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Short-Term Psychodynamic Psychotherapy for Depression: An Examination of Statistical, Clinically Significant, and Technique-Specific Change

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This study investigates the effectiveness of short-term psychodynamic psychotherapy (STPP) for depression in a naturalistic setting utilizing a hybrid effectiveness/ efficacy treatment research model. Twenty-one patients were assessed pre- and posttreatment through clinician ratings and patient self-report on scales representing specific DSM-IV depressive, global symptomatology, relational, social, and occupational functioning. Treatment credibility, fidelity, and satisfaction were examined, all of which were found to be high. All areas of functioning assessed exhibited significant and positive changes. These adaptive changes in functioning demonstrated large statistical effects. Likewise, changes in depressive symptoms evaluated at the patient level utilizing clinical significance methodology were found to be high. A significant direct process/outcome link between STPP therapist techniques and changes in depressive symptoms was observed. Alternative treatment interventions within STPP were evaluated in relation to subsequent improvements in depression and were found to be nonsignificant. The present results demonstrate that robust statistical and clinically significant improvement can occur in a naturalistic/hybrid model of outpatient STPP for depression.

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A number of studies have demonstrated the effectiveness and efficacy of psychodynamic psychother-

apy for depression (Anderson and Lambert, 1995; Barber et al., 1996; Crits-Christoph, 1992; Gaston et al., 1998; Lueger et al., 2000; Shapiro et al., 1995). In addition, two of these studies have made particularly important contributions to psychodynamic psychotherapy for depression by demonstrating direct treatment intervention-outcome relationships. The first study found a significant relationship between the competent delivery of psychodynamic-expressive techniques early in treatment with subsequent improvements in depression (Barber et al., 1996), while a second study found a significant relationship between psychodynamically derived exploratory interventions made during the middle of treatment and less depressive symptomatology at termination (Gaston et al., 1998).

The present study seeks to replicate and extend these earlier findings regarding the effectiveness of

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short-term psychodynamic psychotherapy (STPP) for the treatment of depression. Posttreatment changes from initial assessment across different domains of functioning (i.e., depression, global distress, and interpersonal, social, and occupational functioning) were expected to be moderate (d > .5)to large (d > .8) in effect (Cohen, 1977). In addition, this study is the first to empirically investigate the two new DSM-IV (American Psychiatric Association, 1994) experimental scales on Axis V for relational functioning (Global Assessment of Relational Functioning [GARF]) and social and occupational functioning (Social and Occupational Functioning Assessment Scale [SOFAS]) in regard to treatment outcome. This study seeks to extend previous research by examining changes in depressive symptoms at the individual patient level utilizing clinical significance methodology (Jacobson and Truax, 1991; Jacobson et al., 1999). Also, this study will examine the relationship between therapist techniques with subsequent improvements in depression from alternative models of treatment (i.e., cognitive-behavioral) in addition to psychodynamic interventions. Finally, we will examine treatment credibility, fidelity, and satisfaction.

Methods

Participants

Participants were 27 patients who received a DSM-IV Axis I diagnosis representative of a depressive spectrum disorder (major depressive disorder, depressive disorder NOS, dysthymia, or adjustment disorder with depressed mood; American Psychiatric Association, 1994) consecutively admitted for individual psychotherapy to a psychodynamic psychotherapy treatment team (PPTT) at a community outpatient psychological clinic. Patients were accepted into treatment regardless of disorder or comorbidity. Four patients prematurely terminated their treatments (15%; after sessions 4, 4, 5, and 8) against the advice of clinic staff. For all patients starting psychotherapy on this treatment team, regardless of diagnosis, the premature termination rate was 18%. Two patients entered treatment utilizing antidepressant medication and were excluded from these analyses, bringing the final sample used in the analyses to 21.

Eleven patients were men, and 10 were women. Seven patients were single, seven were married, and seven were divorced. The mean age for the current sample was 34.43 years with a standard deviation (SD) of 12.7. The range of DSM-IV axis I depressive spectrum disorders in the patient sample included major depressive disorder (N = 10), depressive dis-

order NOS (N=4), dysthymia (N=5), and adjustment disorder with depressed mood (N=2). Nine patients were also diagnosed with a DSM-IV personality disorder, and five others had (subclinical) personality disorder features or traits. Each participant provided written informed consent to be included in program evaluation research.

