, K., & Beck, A.T. (1999). Psychosocial treatments for cocaine dependence: National Institute on Drug Abuse Collaborative Cocaine Treatment Study. *Archives of General Psychiatry*, 56, 493-502.
- Cutler, J.L., Goldyne, A., Markowitz, J.C., Devlin, M.J., & Glick, R.A. (2004). Comparing cognitive behavior therapy, interpersonal psychotherapy, and psychodynamic psychotherapy. *American Journal of Psychiatry*, 161, 1567-1573.
- Dare, C., Eisler, I., Russel, G., Treasure, J., & Dodge, L. (2001). Psychological therapies for adults with anorexia nervosa. Randomised controlled trial of out-patient treatments. *British Journal of Psychiatry*, 178, 216-221.
- Davidson, J.R., Foa, E.B., Huppert, J.D., Keefe, F.J., Franklin, M.E., Compton, J.S., Zhao, N., Connor, K.M., Lynch, T.R., & Gadde, K.M. (2004). Fluoxetine, comprehensive cognitive behavioral therapy, and placebo in generalized social phobia. *Archives of General Psychiatry*, 61, 1005-1013.
- Deacon, B.J., & Abramowitz, J.S. (2004). Cognitive and behavioral treatments for anxiety disorders: a review of meta-analytic findings. *Journal of Clinical Psychology*, 60, 429-441.
- 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.
- DeRubeis, R.J., Gelfa, L.A., Tang, T.Z., & Simons, A.D. (1999). Medications versus cognitive behavior therapy for severely depressed outpatients: mega-analysis of four randomized comparisons. *American Journal of Psychiatry*, 156, 1007-13.
- Dobson, K.S. (Ed.) (2000). *Handbook of Cognitive-Behavioral Therapies*. 2nd ed. New York: Guilford Publications.
- Eddy, K.T., Dutra, L., Bradley, R., & Westen, D. (2004). A multidimensional meta-analysis of psychotherapy and pharmacotherapy for obsessive-compulsive disorder. *Clinical Psychology Review*, 24, 1011-1030.
- Edinger, J.D., Wohlgenuth, W.K., Radtke, R.A., Marsh, G.R., & Quillian, R.E. (2001). Cognitive behavioral therapy for treatment of chronic primary insomnia: a randomized controlled trial. *Journal of the American Medical Association*, 285, 1856-1864.
- 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 Institute of Mental Health Treatment of Depression Collaborative Research Program. *Archives of General Psychiatry*, 46, 971-982.
- Fairburn, C.G. (2005). Evidence-based treatment of anorexia nervosa. *International Journal of Eating Disorders*, 37, Suppl., 26-30.
- Fairburn, C.G., & Harrison, P.J. (2003). Eating disorders. *Lancet*, 361, 407-416.
- Fairburn, C.G., Kirk, J., O'Connor, M., & Cooper, P.J. (1986). A comparison of two psychological treatments for bulimia nervosa. *Behaviour Research and Therapy*, 24, 629-643.
- Fairburn, C.G., Norman, P.A., Welch, S.L., O'Connor, M.E., Doll, H.A., & Peveler, R.C. (1995). A prospective study of outcome in bulimia nervosa and the long-term effects of three psychological treatments. *Archives of General Psychiatry*, 52, 304-312.
- Fedoroff, I.C., & Taylor, S. (2001). Psychological and pharmacological treatments of social phobia: a meta-analysis. *Journal of Clinical Psychopharmacology*, 21, 311-324.
- Finney, J.W., & Moos, R.H. (2002). Psychosocial treatments for alcohol use disorder. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 157-168). New York: Oxford University Press.
- Foa, E.B. (2000). Psychosocial treatment of posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 61, Suppl. 5, 43-48.
- Fonagy, P., Roth, A., & Higgitt, A. (2005). Psychodynamic psychotherapies: Evidence-based practice and clinical wisdom. *Bulletin of the Menninger Clinic*, 69, 1-58.
- Frank, E., Kupfer, D.J., Thase, M.E., Mallinger, A.G., Swartz, H.A., Fagioli, A.M., Grochocinski, V., Houck, P., Scott, J., Thompson, W., & Monk, T. (2005). Two-year outcomes for interpersonal and social rhythm therapy in individuals with bipolar I disorder. *Archives of General Psychiatry*, 62, 996-1004.
