

## Comparing the Effectiveness of Process–Experiential With Cognitive–Behavioral Psychotherapy in the Treatment of Depression

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This study compared process–experiential and cognitive–behavioral psychotherapy in the treatment of major depression in a researcher allegiance-balanced randomized clinical trial. Sixty-six clients participated in weekly sessions of psychotherapy for 16 weeks. Clients' level of depression, self-esteem, general symptom distress, and dysfunctional attitudes significantly improved in both therapy groups. Clients in both groups showed significantly lower levels of reactive and suppressive coping strategies and higher reflective coping at the end of treatment. Although outcomes were generally equivalent for the 2 treatments, there was a significantly greater decrease in clients' self-reports of their interpersonal problems in process–experiential than cognitive–behavioral therapy.

Numerous treatment approaches, including cognitive–behavioral, interpersonal, psychodynamic, psychodynamic–humanistic, and pharmacological, have been found to be effective in the treatment of depression (Dobson, 1989; Elkin et al., 1989; Hollon, DeRubeis, & Evans, 1996; Jacobson et al., 1996; Lambert & Bergin, 1994; Shapiro & Firth, 1987). Although there is some evidence that client-centered and process–experiential approaches are also effective (Elliott et al., 1990; Greenberg & Watson, 1998), it is necessary to replicate these findings with other samples and to test the efficacy of humanistic, emotionally focused approaches against other accepted treatments in this era of empirically validated treatment approaches, especially as numerous clinicians identify themselves as humanistic. The focus of the current study was to examine the differential effectiveness of cognitive–behavioral therapy (CBT) and process–experiential therapy (PET) in the treatment of major depression.

Numerous studies have demonstrated the efficacy of CBT in the treatment of depression with outpatient samples (Dobson, 1989; Elkin et al., 1989; Hollon & Beck, 1994; Hollon, Shelton, & Loosen, 1991; Jacobson et al., 1996; Robinson, Berman, & Neimeyer, 1990; Rush, Beck, Kovacs, & Hollon, 1977; Shapiro & Firth, 1987; Shaw, 1979). However, a number of methodological weaknesses have been noted that need to be redressed to establish CBT's differential effectiveness with other therapies (Chambless & Hollon, 1998; Lambert & Bergin, 1994; Robinson et al., 1990). These include researchers' allegiance effects; the use of cross-

study comparisons and analogue studies, as well as the inclusion of mild cases; and the lack of more reactive outcome measures in CBTs.

Studies conducted by adherents of a specific approach are more likely to show the superiority of their approach against an alternative. Comparative outcome studies of CBT, dynamic, and humanistic approaches conducted by adherents of CBT report effect sizes of .40, which are more in keeping with placebo controls than effective treatment effects (Lambert & Bergin, 1994). There is a lack of well-controlled comparison studies. Early studies often relied on analogue studies to demonstrate the efficacy of one approach, thereby seriously compromising the generalizability of the findings as well as their clinical utility, whereas other studies have compared treatment approaches across different studies.

Another criticism is that the measures used to assess changes have been more sensitive to changes consistent with the interventions and theory of CBT treatments than the comparison treatments (Lambert & Bergin, 1994). When researcher allegiance effects are controlled and measures other than those that assess symptoms are used, the possible differential effectiveness of certain treatments is clearer (Elkin et al., 1989; Greenberg & Watson, 1998; Imber et al., 1990; Robinson et al., 1990; Shapiro, Barkham, Hardy, & Morrin, 1990).

Fewer studies have examined the efficacy of PET in the treatment of depression. PET was shown to effectively treat depression in two recent studies (Elliott et al., 1990; Greenberg & Watson, 1998), however Elliott et al. (1990) did not have a comparison group. Greenberg and Watson (1998) found that both client-centered therapy (CCT) and PET were effective in treating depression with effect sizes comparable to those reported in studies investigating CBT. However, PET produced a significantly greater improvement in clients' interpersonal problems and self-esteem than CCT.

Although these studies provide some preliminary support for the efficacy of PET in the treatment of depression, it is important to replicate these findings with other treatments and samples while controlling for researcher allegiance effects. The goal in the current study was to compare the efficacy of PET in the treatment of depression with CBT. We used manual-guided treatment ap-

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proaches and multiple outcome measures sensitive to the demands of each approach, while controlling for investigator allegiance effects and random assignment to groups (Chambless & Hollon, 1998; Lambert & Bergin, 1994). The objective was to determine the specific and differential efficacy of both treatments over time.

## Method

### Clients

Sixty-six clients completed the treatment study. Clients' demographic information is presented in Table 1. All clients, including those in the attrition sample, were diagnosed with major depression according to *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) criteria using the Structured Clinical Interview for *DSM-IV* (SCID-IV; Spitzer, Williams, Gibbon, & First, 1995). Clients were excluded from the study if they were (a) currently on medication or in another form of treatment; (b) unable to speak or understand English; (c) currently or previously diagnosed with one of the following *DSM-IV* Axis I disorders: substance abuse, psychosis, manic-depression, or eating disorder or one of the following *DSM-IV* Axis II disorders: borderline, antisocial, or schizotypal; or (d) at high risk of

suicide. Thirty-four (51%) clients were diagnosed with personality disorders. Seventeen were assigned to CBT and 17 to PET. Nineteen clients were diagnosed with 1, 13 with 2, and 2 with 3 Axis II disorders. Twenty clients were diagnosed with obsessive-compulsive, 20 with avoidant, 1 with histrionic, 1 with schizoid, 3 with narcissistic, 2 with dependent, and 4 with paranoid personality disorder.

### Therapists

There were 15 therapists in the study, 8 CBT and 7 PET: 2 therapists treated 7 clients, 2 treated 6, 2 treated 5, 4 treated 4, 4 treated 3, and 1 therapist treated 2. Therapists ranged in age from 26 to 43 years ( $M = 32.73$ ,  $SD = 6.08$ ). Thirteen therapists were master's or doctoral candidates in counseling psychology at a large metropolitan university in Southern Ontario, and 2 were psychologists. Therapists' years of experience ranged from 1 to 15 years ( $M = 5.23$ ,  $SD = 4.74$ ). There was no difference between CBT and PET therapists' age, therapy experience, level of education, or gender.