Treatment

Treatment consisted of once- or twice-weekly sessions of STPP. Treatment was organized, aided, and informed (but not prescribed) by the technical guidelines delineated in four treatment manuals (Book, 1998; Luborsky, 1984; Strupp and Binder, 1984; Wachtel, 1993). Additional technical material specific to STPP management of depression (Luborsky et al., 1995; Malan, 1979) was actively integrated into the treatment of these patients with depressive symptoms. Key features of the STPP model include (Blagys and Hilsenroth, 2000) a) focus on affect and the expression of emotion; b) identification of patterns in actions, thoughts, feelings, experiences, and relationships (these patterns were explored and formulated using the core conflictual relationship theme [CCRT] format; Luborsky and Crits-Christoph, 1997); c) emphasis on past experiences; d) focus on interpersonal experiences; e) emphasis on the therapeutic relationship/ alliance; f) exploration of wishes, dreams, or fantasies; and g) exploration of attempts to avoid topics or engage in activities that may hinder the progress of therapy. In addition to these areas of treatment focus, case presentations and symptoms are conceptualized in the context of interpersonal/intrapsychic conflict (Luborsky and Crits-Christoph, 1997). Also, when a termination date is set in the treatment, this becomes a frequent area of intervention. Issues related to the termination are often linked to key interpersonal, affective, and thought patterns prominent in that patient's treatment.

Treatment was not of a fixed duration, but it was determined by clinician judgment, patient decision, progress toward goals, and life changes. Treatment goals were first explored during the assessment period, and a formal treatment plan was reviewed with each patient in the third psychotherapy session. This treatment plan was subsequently reviewed in the 10th, 24th, 40th, 60th, and 80th sessions for changes, additions, or deletions. Patients and therapists completed reassessment of patient functioning on a standard battery of outcome measures and process ratings immediately after selected sessions prior to these review points. At the end of treatment, all patients receiving services from the PPTT completed an exit evaluation. All patients included in the

analyses had attended a minimum of nine sessions and had completed, at least, a ninth session reassessment battery. Mean number of sessions attended by these 21 patients was 30 sessions during an average 7-month period. However, the median number of sessions and length of treatment were somewhat shorter at 21 sessions and 5 months, respectively. Also, all sessions in this training clinic were videotaped, not just the sessions of this study's participants.

The rapists

Ten advanced graduate students (five men and five women) enrolled in an American Psychological Association-approved clinical psychology Ph.D. program were trained in the use of STPP using the texts described earlier. The study supervisor, a Ph.D. licensed psychologist with extensive training in STPP, also treated one patient in this investigation and utilized this treatment in a continuing case conference to augment therapist training. Each therapist received a minimum of 3.5 hours of supervision per week (i.e., 1.5 hours individually and 2 hours in a group treatment team meeting) on the therapeutic model, conceptualization, process, interpretation, and clinical interventions. Individual and group supervision focused heavily on the review of videotaped case material and technical interventions.

Assessment

The assessment process was designed to assess depressive symptomatology, global distress, and interpersonal, social, and occupational domains using a semistructured clinical interview and standardized measures. Clinicians (i.e., therapist and external rater) and patient self-report assessed these various domains of functioning. Patients and clinicians completed measures assessing symptomatic distress and interpersonal, social, and occupational functioning during pretreatment evaluation and again at posttreatment (or when 90% of the treatment was completed). A more thorough description of the assessment procedures (semistructured clinical interview and assessment measures) and process utilized with this sample are provided in greater detail elsewhere (Ackerman et al., 2000; Hilsenroth, 2002; Hilsenroth et al., 2000; Hilsenroth et al., 2003⁵).

Symptom Checklist-90-Revised. The Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994) is

a 90-item self-report inventory that assesses symptom distress in a number of different domains and problem areas using a Likert scale of 0 (not at all) to 4 (extremely). This measure contains specific subscales of depression (DEP) and interpersonal sensitivity (INT) and a summary score, the Global Severity Index (GSI). The mean DEP for a normal population (N=974 nonpatients) is .36 (SD = .44), and test-retest reliability during a 1-week period utilizing an outpatient sample was .82.