- Franklin, M., & Foa, E.B. (2002). Cognitive behavioral treatments for obsessive compulsive disorder. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed., (pp. 367-386). New York: Oxford University Press.
- Fraser-Smith, N., & Lesperance, F. (2003). Depression—A cardiac risk factor in search of a treatment. *Journal of the American Medical Association*, 289, 3171-3173.
- Furukawa, T.A. (2001). Psychosocial treatment for schizophrenia. *American Journal of Psychiatry*, 158, 2092-2093.
- Gabbard, G.O. (2000). *Psychodynamic psychiatry in clinical practice*, 3rd ed. Washington, DC: American Psychiatric Press.
- Gabbard, G.O. (2004). *Long-term psychodynamic psychotherapy*. Washington, DC: American Psychiatric Publishing.
- Gabbard, G.O., Lazar, S.G., Hornberger, J., & Spiegel, D. (1997). The economic impact of psychotherapy: a review. *American Journal of Psychiatry*, 154, 147-55.
- Gabbard, G.O., Westen, D. (2003). Rethinking therapeutic action. *International Journal of Psychoanalysis*, 84, 823-41.
- 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.
- Garner, D.M., Rockert, W., Davis, R., Garner, M.V., Olmsted, M.P., & Eagle, M. (1993). Comparison of cognitive-behavioral and supportive-expressive therapy for bulimia nervosa. *American Journal of Psychiatry*, 150, 37-46.
- Gill, M.M. (1951). Ego psychology and psychotherapy. *Psychoanalytic Quarterly*, 20, 60-71.
- Gloaguen, V., Cottraux, J., Cucherat, M., & Blackburn, I.M. (1998). A meta-analysis of the effects of cognitive therapy in depressed patients. *Journal of Affective Disorders*, 49, 59-72.
- Goisman, R.M., Warshaw, M.G., & Keller, M.B. (1999). Psychosocial treatment prescriptions for generalized anxiety disorder, panic disorder, and social phobia, 1991-1996. *American Journal of Psychiatry*, 156, 1819-1821.
- Goldenberg, D.L., Burckhardt, C., & Crofford, L. (2004). Management of fibromyalgia syndrome. *Journal of the American Medical Association*, 292, 2388-2395.
- Goode, P.S., Burgio, K.L., Locher, J.L., Roth, D.L., Umlauf, M.G., Richter, H.E., Varner, R.E., &

- Lloyd, L.K. (2003). Effect of behavioral training with or without pelvic floor electrical stimulation on stress incontinence in women: a randomized controlled trial. *Journal of the American Medical Association*, 290, 345-352.
- Gould, R.A., Buckminster, S., Pollack, M.H., Otto, M.W., & Yap, L. (1997). Cognitive-behavioral and pharmacological treatment for social phobia: a meta-analysis. *Clinical Psychology: Science and Practice*, 4, 291-306.
- Gould, R.A., Mueser, K.T., Bolton, E., Mays, V., & Goff, D. (2001). Cognitive therapy for psychosis in schizophrenia: an effect size analysis. *Schizophrenia Research*, 48, 335-342.
- Gould, R.A., Otto, M.W., Pollack, M.H., & Yap, L. (1997). Cognitive behavioral and pharmacological treatment of generalized anxiety disorder: a preliminary meta-analysis. *Behaviour Therapy*, 28, 285-305.
- Gowers, D., Norton, K., Halek, C., & Vrisp, A.H. (1994). Outcome of outpatient psychotherapy in a random allocation treatment study of anorexia nervosa. *International Journal of Eating Disorders*, 15, 165-177.
- Gunderson, J.G., & Links, P. (2001). Treatment of borderline personality disorder. In G. Gabbard (Ed.), *Treatment of psychiatric disorders: The DSM-IV edition*. 2nd ed., (pp. 2291-2309). Washington, DC: American Psychiatric Press.
- Guthrie, E., Moorey, J., Margison, F., Barker, H., Palmer, S., McGrath, G., Tomenson, B., & Creed, F. (1999). Cost-effectiveness of brief psychodynamic-interpersonal therapy in high utilizers of psychiatric services. *Archives of General Psychiatry*, 56, 519-526.
- Guthrie, E., Creed, F., Dawson, D., & Tomenson, B. (1991). A controlled trial of psychological treatment for the irritable bowel syndrome. *Gastroenterology*, 100, 450-457.