### Training

An expert in each modality trained the therapists according to the manuals for CBT (Beck, Rush, Shaw, & Emery, 1979) and PET (Green-

Table 1  
*Client Characteristics at Pretreatment*

| Variable                                      | Completers ( $n = 66$ ) |                    | Attrition ( $n = 27$ ) |                    |
|---|-------------------------|--------------------|------------------------|--------------------|
|   | $n$ (%)                 | $M$                | $n$ (%)                | $M$                |
| Gender  |                         |                    |                        |                    |
| Male  | 22 (33)                 |                    | 9 (33)                 |                    |
| Female  | 44 (67)                 |                    | 18 (67)                |                    |
| Age in years                                  |                         | 41.52 <sup>a</sup> |                        | 37.33 <sup>b</sup> |
| Marital status                                |                         |                    |                        |                    |
| Married/common-law                            | 28 (42)                 |                    | 6 (22)                 |                    |
| Single  | 28 (42)                 |                    | 13 (48)                |                    |
| Separated/divorced                            | 9 (14)                  |                    | 8 (30)                 |                    |
| Widowed                                       | 1 (2)                   |                    | 0 (0)                  |                    |
| Education <sup>c</sup>                        |                         |                    |                        |                    |
| Secondary                                     | 16 (24)                 |                    | 9 (33)                 |                    |
| Postsecondary/college                         | 37 (56)                 |                    | 16 (59)                |                    |
| Graduate school                               | 13 (20)                 |                    | 1 (4)                  |                    |
| Race  |                         |                    |                        |                    |
| European                                      | 60 (91)                 |                    | 24 (89)                |                    |
| Asian   | 4 (6)                   |                    | 1 (3.7)                |                    |
| Hispanic                                      | 2 (3)                   |                    | 1 (3.7)                |                    |
| Middle Eastern                                | 0 (0)                   |                    | 1 (3.7)                |                    |
| Beck Depression Inventory                     |                         |                    |                        |                    |
| Mild-moderate                                 | 12 (18)                 |                    | 6 (22)                 |                    |
| Moderate-severe                               | 38 (58)                 |                    | 8 (30)                 |                    |
| Extremely severe                              | 16 (24)                 |                    | 7 (26)                 |                    |
| No. of previous episodes of MDD <sup>d</sup>  |                         |                    |                        |                    |
| Current episode = 1st episode                 | 4 (6)                   |                    | 6 (22)                 |                    |
| 2-4 episodes                                  | 17 (26)                 |                    | 5 (19)                 |                    |
| 5 or more                                     | 41 (62)                 |                    | 13 (48)                |                    |
| Length of current episode <sup>e</sup>        |                         |                    |                        |                    |
| ≤ 6 months                                    | 19 (29)                 |                    | 11 (41)                |                    |
| 6 months-9 years                              | 34 (51)                 |                    | 9 (33)                 |                    |
| ≥ 9 years                                     | 8 (12)                  |                    | 7 (26)                 |                    |
| Global assessment of functioning <sup>f</sup> |                         | 58.17              |                        | 59.65              |

Note. MDD = major depressive disorder.

<sup>a</sup> Range = 21-65 years,  $SD = 10.82$ . <sup>b</sup> Range = 21-61 years,  $SD = 12.79$ . <sup>c</sup> Unknown for 1 attrition client. <sup>d</sup> Unknown for 4 completer clients and 3 attrition clients. <sup>e</sup> Unknown for 5 completer clients. <sup>f</sup> Mean Structured Clinical Interview for *DSM-IV*—global assessment of functioning; range = 51-65 for completers and 51-67 for attrition.

berg, Rice, & Elliott, 1993; Greenberg & Watson, 1998). Allegiance effects were controlled for by having a CBT and PET expert train, supervise, and conduct the respective therapies. All the therapists in each approach were adherents of that approach. In addition, a recognized consultant in each modality provided consultation to each of the investigators on issues that arose during training and treatment. Therapists in both groups received 2 hr of training per week for 4 months. Training consisted of therapists attending lectures, viewing experts' videos and live demonstrations, and receiving supervision of in vivo practice dyads and audiotapes of their work with clients. At the end of training, the therapists judged to be competent according to each instructor were invited to be therapists on the project.

### Treatment

**CBT.** The CBT protocol was conducted according to the cognitive therapy treatment for depression outlined by Beck et al. (1979). The treatment was primarily a cognitive therapy with some behavioral components, such as the recording of daily activities and behavioral experiments.

**PET.** This treatment followed the manual developed by Greenberg et al. (1993). PET integrates client-centered and gestalt techniques including two-chair, empty-chair, systematic evocative-unfolding, and focusing to resolve clients' cognitive-affective problems in therapy. When they felt it was most appropriate, therapists implemented specific interventions at client markers or statements that indicated clients were experiencing specific processing difficulties. There was a general expectation that therapists would implement a minimum of 1 intervention every 2 to 3 sessions from Session 3 to 15.

### Measures

**SCID-IV.** The SCID-IV is a structured diagnostic instrument designed to assess *DSM-IV* Axis I and II disorders. The SCID-IV has been found to yield highly reliable diagnoses for most Axis I and Axis II disorders (Segal, Hersen, & Van Hasselt, 1994).

**Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).** The BDI is a 21-item inventory for assessing depression. Scores of 10 and above are regarded as symptomatic of depression. Test-retest reliability has been reported at .65 (Ogles, Lambert, & Sawyer, 1995).

**Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988).** The IIP is a self-report instrument consisting of 127 items, which measures distress arising from interpersonal sources. Responses are scored according to a circumplex model divided into eight octants corresponding to eight subscales: Domineering/Controlling, Vindictive/Self-Centered, Cold/Distant, Socially Inhibited, Nonassertive, Overly Accommodating, Self-Sacrificing, and Intrusive/Needy. The IIP has been shown to possess high internal consistency, reliability, validity (Horowitz et al., 1988) and high test-retest reliability,  $r = .90$  (Hansen & Lambert, 1996).

**Rosenberg Self-Esteem Inventory (RSE; Rosenberg, 1965).** A 10-item version of the RSE scale (Bachman & O'Malley, 1977) was used to assess clients' levels of self-esteem. This instrument has shown good internal consistency and validity. Excellent internal reliability (.89-.94), test-retest reliability (.80-.90), and adequate sensitivity to change have been reported.

**Symptom Checklist-90-Revised (SCL-90-R; Derogatis, Rickels, & Roch, 1976).** The SCL-90-R is a 90-item self-report questionnaire that measures general psychological distress. Derogatis et al. (1976) reported internal consistency ranging from .77 to .90 and test-retest reliability between .80 and .90 over a 1-week interval.

**Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978).** The DAS is a 40-item inventory of dysfunctional attitudes to measure vulner-

ability to depression. It has high internal reliability coefficients and test-retest reliability coefficients (Kuiper & Olinger, 1989).

**Problem-Focused Style of Coping (PF-SOC; Heppner, Cook, Wright, & Johnson, 1995).** The PF-SOC is an 18-item self-report questionnaire that identifies three styles of coping: reflective, suppressive, and reactive. The PF-SOC has been reported to have construct, concurrent, and discriminant validity and to have moderate test-retest reliability. The suppressive and reactive factors have been reported to predict depression, anxiety, frequency of problems, and psychological adjustment.

### Procedure

The study was advertised by means of radio and written media to the residents of a large metropolitan area in Southern Ontario. A total of 368 people were initially screened on the telephone and provided with information about the study, of whom 182 were assessed. Eighty-one people, who did not meet criteria for the study, were referred elsewhere. Before participating, clients were provided with information about the treatment study and clients gave their informed consent to participate. During the first assessment interview, interviewers administered the SCID-IV and obtained a clinical history to establish a diagnosis of major depression. After the first assessment, the research team, including Jeanne C. Watson, reviewed clients' clinical histories and SCID-IV Axis I data to establish a diagnosis by consensus. The second interview assessed clients on Axis II criteria according to the formal SCID-IV criteria and clarified any questions that had arisen after the first interview. Assessors had received prior training during their internships and 2 hr of training once a week for 6 weeks under the supervision of Jeanne C. Watson.

Research assistants, independently of the primary investigator, gave clients a code number then randomly assigned them to one of two treatment groups by drawing the name of a therapist from either treatment from a container. If the first therapist was unable to meet with the client because of lack of space or a filled quota, assignment passed randomly, by use of the same procedure, to another therapist in the same treatment modality. This procedure initially led to the groups becoming unbalanced, after which clients were assigned to each group on an alternating basis and then randomly assigned to therapists. Random assignment of clients to therapists was somewhat compromised because one therapist became critically ill during the project and two joined the project late. Clients received 16 sessions of either CBT or PET on an individual basis for 1 hr once a week. They were seen at an outpatient clinic affiliated with a large metropolitan university in Southern Ontario. All sessions were video- and audiotaped. Once they were assigned to their treatment group, clients were assigned a code number that appeared on all the self-report instruments that were completed at the beginning and termination of therapy.

### Hypotheses

At the end of treatment, clients in both CBT and PET would show (a) a decrease in their depression on the BDI and in their level of general symptom distress on the Global Severity Index (GSI) of the SCL-90-R, (b) an increase in their level of self-esteem on the RSE, and (c) a decrease in their reactive and suppressive coping style and an increase in their reflective coping style on the PF-SOC.

A comparison of the treatment groups at the end of treatment would show no significant differences on the BDI, the GSI of the SCL-90-R, the RSE, and the PF-SOC.

At the end of treatment, clients in PET would show fewer interpersonal problems than clients in CBT, as measured by the IIP, and clients in CBT would show fewer dysfunctional attitudes than clients in PET, as measured by the DAS.

## Results

### Adherence

The PET- and CBT-supervising psychologists met with the PET and CBT therapists, respectively, in a group format for 2 hr per week. During these sessions, therapists would show videotapes of their work to receive supervision and to ensure effective implementation (Chambless & Hollon, 1998). In addition, an adherence check was performed once the treatments were complete. As per Waltz, Addis, Koerner, and Jacobson's (1993) criteria, a checklist was devised for each approach that identified behaviors that were consistent with each model of treatment and those that were not. Therapists' behaviors were divided into four categories: (a) essential, (b) acceptable but not necessary, (c) proscribed, and (d) other. Two pairs of raters reviewed the middle 20 min of three transcribed sessions per client, one each from sessions 1–4, 5–11, and 12–15. Reliability between the two raters using Cohen's kappa (Cohen, 1960) was significant ( $\kappa = .801, p < .01$ ).

All the behaviors in the essential category are necessary to provide a high quality dose of each treatment. The majority of responses for both CBT and PET therapists were essential to each approach, 70% and 71%, respectively. Of these, 11% of CBT and 5% of PET response types were shared. Another 1% and 4% in CBT and PET, respectively, were acceptable to each approach, and 30% in CBT and 25% in PET were categorized as other and included minimal encouragement such as "yes," "I see," "mmh-hmm," and phrases that were inaudible to the transcriber. No responses fell into the proscribed category, indicating that there was no overlap on the core aspects of each treatment. The data indicate that the two groups received comparable doses of their respective treatments. In addition, the mean number of tasks engaged in with each client in PET was consistent with training expectations ( $M = 8, SD = 3$ ).

### Attrition

There were 101 clients admitted to the study, but 8 dropped out prior to Session 1, leaving 93 clients to enter treatment. However, 27 (29%) dropped out between Sessions 1 and 16, 17 (18%) from CBT and 10 (11%) from PET. Of the attrition group, 6 dropped out after Session 1 because they went on medication or found an alternative treatment. Ten dropped out between Sessions 2 and 5, 9 dropped out between Sessions 6 and 11, and 2 dropped out between Sessions 12 and 15. Nine clients dropped out between Sessions 6 and 11 either because their life circumstances changed, for example, they moved or began a new job, or because they began another treatment, felt sufficiently improved, and did not wish to return, or because they did not complete the questionnaires. The 2 clients who dropped out between Sessions 12 and 15 were not included in the sample of completers because 1 did not complete a post package and the other began seeing another therapist for a different problem while in the study.