Social Adjustment Scale. The Social Adjustment Scale (SAS; Weissman and Bothwell, 1976) is a 42-item self-report measure that assesses social adjustment in major areas of social and occupational functioning. This measure contains a summary score, the Global Adjustment Score (SASG), which is considered an overall adjustment measure of social and occupational functioning.

DSM-IV Rating Scales. Additional details regarding the reliability data of the DSM-IV scales and aspects of related research design procedures are reported elsewhere (Hilsenroth et al., 2000; Hilsenroth et al., 2003⁵). After the semistructured clinical interview and a feedback session, each patient was rated according to DSM-IV for the presence or absence of DSM-IV Axis II psychopathology, total number of DSM-IV major depressive episode (MDE) symptoms (A1-A9, p. 327; American Psychiatric Association, 1994), and the three Axis V global rating scales: Global Assessment of Functioning scale (GAF; p. 32; American Psychiatric Association, 1994), GARF (p. 758; American Psychiatric Association, 1994), and SOFAS (p. 761; American Psychiatric Association, 1994). DSM-IV Axis V therapist ratings (i.e., on a scale of 0 to 100) were based on the level of functioning of patients at assessment prior to beginning treatment. At the different treatment review points, therapists made routine ratings of these DSM-IV rating scales (MDE, GAF, GARF, and SOFAS) based on the patients' level of functioning at that time. An independent rater scored all rating scales (MDE, GAF, GARF, and SOFAS) used in this study for each participant after viewing a videotape of the clinical interview, feedback sessions, and those sessions or treatment review representative of when 90% of the psychotherapy had been completed. For all cases, scoring of the scales by the second rater was completed without knowledge of patient self-report data and the assessing clinician's ratings for the MDE, GAF, GARF, and SOFAS.

The Spearman-Brown correction for a one-way random effects model intraclass correlation coeffi-

⁵ Hilsenroth M, Baity M, Mooney M, Meyer G (2003) DSM-IV major depressive episode criteria: An evaluation of reliability and validity across three different rating methods. Submitted.

cient (ICC [1,2]; Shrout and Fleiss, 1979) was calculated to examine the reliability of the mean score for each DSM-IV Axis V scale. These Spearman-Brown corrected interrater reliability scores (ICC [1,2], N=21) for the assessment and end of treatment MDE, GAF, GARF, and SOFAS were in the "excellent" range (Shrout and Fleiss, 1979) at >.74. In all analyses of the MDE, GAF, GARF, and SOFAS, these Spearman-Brown corrected interrater reliability scores (ICC [1,2]) representing the mean of the clinician and independent rater were utilized.

Treatment Fidelity: Comparative Psychotherapy *Process Scale.* A more thorough description of the development, procedures, reliability, and validity of the Comparative Psychotherapy Process Scale (CPPS) are reported elsewhere (Blagys et al., 2003⁶). The CPPS is a measure of psychotherapy process designed to assess therapist activity, process variables, and psychotherapy techniques used and occurring during the therapeutic hour. While the CPPS is intended to primarily be a descriptive measure (i.e., what is being done) rather than an evaluative measure (i.e., how well it is being done), as detailed in the scoring manual of this measure, higher scores on the CPPS may reflect a greater competence in the technique or intervention being employed. Developed from an extensive empirical review of the comparative psychotherapy process literature (Blagys and Hilsenroth, 2000, 2002), the scale consists of 20 items to be rated on a 7-point Likert Scale, ranging from 0 ("not at all characteristic"), 2 ("somewhat characteristic"), 4 ("characteristic"), to 6 ("extremely characteristic"). The patient, therapist, or an external rater may complete the CPPS. One unique feature of the items on the CPPS is that they were derived from empirical studies comparing and contrasting psychodynamic-interpersonal- and cognitive-behavioral-oriented approaches to treatment. This measure consists of two subscales: a psychodynamic-interpersonal subscale (PI; 10 items) and a cognitive-behavioral subscale (CB; 10 items). The PI subscale measures the seven domains of therapist activity previously described as key features of the STPP treatment model (Blagys and Hilsenroth, 2000). The CB subscale consists of items that are significantly more characteristic of cognitive-behaviorally oriented therapy (Blagys and Hilsenroth, 2002). Items include a) emphasis on cognitive or logical/illogical thought patterns and belief systems; b) emphasis on teaching skills to patients; c) assigning homework to patients; d) providing information regarding treatment, disorder, or symptoms; e) direction of session activity; and f) emphasis on future functioning.