- Hamilton, J., Guthrie, E., Creed, F., Thompson, D., Tomenson, B., Bennett, R., Moriarty, K., Stephens, W., & Liston, R. (2000). A randomized controlled trial of psychotherapy in patients with chronic functional dyspepsia. *Gastroenterology*, 119, 661-669.
- Hay, P.J., Bacaltchuk, J., & Stefano, S. (2004). Psychotherapy for bulimia nervosa and bingeing. *Cochrane Database of Systematic Reviews*, 2004, 3.
- Hayes, S.C. (2004). Acceptance and commitment therapy and the new behavior therapies. In S.C. Hayes, V.M. Follette, & M.M. Linehan (Eds.), *Mindfulness and Acceptance—Expanding the cognitive-behavioral tradition* (pp. 1-29). New York: Guilford Press.
- Hayes, S.C., Follette, V.M., & Linehan, M.M. (2004). *Mindfulness and Acceptance—Expanding the cognitive-behavioral tradition*. New York: Guilford Press.
- Henry, W.O., Strupp, H.H., Schacht, T.E., & Gaston, L. (1994). Psychodynamic approaches. In A.E. Bergin & S.L. Garfield (Eds.), *Handbook of psychotherapy and behavior change*. 4th ed. (pp. 467-508). New York: Wiley.
- Hersen, M., Himmelhoch, J.M., & Thas, M.E. (1984). Effects of social skill training, amitriptyline and psychotherapy in unipolar depressed women. *Behaviour Therapy*, 15, 21-40.
- Heuzenroeder, L., Donnelly, M., Haby, M.M., Mihalopoulos, C., Rossell, R., Carter, R., Andrews, G., & Vos, T. (2004). Cost-effectiveness of psychological and pharmacological interventions for generalized anxiety disorder and panic disorder. *Australian and New Zealand Journal of Psychiatry*, 38, 602-612.
- Horowitz, M., & Kaltreider, N. (1979). Brief therapy of the stress response syndrome. *Psychiatric Clinics of North America*, 2, 365-377.
- Jones, C., Cormac, I., Silveira da Mota Neto, J.I., & Campbell, C. (2004). Cognitive behaviour therapy for schizophrenia. *Cochrane Database of Systematic Reviews*, 18.
- Kanfer, F.H., & Phillips, J.S. (1970). *Learning foundations of behavior therapy*. New York: Wiley.
- Klerman, G.L., Weissman, M.M., Rounsaville, B.J., & Chevron, E.S. (1984). *Interpersonal psychotherapy of depression*. New York: Basic Books.
- Kobak, K.A., Greist, J.H., Jefferson, J.W., Katzelnick, D.J., & Henk, H.J. (1998). Behavioral versus pharmacological treatments of obsessive compulsive disorder: a meta-analysis. *Psychopharmacology*, 136, 205-216.
- Kopelowicz, A., Liberman, R.P., & Zarate, R. (2002). Psychosocial treatments for schizophrenia. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 201-228). New York: Oxford University Press.
- Krupnick, J.L., Sotsky, S.M., Simmens, S., Moyer, J., Elkin, I., Watkins, J., & Pilkonis, P. (1996). The role of the therapeutic alliance in psychotherapy and pharmacotherapy outcome: Findings in

- the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology*, 64, 532-539.
- Leichsenring, F. (2001). Comparative effects of short-term psychodynamic psychotherapy and cognitive-behavioral therapy in depression. A meta-analytic approach. *Clinical Psychology Review*, 21, 401-419.
- Leichsenring, F. (2005). Are psychodynamic and psychoanalytic therapies effective? A review of empirical data. *International Journal of Psychoanalysis*, 86, 1-26.
- Leichsenring, F., & Leibling, E. (2003). The effectiveness of psychodynamic therapy and cognitive behavior therapy in the treatment of personality disorders: a meta-analysis. *American Journal of Psychiatry*, 160, 1223-1232.
- Leichsenring, F., Rabung, S., & Leibling, E. (2004). The efficacy of short-term psychodynamic therapy in specific psychiatric disorders: a meta-analysis. *Archives of General Psychiatry*, 61, 1208-1216.
- Lewandowski, L.M., Gebing, T.A., Anthony, J.L., & O'Brien, W.H. (1997). Meta-analysis of cognitive-behavioral treatment studies for bulimia. *Clinical Psychology Review*, 17, 703-718.