Client characteristics of the attrition sample are presented in Table 1. There were no significant differences between clients who dropped out and clients who completed therapy on demographic characteristics including age,  $t(91) = 1.60, p = .11$ ; gender,  $\chi^2(1, N = 93) = 0.0, p = 1.00$ ; marital status,  $\chi^2(4, N = 93) = 5.38, p = .25$ ; education,  $\chi^2(3, N = 92) = 4.56, p = .21$ ; race,  $\chi^2(3, N = 93) = 2.68, p = .44$ ; number of depressive episodes,  $\chi^2(4, N =$

86) = 6.18,  $p = .19$ ; length of current episode,  $\chi^2(2, N = 88) = 4.23, p = .12$ ; and global assessment of functioning (GAF),  $t(90) = 1.51, p = .13$ . There were no significant differences between clients who dropped out and clients who completed treatment on the BDI,  $t(85) = 0.42, p = .68$ ; the RSE,  $t(78) = 0.63, p = .53$ ; the DAS,  $t(75) = 0.25, p = .80$ ; the IIP-total,  $t(76) = 1.45, p = .16$ ; the GSI of the SCL-90-R,  $t(77) = 0.27, p = .79$ ; and the Suppressive,  $t(83) = 1.33, p = .19$ , and Reactive,  $t(77) = .45, p = .66$ , subscales of the PF-SOC. However, there were significant differences on the Reflective subscale of the PF-SOC,  $t(78) = 2.38, p = .02$ , and on the Nonassertive,  $t(76) = 3.45, p < .00$ , and the Overly Accommodating,  $t(76) = 2.52, p = .01$ , subscales of the IIP. The attrition sample showed higher levels of reflective coping and assertiveness and less accommodation to others than the completers at pretreatment. There were no significant differences between attrition clients in PET and attrition clients in CBT on the outcome measures at pretreatment.

### Completers

There were no significant differences between clients assigned to CBT and PET on any of the demographic variables including age, gender, marital status, education, race, number of depressive episodes, length of current episode, and GAF. Neither were there significant differences between the two therapy groups on the presence of personality disorders,  $\chi^2(3, N = 66) = 4.90, p = .18$ ; the number of clients who dropped out of treatment,  $\chi^2(1, N = 93) = 1.30, p = .26$ ; nor on any of the outcome measures at the beginning of treatment, except for the Suppressive subscale of the PF-SOC, indicating that clients in PET suppressed their problems more than those in CBT. The client self-report questionnaires were anonymous and scored by research assistants. The hypotheses were examined using SPSS repeated measures analysis of variance for each of the outcome measures pre- and posttreatment with clients' suppressive style of coping as a covariate. The means, standard deviations, and  $F$  values on all the outcome measures for all clients, pre- and posttreatment, are presented in Table 2. The effect sizes for each therapy group at pre- and posttreatment as well as the effect sizes between each therapy group at the end of treatment are presented in Table 3.

As predicted, clients overall, independent of treatment group, improved significantly on all the outcome measures at the end of treatment. Clients' scores were significantly lower on the BDI, the GSI of the SCL-90-R, the DAS, and the total score of the IIP. A post hoc analysis of the IIP subscales showed that clients improved on five of the eight subscales of the IIP. These were Domineering and Controlling,  $F(1, 56) = 7.71, p < .00$ ; Overly Accommodating,  $F(1, 56) = 14.84, p < .00$ ; Cold and Distant,  $F(1, 56) = 7.67, p < .00$ ; Self-Sacrificing,  $F(1, 56) = 17.24, p < .00$ ; and Intrusive and Needy,  $F(1, 56) = 5.90, p = .02$ . There were no significant differences over time independent of group on the remaining three IIP subscales: Vindictive and Self-Centered,  $F(1, 56) = 2.45, p = .12$ ; Socially Inhibited,  $F(1, 56) = 1.65, p = .20$ ; and Nonassertive,  $F(1, 56) = 3.09, p = .08$ . Clients also showed a significant increase in their levels of self-esteem at the end of treatment as measured by the RSE.

As predicted, there were no significant Treatment Group  $\times$  Time interactions for clients' scores on the BDI, the GSI of the

SCL-90-R, and the RSE. Contrary to prediction, there was no Treatment  $\times$  Group interaction on the DAS. However, consistent with our hypothesis, there was a significant Group  $\times$  Time interaction on the total score of the IIP-circumplex, with clients in PET reporting a greater decrease in their interpersonal problems than clients in CBT.

A post hoc analysis of the subscales indicated that there was a significant interaction between treatment groups and time on five of the eight subscales of the IIP-circumplex. PET clients reported being more assertive,  $F(1, 56) = 4.32, p = .04$ , and less domineering and controlling,  $F(1, 56) = 4.46, p = .04$ , overly accommodating,  $F(1, 56) = 10.10, p < .00$ , self-sacrificing,  $F(1, 56) = 3.93, p = .05$ , and intrusive and needy,  $F(1, 56) = 5.04, p = .03$ , than CBT clients at the end of treatment. Clients in the CBT group did not change at all on the Overly Accommodating subscale of the IIP-circumplex and dropped by only .1 on the Non-assertive subscale. The interaction was not significant for the other three dimensions of the IIP-circumplex.

Changes in clients' PF-SOC were analyzed using a repeated measures multivariate analysis of variance. As predicted, clients in both groups changed significantly from pre- to posttherapy in their styles of coping, such that they were significantly more reflective and significantly less suppressive and reactive at the end of treatment. As predicted, there was no significant Group  $\times$  Time interaction for clients' styles of coping (see Table 2).

The number of clients who changed reliably on the BDI over the course of treatment was also calculated (Jacobson & Truax, 1991; Ogles et al., 1995). Seventeen (51.51%) clients in CBT and 19 (57.57%) clients in PET met the reliable change index (RCI) for the BDI. A chi-square analysis showed no significant differences between therapy groups,  $\chi^2(1, N = 66) = 0.24, p = .62$ .

### *Intent-to-Treat Sample*

The intent-to-treat sample of 93 clients included all clients who received at least one session (i.e., both clients who completed therapy and clients who dropped out of therapy). The intent-to-treat sample was comparable to the completers, with all clients improving significantly on all of the outcome measures by the end of treatment (see Table 2).

There were no significant Treatment Group  $\times$  Time interactions for clients' scores in the intent-to-treat sample on the BDI, GSI of the SCL-90-R, RSE, DAS, and the PF-SOC reflective, suppressive, and reactive styles of coping. However, consistent with the sample of clients who completed treatment, there was a significant Group  $\times$  Time interaction on the total score of the IIP-circumplex, with clients in PET reporting a greater decrease in their interpersonal problems than clients in CBT (see Table 2).

Analysis of the subscales indicated that there was a significant interaction between treatment groups and time on four as opposed to five of the eight subscales of the IIP-circumplex. PET clients reported being less nonassertive, domineering and controlling, overly accommodating, and intrusive and needy than CBT clients at the end of treatment. The interaction was not significant for the other four dimensions of the IIP-circumplex: self-sacrificing, vindictive and self-centered, cold and distant, and socially inhibited.