Videotapes of sessions 3, 9, 15, 21, 27, 36, and 57 (when available) for each patient were arranged in random order, and entire sessions were watched and rated by the two judges independently. Immediately after viewing a videotaped session, judges independently completed the CPPS. Also, each subscale (PI and CB) was coded in random order. Regular reliability meetings were held during the coding process to prevent rater drift. The interrater reliabilities of the CPPS-PI and CPPS-CB subscales were evaluated using one-way random effects model ICC (Shrout and Fleiss, 1979) for 80 psychotherapy sessions that were rated by both judges. Interrater reliability scores [ICC (1)] for these 80 sessions were in the "excellent range" (Shrout and Fleiss, 1979; ≥.75) for the mean CPPS-PI and CPPS-CB scores (both .82). Coefficient alphas from a larger sample of (42 patients) 124 psychodynamic, cognitive-behavioral, and eclectic psychotherapy sessions were found to be high for both subscales: CPPS-PI = .92 and CPPS-CB = $.94.^{6}$

Results

Treatment Credibility

Patients answered two questions regarding their confidence in the treatment they were to receive after a socialization interview (Luborsky, 1984) before starting treatment and again at the end of the third session after reviewing the formal treatment plan. Patients rated their confidence in the treatment on a 7-point Likert scale ranging from 1 (never) to 7 (always). The mean score for "I feel that the things I do in therapy will help me to accomplish the changes I want," was 5.3 (SD = 1.4). The mean score for "How confident do you feel that through your own efforts and those of your therapist you will gain relief from your problems," was 5.7 (SD = 1.3). Patients rated their confidence in their treatment again at the end of the third session with the mean scores for questions 1 and 2 of 5.4 (SD = 1.2) and 5.7(SD = 1.2), respectively. These results indicate, with a score of 5 being labeled as "often" and a score of 6 labeled as "very often," that patients were confident that this treatment would be helpful.

Treatment Fidelity

Ratings of therapist activity were made on the CPPS-PI and CPPS-CB subscales for 78 of the ses-

 $^{^6\,\}rm Blagys$ M, Ackerman S, Bonge D, Hilsenroth M (2003) Measuring psychodynamic-interpersonal and cognitive-behavioral therapist activity: Development of the comparative psychotherapy process scale. Submitted.

TABLE 1
Comparison of pre- to post-treatment changes for the eight outcome scales

	Depression Symptoms						
	Pre-Treatment		Post-Treatment				
Outcome Scale	M	S.D.	M	S.D.	t	p	Effect size a
MDE $(N = 21)^b$	4.48	1.24	1.14	1.81	7.78	<.0001	2.15
$DEP (N = 20)^c$	1.99	.85	.88	.76	6.57	<.0001	1.38
	Global Symptom Distress						
	Pre-Treatment		Post-Treatment				
Outcome Scales	M	S.D.	M	S.D.	t	p	Effect Size
$\overline{\text{GAF } (N=21)^d}$	61.91	6.26	73.14	7.90	8.84	<.0001	1.58
$GSI (N = 20)^e$	1.25	.66	.61	.55	5.12	<.0001	1.05
	Interpersonal Distress						
	Pre-Treatment		Post-Treatment				
Outcome Scales	M	S.D.	M	S.D.	t	p	Effect Size
$\overline{\text{GARF} (N = 21)^f}$	51.81	13.33	65.21	8.10	4.17	.0005	1.22
$INT (N = 20)^g$	1.66	1.01	.81	.70	4.03	.0007	.98
	Social/Occupational-Functioning						
	Pre-Treatment		Post-Treatment				
Outcome Scales	M	S.D.	M	S.D.	t	p	Effect Size
$\overline{\text{SOFAS } (N=21)^h}$	60.10	8.25	70.31	7.50	4.50	.0002	1.30
SASG $(N = 18)^i$	2.2	.35	1.9	.36	4.28	.0005	.85