- Lieb, K., Zanarini, M.C., Schmahl, C., Linehan, M.M., & Bohus, M. (2004). Borderline personality disorder. *Lancet*, 364, 453-461.
- Lin, E.H., Katon, W., Von Korff, M., Tang, L., Williams, J.W. Jr., Kroenke, K., Hunkeler, E., Harpole, L., Hegel, M., Areal, P., Hopping, M., Della Penna, R., Langston, C., & Unutzer, J. (2003). IMPACT Investigators. Effect of improving depression care on pain and functional outcomes among older adults with arthritis: a randomized controlled trial. *Journal of the American Medical Association*, 290, 2428-2429.
- Linehan, M.M., Dimeff, L.A., Reynolds, S.K., Comtois, K.A., Welch, S.S., Heagerty, P., & Kivlahan, D.R. (2002). Dialectical behavior therapy versus comprehensive validation therapy plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence*, 67, 13-26.
- Livesley, W.J. (2005). Principles and strategies for treating personality disorder. *Canadian Journal of Psychiatry*, 50, 442-450.
- Luborsky, L. (1984). Principles of psychoanalytic psychotherapy. A manual for supportive expressive treatments. New York: Basic Books.
- Maina, G., Forner, F., & Bogetto, F. (2005). Randomized controlled trial comparing brief dynamic and supportive therapy with waiting list condition in minor depressive disorders. *Psychotherapy and Psychosomatics*, 74, 43-50.
- Malone, M.D., Strube, M.J., & Scogin, F.R. (1988). Meta-analysis of non-medical treatments for chronic pain. *Pain*, 34, 231-244.
- Masters, J.C., Burish, T.G., Hollon, S.D., & Rimm, D.C. (Eds). (1987). *Behavior Therapy. Techniques and empirical findings*. 3rd ed. Orlando, Florida: Harcourt Brace Jovanovich.
- Mattick, R.P., Andrews, G., Hadzi-Pavlovic, D., & Christensen, H. (1990). Treatment of panic and agoraphobia. An integrative review. *Journal of Nervous and Mental Disease*, 178, 567-576.
- Messer, S.B. (2001). What makes brief psychodynamic therapy time efficient. *Clinical Psychology*, 8, 5-22.
- Messer, S.B., & Warren, C.S. (1995). Models of brief psychodynamic therapy. A comparative approach. New York: Guilford.
- Milrod, B., Leon, A.C., Busch, F., Rudden, M., Schwalberg, M., Clarkin, J., Aronson, A., Singer, M., Turchin, W., Klass, E.T., Graf, E., Teres, J.J., & Shear, M.K. (in press). A randomized controlled clinical trial of psychoanalytic psychotherapy for panic disorder. *American Journal of Psychiatry*.
- Monsen, K., & Monsen, T.J. (2000). Chronic pain and psychodynamic body therapy. *Psychotherapy*, 37, 257-269.
- Morley, S., Eccleston, C., & Williams, A. (1999). Systematic review and meta-analysis of randomized controlled trials of cognitive behaviour therapy and behaviour therapy for chronic pain in adults, excluding headache. *Pain*, 80, 1-13.
- Munroe-Blum, H., & Marziali, E. (1995). A controlled trial of short-term group treatment for borderline personality disorder. *Journal of Personality Disorders*, 9, 190-198.
- Mullen, P.D., Laville, E.A., Biddle, A.K., & Lorig, K. (1987). Efficacy of psychoeducational interventions on pain, depression, and disability in people with arthritis: a meta-analysis. *Journal of Rheumatology, Supplement*, 15, 33-39.

- Nathan, P.E., & Gorman, J.M. (Eds.). *A guide to treatments that work*. 2nd ed. New York: Oxford University Press.
- Nowell, P.D., Buysse, D.J., Morin, C., Reynolds, C.F. 3rd, & Kupfer, D.J. (2002). Effective treatments for selective sleep disorders. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 592-610). New York: Oxford University Press.
- Pampallona, S., Bollini, P., Tibaldi, G., Kupelnick, B., & Munizza, C. (2004). Combined pharmacotherapy and psychological treatment for depression: a systematic review. *Archives of General Psychiatry*, 61, 714-719.
- Parker, G., Roy, K., & Eysers, K. (2003). Cognitive behavior therapy for depression? Choose horses for courses. *American Journal of Psychiatry*, 160, 825-84.