## Discussion

### *Treatment Efficacy*

Consistent with previous studies, the results of this study demonstrate the efficacy of both PET and CBT in treating major depression (Dobson, 1989; Elkin et al., 1989; Elliott et al., 1990; Greenberg & Watson, 1998; Hollon et al., 1991; Robinson et al., 1990; Shapiro et al., 1990). Although pretreatment scores indicate that this was a population with scores well into the clinical range of severity on the BDI, at least half of the clients in each group improved reliably over the course of treatment. However the means at posttreatment for both groups did not fall below 9, the commonly used cutoff for recovery from depression. This is comparable to those reported in other studies (Jacobson et al., 1996; Ogles et al., 1995; Shapiro & Firth, 1987). Ogles et al. (1995), in their review of the TDRCP data, found that 50% of clients in CBT and 64% in interpersonal therapy met RCI criteria. Similarly, Jacobson et al. (1996) reported a 56% recovery rate for clients in cognitive therapy at the end of treatment, whereas Shapiro and Firth (1987) reported that 37% of their entire sample receiving either exploratory or prescriptive psychotherapy met RCI criteria.

Further support for the effectiveness of both treatments is apparent from the large magnitude of change in each group from pre- to posttherapy. The effect sizes fall within the range (1.45–2.82) of those calculated for other studies (Elkin et al., 1989; Greenberg & Watson, 1998; Jacobson et al., 1996; Shapiro et al., 1990). Moreover, a comparison of the magnitude of change shown by the clients in the current study is far larger than that for no-treatment controls reported in other studies with comparable samples. The effect sizes at pre- and posttreatment for no-treatment controls range from .20 to .49 (Propst, Ostrom, Watkins, Dean, & Mashburn, 1992; Taylor & Marshall, 1977; Wierzbicki & Bartlett, 1987; Wilson, Goldin, & Charbonneau-Powis, 1983). Brown and Lewinsohn (1984) reported a larger effect size (1.16) for a more severely depressed population. This is still considerably smaller than the effect sizes noted in the current study, and the wait list controls in the Brown and Lewinsohn (1984) study were still moderately depressed ( $M = 18.18, SD = 11.29$ ) at posttreatment. It is thus unlikely that the current findings are due merely to the remission of clients' depressive symptoms over time.

Although this sample was recruited through advertisements, it was comparable to other samples reviewed by Hollon et al. (1991), who determined that "the modal patient was typically female, mid-30s, lower middle to middle class, moderately to severely depressed, and with a history of several previous episodes" (p. 93). Although there was a relatively high attrition rate (29%) with the current sample, it is slightly lower than that reported by Hollon et al. (1991) for other studies. Although some studies have reported attrition rates as low as 5% (Rush et al., 1977) and 16% (Covi & Lipman, 1987), others have reported rates ranging from 27% to 38% (Elkin et al., 1989; Hollon et al., 1991, 1996; Murphy, Simons, Wetzel, & Lustman, 1984).

### *Treatment Equivalence*

The finding of no differences between groups in terms of clients' depression, self-esteem, dysfunctional attitudes, and general level of distress is consistent with the majority of outcome studies that have sought to contrast two or more bonafide treat-

Table 2  
*Means (and Standard Deviations) and F values for Each Outcome Measure*

| Measure                                 | CBT      |                        | PE       |                        | <i>F</i> value |              |
|---|----------|------------------------|----------|------------------------|----------------|--------------|
|   | <i>n</i> | <i>M</i> ( <i>SD</i> ) | <i>n</i> | <i>M</i> ( <i>SD</i> ) | Time           | Time × Group |
| Intent-to-treat sample ( <i>n</i> = 93) |          |                        |          |                        |                |              |
| BDI                                     |          |                        |          |                        |                |              |
| Pre                                     | 45       | 25.09 (9.10)           | 40       | 24.50 (8.39)           | 6.02*          | 0.18         |
| Post                                    | 45       | 12.56 (10.70)          | 40       | 13.05 (11.91)          |                |              |
| RSE                                     |          |                        |          |                        |                |              |
| Pre                                     | 42       | 32.55 (7.34)           | 37       | 32.81 (7.40)           | 4.11*          | 0.67         |
| Post                                    | 42       | 36.26 (7.40)           | 37       | 37.57 (7.47)           |                |              |
| DAS total                               |          |                        |          |                        |                |              |
| Pre                                     | 41       | 141.73 (30.03)         | 35       | 134.29 (32.16)         | 9.8**          | 0.00         |
| Post                                    | 41       | 124.56 (32.66)         | 35       | 118.54 (36.53)         |                |              |
| IIP total                               |          |                        |          |                        |                |              |
| Pre                                     | 41       | 1.27 (0.55)            | 36       | 1.37 (0.44)            | 9.9**          | 6.48**       |
| Post                                    | 41       | 1.16 (0.56)            | 36       | 1.07 (0.56)            |                |              |
| SCL-90-R-GSI                            |          |                        |          |                        |                |              |
| Pre                                     | 39       | 1.06 (0.48)            | 36       | 1.07 (0.38)            | 6.02*          | 0.17         |
| Post                                    | 39       | 0.77 (0.58)            | 36       | 0.74 (0.70)            |                |              |
| PF-SOC                                  |          |                        |          |                        |                |              |
| Reflective                              |          |                        |          |                        |                |              |
| Pre                                     | 42       | 2.94 (0.89)            | 38       | 3.01 (0.88)            | 6.70**         | 1.59         |
| Post                                    | 42       | 3.20 (0.85)            | 38       | 3.10 (0.92)            |                |              |
| Suppressive                             |          |                        |          |                        |                |              |
| Pre                                     | 45       | 2.89 (0.83)            | 40       | 3.21 (0.80)            | 40.32**        | 3.61         |
| Post                                    | 45       | 2.47 (1.03)            | 40       | 2.44 (0.95)            |                |              |
| Reactive                                |          |                        |          |                        |                |              |
| Pre                                     | 42       | 3.16 (0.77)            | 37       | 3.32 (0.70)            | 25.05***       | 1.61         |
| Post                                    | 42       | 2.80 (0.82)            | 37       | 2.72 (0.86)            |                |              |
| Completer sample ( <i>n</i> = 66)       |          |                        |          |                        |                |              |
| BDI                                     |          |                        |          |                        |                |              |
| Pre                                     | 33       | 26.00 (9.03)           | 33       | 23.24 (7.81)           | 14.53***       | 0.08         |
| Post                                    | 33       | 10.27 (9.62)           | 33       | 9.03 (8.63)            |                |              |
| RSE                                     |          |                        |          |                        |                |              |
| Pre                                     | 29       | 31.28 (7.32)           | 31       | 33.06 (6.64)           | 5.32*          | 0.23         |
| Post                                    | 29       | 36.45 (7.76)           | 31       | 38.74 (6.11)           |                |              |
| DAS total                               |          |                        |          |                        |                |              |
| Pre                                     | 28       | 144.04 (27.90)         | 28       | 132.57 (32.32)         | 11.21**        | 0.06         |
| Post                                    | 28       | 121.93 (30.75)         | 28       | 112.21 (34.18)         |                |              |
| IIP total                               |          |                        |          |                        |                |              |
| Pre                                     | 29       | 1.33 (0.51)            | 30       | 1.40 (0.38)            | 11.89***       | 5.54*        |
| Post                                    | 29       | 1.18 (0.53)            | 30       | 1.05 (0.54)            |                |              |
| SCL-90-R-GSI                            |          |                        |          |                        |                |              |
| Pre                                     | 29       | 1.11 (0.49)            | 30       | 1.07 (0.37)            | 5.45*          | 0.06         |
| Post                                    | 29       | 0.71 (0.61)            | 30       | 0.67 (0.72)            |                |              |
| PF-SOC                                  |          |                        |          |                        |                |              |
| Reflective                              |          |                        |          |                        |                |              |
| Pre                                     | 28       | 2.85 (0.88)            | 31       | 2.89 (0.86)            | 9.61**         | 1.14         |
| Post                                    | 28       | 3.21 (0.87)            | 31       | 3.06 (0.96)            |                |              |
| Suppressive                             |          |                        |          |                        |                |              |
| Pre                                     | 31       | 2.88 (0.79)            | 33       | 3.33 (0.78)            | 42.13***       | 2.75         |
| Post                                    | 31       | 2.33 (1.05)            | 33       | 2.39 (1.00)            |                |              |
| Reactive                                |          |                        |          |                        |                |              |
| Pre                                     | 28       | 3.21 (0.75)            | 31       | 3.34 (3.34)            | 37.65***       | 0.13         |
| Post                                    | 28       | 2.57 (0.76)            | 31       | 2.62 (0.86)            |                |              |