 $[^]a$ Cohen's d, utilizing pooled standard deviations from pre and post treatment (Cohen, 1977).

sions in this study. The mean CPPS-PI score across these sessions was 3.56 (SD = .79), while the mean CPPS-CB score across the sessions was 1.21 (SD = .27). This difference in the two models of therapeutic focus and activity was found to be significant (t = 11.54, p < .0001) and demonstrated a very large effect (d = 3.98).

Evaluation of Treatment Changes

Paired t-tests (two-tailed, p < .05) were used to examine all pre- and post-treatment changes. The results are given in Table 1 for the eight outcome scales organized in the conceptual categories of depression symptoms, global distress, and interpersonal and social/occupational functioning. Results revealed statistically significant change in all four of the conceptual outcome categories. Treatment change in depressive symptoms, as assessed by clinician ratings and patient self-report, was shown to significantly decrease in this group of treated patients (p < .0001), and these changes were considered to be very robust in effect (d > 1.0). Both

measures of global symptomatic distress, GAF (therapist and external rater) and GSI (patient self-report), were shown to significantly decrease during the course of treatment (p < .0001), and these changes were also considered to be very large in effect (d > 1.0). Likewise, measures of interpersonal distress, GARF (therapist and external rater) and INT (patient self-report), were shown to significantly decrease during the course of treatment (p <.001), and these changes were also considered to be large in effect (d > .80). The two social and occupational functioning scales, SOFAS (therapist and external rater) and SASG (patient self-report), also showed significant changes (p < .001), with clinician rating and patient self-report demonstrating large effects (d = 1.30 and .85, respectively).

Clinically Significant Change in Depression Symptoms

Both measures of depression were examined at the individual patient level for clinical significance. Prior to the calculation of clinical significance infor-

 $[^]b$ DSM-IV Major Depressive Episode Symptoms (0–9).

^c Depression Subscale of the Symptom Checklist-90-Revised.

^d Global Assessment of Functioning scale.

^e Global Severity Index of the Symptom Checklist-90-Revised.

^f Global Assessment of Relational Functioning scale.

 $[^]g$ Interpersonal Sensitivity Subscale of the Symptom Checklist-90-Revised.

^h Social and Occupational Functioning Assessment Scale.

ⁱ Global Adjustment Score of the Social Adjustment Scale.

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mation, to address concerns of pretreatment score regression to the mean, each of the pretreatment scores utilized in this stage of data analysis were adjusted according to standard psychometric procedures (Speer, 1992). In this formula, evaluation scores were "true score adjusted" to attenuate any regression effects. Reliable Change Index (RCI; Jacobson and Truax, 1991) scores then were calculated for each variable (using the adjusted pretest scores). An RCI score exceeding 1.96 suggests that the test score change was psychometrically reliable, reflected real change, and was not the product of random error (p < .05, two tailed). Each posttreatment test score then was examined to determine whether it fell below the cutoff score for a functional distribution, within 2 SD of the normative mean. Patients who met both of these criteria (i.e., reliable change and moved within 2 SD of the normative mean) were considered to have achieved clinically significant change. RCIs were examined to determine whether any patients reliably deteriorated during treatment.

All calculations of clinical significance for the DEP utilized the normative mean, standard deviation, and test-retest reliability data reported in the method. Calculation of RCI for the MDE required a slight modification in the computation of the standard error of difference (Sdiff) used in the denominator of this formula. A number of authors (Jacobson et al., 1999; Kadera et al., 1996; Tingey et al., 1996) have recommended alternative reliability estimates when calculating RCI for measures that do not have test-retest reliability estimates available for nonclinical populations. Since we were unaware of any test-retest reliability data from nonclinical subjects for the DSM-IV MDE symptoms, we instead utilized a pooled mean interrater reliability coefficient (ICC [1,2], .86 and .97, respectively) from the evaluation and final session rating in the computation of Sdiff.