- Pilling, S., Bebbington, P., Kuipers, E., Garety, P., Geddes, J., Orbach, G., & Morgan, C. (2002). Psychological treatments in schizophrenia: I. Meta-analysis of family intervention and cognitive behaviour therapy. *Psychological Medicine*, 32, 763-782.
- Pilling, S., Bebbington, P., Kuipers, E., Garety, P., Geddes, J., Martindale, B., Orbach, G., & Morgan, C. (2002). Psychological treatments in schizophrenia: II. Meta-analyses of randomized controlled trials of social skills training and cognitive remediation. *Psychological Medicine*, 32, 783-791.
- Piper, W.E., McCallum, M., Joyce, A.S., & Ogrodniczuk, J. (2001). Patient personality and time-limited group psychotherapy for complicated grief. *International Journal of Group Psychotherapy*, 51, 525-552.
- Rodebaugh, T.L., Holaway, R.M., & Heimberg, R.G. (2004). The treatment of social anxiety disorder. *Clinical Psychology Review*, 24, 883-908.
- Roffman, J.L., Marci, C.D., Glick, D.M., Dougherty, D.D., & Rauch, S.L. (2005). Neuroimaging and the functional neuroanatomy of psychotherapy. *Psychological Medicine*, 35, 1385-1398.
- Roth, A., & Fonagy, P. (2005). What works for whom? A critical review of psychotherapy research. 2nd ed. New York: Guilford.
- Rothwell, P.M. (2005). External validity of randomized controlled trials: "To whom do the results of this trial apply?" *Lancet*, 365, 82-93.
- Sandahl, C., Herlitz, K., Ahlin, G., & Rönnerberg, S. (1998). Time-limited group psychotherapy for moderately alcohol dependent patients: A randomized controlled clinical trial. *Psychotherapy Research*, 8, 361-378.
- Schlesinger, H. (1969). Diagnosis and prescription of psychotherapy. *Bulletin of the Menninger Clinic*, 33, 269-278.
- Sensky, T. (2005). The effectiveness of cognitive therapy for schizophrenia: what can we learn from the meta-analyses? *Psychotherapy and Psychosomatics*, 74, 131-135.
- 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., 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 Institute of Mental Health Treatment of Depression Collaborative Research Program. *Archives of General Psychiatry*, 49, 782-787.
- Shear, K., Frank, E., Houck, P.R., & Reynolds, C.F. 3rd (2005). Treatment of complicated grief: a randomized controlled trial. *Journal of the American Medical Association*, 293, 2658-2660.
- Sheps, D.S., Freedland, K.E., Golden, R.N., & McMahon, R.P. (2003). Enhancing Recovery in Coronary Heart Disease and Sertraline Antidepressant Heart Attack Trial. ENRICH and SADHART: implications for future biobehavioral intervention efforts. *Psychosomatic Medicine*, 65, 1-2.
- Sherman, J.J. (1998). Effects of psychotherapeutic treatments for PTSD: a meta-analysis of controlled clinical trials. *Journal of Traumatic Stress*, 11, 413-435.
- Simon, G. (2002). Management of somatoform and factitious disorders. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 447-462). New York: Oxford University Press.

- Strupp, H.H., & Binder, J. (1984). *Psychotherapy in a new key: A guide to time limited dynamic psychotherapy*. New York: Basic Books.
- Svartberg, M., Stiles, T., & Seltzer, M.H. (2004). Randomized, controlled trial of the effectiveness of short-term dynamic psychotherapy and cognitive therapy for Cluster C personality disorders. *American Journal of Psychiatry*, 161, 810-817.
- Svedlund, J., Sjödin, I., Ottosson, J.O., & Dotevall, G. (1983). Controlled study of psychotherapy in irritable bowel syndrome. *Lancet*, 10, 589-592.
- Tarrier, N., & Wykes, T. (2004). Is there evidence that cognitive behaviour therapy is an effective treatment for schizophrenia? A cautious or cautionary tale? *Behaviour Research and Therapy*, 42, 1377-1401.
- Task Force on Promotion and Dissemination of Psychological Procedures. (1995). Training and dissemination of empirically-validated psychological treatments: Report and recommendations. *Clinical Psychology*, 48, 3-23.