Table 2 (continued)

| Measure  | CBT      |                        | PE       |                        | <i>F</i> value |              |
|--|----------|------------------------|----------|------------------------|----------------|--------------|
|  | <i>n</i> | <i>M</i> ( <i>SD</i> ) | <i>n</i> | <i>M</i> ( <i>SD</i> ) | Time           | Time × Group |
| Attrition sample ( <i>n</i> = 27) <sup>a</sup> |          |                        |          |                        |                |              |
| BDI  | 13       | 22.85 (8.85)           | 8        | 29.88 (8.56)           |                |              |
| RSE  | 12       | 34.67 (6.18)           | 6        | 31.50 (11.26)          |                |              |
| DAS total                                      | 12       | 139.17 (36.17)         | 6        | 143.17 (35.71)         |                |              |
| IIP total                                      | 11       | 1.07 (0.62)            | 6        | 1.25 (0.68)            |                |              |
| SCL-90-R-GSI                                   | 11       | 1.00 (0.43)            | 8        | 1.12 (0.43)            |                |              |
| PF-SOC   |          |                        |          |                        |                |              |
| Reflective                                     | 12       | 3.30 (0.84)            | 7        | 3.52 (0.84)            |                |              |
| Suppressive                                    | 12       | 2.92 (1.01)            | 7        | 2.64 (0.66)            |                |              |
| Reactive                                       | 12       | 3.12 (0.86)            | 6        | 3.27 (0.72)            |                |              |

*Note.* Intent-to-treat means at posttreatment have been adjusted for the clients who dropped out of treatment. Unequal sample sizes for variables reflect missing data. CBT = cognitive-behavioral therapy; PE = process-experiential therapy; BDI = Beck Depression Inventory; RSE = Rosenberg Self-Esteem Inventory; DAS total = Dysfunctional Attitudes Scale total score; IIP total = Inventory of Interpersonal Problems total score; SCL-90-R-GSI = Symptom Checklist-90—Revised—Global Severity Index; PF-SOC = Problem-Focused Style of Coping; Pre = pretreatment; Post = posttreatment.

<sup>a</sup> Pretreatment data.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

ments (Lambert & Bergin, 1994; Luborsky, Singer, & Luborsky, 1975; Stiles, Shapiro, & Elliott, 1986). In considering these results, it is important to attend to whether there was sufficient power to detect differences. A power analysis, conducted prior to beginning the study, determined that with power = .80 and alpha at .05 the sample should range from 26 to 62 participants to detect moderate to large effect sizes (Cohen, 1988). The current study had 33 participants per therapy group. This is comparable to the sample size of 37 in the CBT condition reported by Elkin et al. (1989) and is well above the median sample size of 12 reported in the literature by Chambless and Hollon (1998) in their article defining empirically validated therapies. Kazdin and Bass (1989) suggested that 30 per group provided sufficient power to establish the equivalence of treatments.

The effect sizes between the two groups at the end of therapy in terms of their depression and their general symptom distress are very small, .14 and .05, respectively. Although a much larger sample size per condition might have been able to detect these very small differences, it is unlikely that this would have any practical or clinical significance in the treatment of depression (Rogers, Howard, & Vessey, 1993). This might not be so for changes in clients' self-esteem and dysfunctional attitudes, however. The effect sizes for differences between groups at posttreatment for clients' self-esteem and dysfunctional attitudes fall between small and medium effect sizes as defined by Cohen (1988) and may benefit from further investigation with larger samples.

#### Differential Effectiveness

In contrast to the other measures, there were differences between the two treatments in terms of clients' reports of their interpersonal problems. Clients in PET reported that they were significantly less domineering and controlling, overly accommodating, self-sacrificing, and intrusive and needy and that they were more self-assertive than CBT clients. Clients in CBT reported no change in their level of assertiveness and overly accommodating behavior. The finding that CBT is less effective in treating clients' sense of interpersonal difficulties than other therapies supports the results from the second Sheffield study (Shapiro et al., 1990), which found that clients treated with exploratory therapy reported a greater reduction in their interpersonal problems than clients receiving prescriptive CBT. The finding is also consistent with the observation that CBT has neglected to focus or deal appropriately with interpersonal issues, emphasizing cognition and reason instead (Castonguay et al., 1995; Goldfried & Davidson, 1994; Safran & Segal, 1990).