Similar to the modification of the RCI, there is currently a lack of normative mean and standard deviation data available for the DSM-IV MDE symptoms necessary to establish a functional distribution criteria point. Regarding this selection of a functional distribution criteria, Jacobson et al. (1999) have recently noted that criterion calculation may be irrelevant for any clinical problem in which exceeding a predetermined cutoff point on a scale automatically guarantees change to a normal band of functioning. When applying this rationale specifically to the MDE symptoms, each of the depressive spectrum disorders utilized in this study does have criteria points at which functioning is considered "nonclinical," all of which would require the presence of less than two MDE criteria (0-1). Table 2

TABLE 2 Clinically significant change in depression symptoms

Criterion	MDE $(N=21)^a$	$DEP (N = 20)^b$
$RCI > 1.96^c$	18 (86%)	16 (80%)
Functional Distribution ^d	15 (71%)	16 (80%)
Clinical Significance ^e	15 (71%)	13 (65%)
Deterioration ^f	0 (0%)	0 (0%)

- ^a DSM-IV Major Depressive Episode Symptoms (0-9).
- b Depression Subscale of the Symptom Checklist-90-Revised.
- ^c Number of individuals who reliably improved after adjusting pretest scores for regression to the mean.
- d Number of individuals who fell within 2 standard deviations of the general population mean.
- ^e Number of individuals who reliably improved and fell within 2 standard deviations of the general population mean.
- $^f\mathrm{Number}$ of individuals who reliably deteriorated during treatment

reports the frequency and percentage of patient reliable change, movement into a functional distribution, clinical significance, and deterioration through the course of psychotherapy for each depression outcome scale.

Approximately three fourths (71% or greater) of the patients who completed treatment showed reliable change and movement into a functional distribution in either clinician-rated or self-reported levels of depressive symptomatology. A very high level of clinical significance was also shown for clinicianrated depressive symptoms (71%), while almost two thirds (65%) of patients achieved clinically significant change based on self-report. None of the patients showed any deterioration during psychotherapy in either of the assessment modalities. When we apply a more conservative standard to calculate clinical significance rates, as recently recommended by Westen and Morrison (2001), by adding the four prematurely terminating patients to the total number of patients in the denominator (i.e., intent-totreat sample rather than only treatment completers), we still obtain a high level of clinically significant change on clinician- (60%) and patient- (54%) rated depressive symptoms.

Treatment Process and Outcome Relationship

The next analyses in this study examined the relationship between therapist activity and technique with changes in depressive symptomatology. Clinician-rated and patient self-report pretreatment scores of depression symptoms were adjusted for regression to the mean prior to these analyses as part of the previously described RCI methodology. A mean score was tabulated across all viewed sessions for each treatment case on the CPPS-PI and CPPS-CB subscales, and these average amounts of therapist technique were examined in relation to

 $\begin{array}{c} {\rm TABLE~3} \\ {\rm Treatment~techniques~in~relation~to~subsequent~changes~in} \\ {\rm depressive~symptomatology} \end{array}$

	MDE-RCI $(N = 21)^a$	DEP-RCI $(N = 20)^b$
Mean CPPS-PI ^c	r = .57, p = .006	r = .49, p = .03
Mean CPPS-CB ^d	r =33, p = .15	r =33, p = .15

- a Reliable Change in number of Major Depressive Episode Symptoms (0-9) after adjusting pretest scores for regression to the mean.
 b Reliable Change in the SCL-90-R Depression Subscale after ad-
- justing pretest scores for regression to the mean.

 ^c Mean Comparative Psychotherany Process Scale: Psychodynam
- ^c Mean Comparative Psychotherapy Process Scale: Psychodynamic-Interpersonal Process Subscale across psychotherapy sessions.
- ^d Mean Comparative Psychotherapy Process Scale: Cognitive-Behavioral Process Subscale across psychotherapy sessions.

that patient's reliable degree of change in depressive symptomatology (MDE-RCI and DEP-RCI).