- Taylor, S. (1996). Meta-analysis of cognitive-behavioral treatments for social phobia. *Journal of Behavior Therapy and Experimental Psychiatry*, 27, 1-9.
- Thase, M.E., Greenhouse, J.B., Frank, E., Reynolds, C.F. 3rd, Pilonis, P.A., Hurley, K., Grochocinski, V., & Kupfer, D.J. (1997). Treatment of major depression with psychotherapy or psychotherapy-pharmacotherapy combinations. *Archives of General Psychiatry*, 54, 1009-1015.
- Thompson, L.W., Gallagher, D., & Steinmetz-Breckenridge, J. (1987). Comparative effectiveness of psychotherapies for depressed elders. *Journal of Consulting and Clinical Psychology*, 55, 385-90.
- Unützer, J., Katon, W., Callahan, C.M., Williams, J.W. Jr., Hunkeler, E., Harpole, L., Hoffsing, M., Della Penna, R.D., Noel, P.H., Lin, E.H., Areal, P.A., Hegel, M.T., Tang, L., Belin, T.R., Oishi, S., & Langston, C. (2002). IMPACT Investigators. Improving Mood-Promoting Access to Collaborative Treatment. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. *Journal of the American Medical Association*, 288, 2836-2845.
- van Balkom, A.J., Bakker, A., Spinhoven, P., Blauw, B.M., Smeenk, S., & Ruesink, B. (1997). A meta-analysis of the treatment of panic disorder with or without agoraphobia: a comparison of psychopharmacological, cognitive-behavioral, and combination treatments. *Journal of Nervous and Mental Disease*, 185, 510-516.
- Vieta, E., & Colom, F. (2004). Psychological interventions in bipolar disorder: From wishful thinking to an evidence-based approach. *Acta Psychiatrica Scandinavica Supplement*, 422, 34-38.
- Wallerstein, R.S. (1989). The Psychotherapy Research Project of the Menninger Foundation: An overview. *Journal of Consulting and Clinical Psychology*, 57, 195-205.
- Weissman, M.M., Markowitz, J., & Klerman, G. (2000). *A comprehensive guide to interpersonal psychotherapy*. New York: Basic Books.
- Whiting, P., Bagnall, A.M., Sowden, A.J., Cornell, J.E., Mulrow, C.D., & Ramirez, G. (2001). Interventions for the treatment and management of chronic fatigue syndrome: a systematic review. *Journal of the American Medical Association*, 286, 1360-1368.
- Williams, J.W. Jr., Barrett, J., Oxman, T., Frank, E., Katon, W., Sullivan, M., Cornell, J., & Sengupta, A. (2000). Treatment of dysthymia and minor depression in primary care: A randomized controlled trial in older adults. *Journal of the American Medical Association*, 284, 1519-1526.
- Wilson, G.C., & Fairburn, C.G. (2002). Treatments for eating disorders. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work*. 2nd ed. (pp. 559-592). New York: Oxford University Press.
- Woody, G.E., Luborsky, L., McLellan, A.T., & O'Brien, C.P. (1990). Corrections and revised analyses for psychotherapy in methadone maintenance patients. *Archives of General Psychiatry*, 47, 788-789.
- Woody, G.E., Luborsky, L., McLellan, A.T., & O'Brien, C.P. (1995). Psychotherapy in community methadone programs: a validation study. *American Journal of Psychiatry*, 152, 1302-1308.
- Woolf, S.H., Battista, R.N., Anderson, G.M., Logan, A.G., & Wang, E. (1990). Assessing the clinical effectiveness of preventive maneuvers: analytic principles and systematic methods in reviewing evidence and developing clinical practice recommendations. A report by the Canadian Task Force on the Periodic Health Examination. *Journal of Clinical Epidemiology*, 43, 891-905.
- Young, J.E. (1994). *Cognitive therapy for personality disorders: A schema focused approach* (revised edition). Sarasota, FL: Professional Resource Press.

- Zaider, T.I., & Heimberg, R.G. (2003). Non-pharmacologic treatments for social anxiety disorder. *Acta Psychiatrica Scandinavica Supplement*, 72-84.
- Zimmermann, G., Favrod, J., Trieu, V.H., & Pomini, V. (2005). The effect of cognitive behavioral treatment on the positive symptoms of schizophrenia spectrum disorders: a meta-analysis. *Schizophrenia Research*, 77, 1-9.