Two factors may account for the greater improvement in clients' interpersonal functioning in PET: the type of therapeutic relationship that is modeled, with its emphasis on empathy, acceptance,

Table 3  
Effect Sizes for Completers

| Measure      | Pre-posttreatment |      | Posttreatment<br>for CBT and PE |
|--------------|-------------------|------|---------------------------------|
|              | CBT               | PE   |                                 |
| BDI          | 1.69              | 1.73 | 0.14                            |
| RSE          | 0.68              | 0.89 | 0.34                            |
| DAS total    | 0.75              | 0.61 | 0.30                            |
| IIP total    | 0.30              | 0.74 | 0.23                            |
| SCL-90-R-GSI | 0.72              | 0.69 | 0.05                            |
| PF-SOC       |                   |      |                                 |
| Reflective   | 0.41              | 0.17 | 0.17                            |
| Suppressive  | 0.61              | 1.04 | 0.06                            |
| Reactive     | 0.83              | 0.91 | 0.04                            |

*Note.* CBT = cognitive-behavioral therapy; PE = process-experiential therapy; BDI = Beck Depression Inventory; RSE = Rosenberg Self-Esteem Inventory; DAS total = Dysfunctional Attitudes Scale total score; IIP total = Inventory of Interpersonal Problems total score; SCL-90-R-GSI = Symptom Checklist-90—Revised—Global Severity Index; PF-SOC = Problem-Focused Style of Coping.

and positive regard, and the nature of the therapeutic tasks. In addition to the therapeutic relationship, the specific tasks of PET may help to improve clients' interpersonal functioning. In two-chair and empty-chair tasks, clients are encouraged to express their feelings and needs and to request changes of the self and other in appropriate, nonblaming ways and to listen to the other's response. These requests and demands are then negotiated with the significant other or the self. In essence, clients learn the tools for successful conflict resolution and negotiation that they can transfer to their relationships outside of therapy.

Future work needs to be concerned with identifying more precisely what is differentially effective in each treatment and common to all to further our understanding of treatment efficacy. It is important to replicate these findings with a larger and more severely symptomatic sample to determine the treatments' equivalence in treating depression and to determine the limits of their effectiveness (Elkin et al., 1995). A larger sample might highlight the differential effectiveness of each approach with respect to clients' self-esteem, dysfunctional attitudes, and interpersonal problems to isolate the active ingredients of each approach. Future studies would benefit from determining whether people, other than the client, report an improvement in the client's interpersonal functioning. Further investigation of the differences between the attrition group and the clients who completed therapy in terms of their interpersonal problems and their styles of coping would be useful. In this study, clients who dropped out early were less deferential and accommodating and more reflective than clients who completed the treatment. The differences in cognitive-affective styles of processing may be an indicator of who can benefit from very brief therapy. Furthermore, the use and development of measures other than those looking at symptomatic change is necessary if we are to adequately identify and understand the role of unique and common factors in each treatment modality.

There are several limitations to the current study. A wait-list control group was not used for ethical reasons, and with the current sample size we were not able to detect small effect sizes. All the data are based on self-report measures, with no independent evaluations by external observers. There was a wide range of depression scores in this study with a number of people scoring in the mild range of the BDI (Beck et al., 1961) and a floor effect with respect to the range of distress in terms of clients' scores on the RSE and IIP. The method of recruitment of clients and the high rate of attrition may have implications for the generalizability of the findings. Although therapist adherence was evaluated and therapists received weekly supervision to ensure effective delivery of each treatment, therapists' competence was not formally assessed. It would be important to address these limitations in future work.

## References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Bachman, J., & O'Malley, P. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. *Journal of Personality and Social Psychology*, *35*, 365–380.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression: A treatment manual*. New York: Guilford Press.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *4*, 561–571.
- Brown, R. A. & Lewinsohn, P. M. (1984). A psychoeducational approach to the treatment of depression: Comparison of group, individual, and minimal contact procedures. *Journal of Consulting and Clinical Psychology*, *52*, 774–783.
- Castonguay, L. G., Hayes, A. M., Goldfried, M. R., & DeRubeis, R. J. (1995). The focus of therapist interventions in cognitive therapy for depression. *Cognitive Therapy and Research*, *19*, 485–503.
- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, *66*, 7–18.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, *20*, 37–46.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Covi, L., & Lipman, R. S. (1987). Cognitive-behavioral group psychotherapy combined with imipramine in major depression. *American Journal of Psychiatry*, *131*, 191–198.
- Derogatis, L. R., Rickels, K., & Roch, A. F. (1976). The SCL-90 and the MMPI: A step in the validation of a new self-report scale. *British Journal of Psychiatry*, *128*, 280–289.
- 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., Gibbons, R. D., Shea, M. T., Sotsky, S. M., Watkins, J. T., Pilkonis, P. A., & Hedeker, D. (1995). Initial severity and differential treatment outcome in the NIMH treatment of depression collaborative research program. *Journal of Consulting and Clinical Psychology*, *63*, 841–847.
- Elkin, I., Shea, M. T., Watkins, J. T., Imber, S. D., Sotsky, S. M., Collins, J. F., et al. (1989). NIMH treatment of depression collaborative research program: General effectiveness of treatments. *Archives of General Psychiatry*, *46*, 971–982.
- Elliott, R., Clark, C., Wexler, M., Kemeny, V., Brinkerhoff, J., & Mack, C. (1990). The impact of experiential therapy of depression: Initial results. In G. Lietaer, J. Rombauts, & R. Van Balen (Eds.), *Client-centered and experiential psychotherapy towards the nineties* (pp. 549–577). Leuven, Belgium: Leuven University Press.
- Goldfried, M., & Davidson, G. C. (1994). *Clinical behavior therapy*. New York: Wiley.
- Greenberg, L. S., Rice, L. N., & Elliott, R. (1993). *Facilitating emotional change: The moment-by-moment process*. New York: Guilford Press.
- Greenberg, L. S., & Watson, J. C. (1998). Experiential therapy of depression: Differential effects of client-centered relationship conditions and process experiential interventions. *Psychotherapy-Research*, *8*, 210–224.
- Hansen, N. B., & Lambert, M. J. (1996). Brief report: Assessing clinical significance using the Inventory of Interpersonal Problems. *Assessment*, *3*, 133–136.
- Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, W. C., Jr. (1995). Progress in resolving problems: A problem-focused style of coping. *Journal of Counseling Psychology*, *42*, 279–293.
- Hollon, S. D., & Beck, A. T. (1994). Cognitive and cognitive behavioral therapies. In S. L. Garfield & A. E. Bergin (Eds.), *Handbook of psychotherapy and behavior change* (pp. 428–466). New York: Wiley.
- Hollon, S. D., DeRubeis, R. J., & Evans, M. D. (1996). Cognitive therapy in the treatment and prevention of depression. In P. M. Salkovskis (Ed.), *Frontiers of cognitive therapy* (pp. 293–317). New York: Guilford Press.
- Hollon, S. D., Shelton, R. C., & Loosen, P. T. (1991). Cognitive therapy and cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, *59*, 1, 88–99.
- Horowitz, L. M., Rosenberg, S. E., Baer, B. A., Ureno, G., & Villasenor, V. S. (1988). Inventory of Interpersonal Problems: Psychometric prop-



- erties and clinical application. *Journal of Consulting and Clinical Psychology*, 56, 885–892.
- Imber, S. D., Pilkonis, P. A., Sotsky, S. M., Elkin, I., Watkins, J. T., Collins, J. F., et al. (1990). Mode-specific effects among three treatments for depression. *Journal of Consulting and Clinical Psychology*, 58, 352–359.
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., et al. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology*, 64, 295–304.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59, 12–19.
- Kazdin, A. E., & Bass, D. (1989). Power to detect differences between alternative treatments in comparative outcome psychotherapy research. *Journal of Consulting and Clinical Psychology*, 57, 138–147.
- Kuiper, N. A., & Olinger, L. J. (1989). Stress and cognitive vulnerability for depression: A self-worth contingency model. In R. W. J. Neufeld (Ed.), *Advances in the investigation of psychological stress* (pp. 367–391). New York: Wiley.
- Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In A. E. Bergin & S. L. Garfield (Eds.), *The handbook of psychotherapy and behavior change* (pp. 143–189). New York: Wiley.
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapy. *Archives of General Psychiatry*, 32, 995–1008.
- Murphy, G. E., Simons, A. D., Wetzel, R. D., & Lustman, P. J. (1984). Cognitive therapy and pharmacotherapy, singly and together in the treatment of depression. *Archives of General Psychiatry*, 41, 33–41.
- Ogles, B. M., Lambert, M. J., & Sawyer, J. D. (1995). Clinical significance of the National Institute of Mental Health Treatment of Depression Collaborative Research Program Data. *Journal of Consulting and Clinical Psychology*, 63, 321–326.
- Propst, L. R., Ostrom, R., Watkins, P., Dean, T., & Mashburn, D. (1992). Comparative efficacy of religious and nonreligious cognitive-behavioral therapy for the treatment of clinical depression in religious individuals. *Journal of Consulting and Clinical Psychology*, 60, 94–103.
- Robinson, L., Berman, J., & Neimeyer, R. (1990). Psychotherapy for the treatment of depression: A comprehensive review of controlled outcome research. *Psychological Bulletin*, 108, 30–49.
- Rogers, J. L., Howard, K. I., & Vessey, J. T. (1993). Using significance tests to evaluate equivalence between two experimental groups. *Psychological Bulletin*, 113, 553–565.
- Rosenberg, M. (1965). *Society and the adolescent self image*. Princeton, NJ: Princeton University Press.
- Rush, A. J., Beck, A. T., Kovacs, M., & Hollon, S. D. (1977). Comparative efficacy of cognitive therapy and pharmacotherapy in the treatment of depressed outpatients. *Cognitive Therapy and Research*, 1, 17–37.
- Safran, J. D., & Segal, Z. V. (1990). *Interpersonal process in cognitive therapy*. New York: Basic Books.
- Segal, D. L., Hersen, M., & Van Hasselt, V. B. (1994). Reliability of the structured Clinical Interview for *DSM-III-R*: An evaluative review. *Comprehensive Psychiatry*, 35, 316–327.
- Shapiro, D. A., Barkham, M., Hardy, G. E., & Morrison, L. A. (1990). The second Sheffield Psychotherapy Project: Rationale, design, and preliminary outcome data. *British Journal of Medical Psychology*, 63, 97–108.
- Shapiro, D. A., & Firth, J. A. (1987). Prescriptive vs. exploratory psychotherapy: Outcomes of the Sheffield Psychotherapy Project. *British Journal of Psychiatry*, 151, 790–799.
- Shaw, B. F. (1979). Comparison of cognitive therapy and behavior therapy in the treatment of depression. *Journal of Consulting and Clinical Psychology*, 45, 543–551.
- Spitzer, R., Williams, J., Gibbon, M., & First, M. (1995). *Structured Clinical Interview for DSM-IV*. New York: American Psychiatric Press.
- Stiles, W. B., Shapiro, D. A., & Elliott, R. K. (1986). Are all psychotherapies equivalent? *American Psychologist*, 41, 165–180.
- Taylor, F. G., & Marshall, W. L. (1977). Experimental analysis of a cognitive-behavioral therapy for depression. *Cognitive Therapy and Research*, 1, 59–72.
- Waltz, J., Addis, M. E., Koerner, K., & Jacobson, N. S. (1993). Testing the integrity of a psychotherapy protocol: Assessment of adherence and competence. *Journal of Consulting and Clinical Psychology*, 61, 620–630.
- Weissman, A. N., & Beck, A. T. (1978, August). *Development and validation of the Dysfunctional Attitudes Scale: A preliminary investigation*. Paper presented at the 86th Annual Convention of the American Psychological Association, Toronto, Ontario, Canada.
- Wierzbicki, M., & Bartlett, T. S. (1987). The efficacy of group and individual cognitive therapy for mild depression. *Cognitive Therapy and Research*, 11, 337–342.
- Wilson, P. H., Goldin, J. C., & Charbonneau-Powis, M. (1983). Comparative efficacy of behavioral and cognitive treatments of depression. *Cognitive Therapy and Research*, 7, 111–124.

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