As reported in Table 3, results demonstrated that higher mean levels of PI techniques across the treatment were significant and positively related to amount of reliable change in clinician-rated and patient self-reported changes in depression symptoms (r=.57, p=.006 and r=.49, p=.03, respectively). These findings also revealed that mean levels of CB interventions across the course of treatment were nonsignificant and negatively related to amount of reliable change in clinician-rated and patient self-reported changes in depression symptoms (both r=-.33, p=.15).

To better understand the specific aspects of PI technique that were most related to subsequent changes in depression symptoms, we undertook two post hoc, exploratory analyses to examine this issue. The results of the first stepwise regression analysis revealed that the CPPS-PI item "The therapist encourages the patient to experience and express feelings in the session" to be significantly related to the criterion variable MDE-RCI (R = .62, R2 = .39, F = 12.09, p = .003). The results of a second stepwise regression analysis revealed that the CPPS-PI item "The therapist addresses the patient's avoidance of important topics and shifts in mood" to be significantly related to the criterion variable DEP-RCI (R = .51, R2 = .26, F = 6.35, p = .02).

Treatment Satisfaction

At completion of treatment, each patient was asked to rate his or her level of satisfaction with the psychotherapy on a -4 to +4 Likert scale for three questions: a) "How unhelpful or helpful has therapy been for you?" b) "Overall, how satisfied or dissatisfied have you been with therapy?" and c) "In general, how productive do you feel the sessions have been with your therapist?" The mean scores on these treatment satisfaction questions were very

positive (3.5, 3.6, and 3.6), with small standard deviations (.68, .59, and .51, respectively), and most patients responded with one of the two highest possible ratings, either a 3 or 4.

Discussion

This is one of the first studies to examine treatment credibility, fidelity, and satisfaction within a naturalistic/effectiveness model of STPP for depression, all of which were found to be high. Also, when evaluating psychotherapy outcomes, treatment attrition should be considered. In this study, the treatment termination rate for these depressed patients (15%) is low in relation to general practice (Garfield, 1994; Olfson and Pincus, 1994; Owen and Kohutek, 1981) and in outcome research (DeRubeis et al., 1999; Elkin et al., 1989; Westen and Morrison, 2001). Changes in the four domains of depressive symptoms, global symptomatic distress, and interpersonal and social/occupational functioning showed substantial improvements and large statistical effects (p < .001 and d > .80). In addition, the findings of this study support the clinical utility of the two DSM-IV Axis V experimental scales, GARF and SOFAS, as outcome variables in treatment studies. Almost all (86% and 80%) of those patients who completed treatment demonstrated reliable change or scored within a functional distribution in regard to depression symptoms. Likewise, the percentage of patients exhibiting clinically significant change in depression (71% and 65%) through the course of psychotherapy was high. This was still the case when a more restrictive definition of clinical significance was calculated (60% and 54%) using a conservative estimate (i.e., intent-to-treat sample rather than only treatment completers) that is uncommon in contemporary psychotherapy outcome research (Westen and Morrison, 2001). The statistical and clinical significance results of this study were consistent with prior research on the efficacy and effectiveness of psychodynamic psychotherapy for the management of depression (Anderson and Lambert, 1995; Barber et al., 1996; Crits-Christoph, 1992; Gaston et al., 1998; Lueger et al., 2000; Shapiro et al., 1995). Indeed, these posttreatment changes and levels of clinical significance compare favorably with other modalities of treatment for depression (DeRubeis et al., 1999; Elkin et al., 1989; Ogles et al., 1995; Westen and Morrison, 2001).

In addition, these changes in depressive symptoms were significantly related to therapist techniques. This is the third study, from three independent research groups, that has found a direct link between psychodynamic interventions and subse-

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quent changes in depressive symptoms (Barber et al., 1996; Gaston et al., 1998). Further, it appears in this study that specific therapist techniques directed toward achieving and maintaining session focus on the exploration and expression of affect were most related to positive changes in depressive symptomatology. These interventions provide important information concerning applied clinical practice and are consistent with a psychodynamic model of change (Blagys and Hilsenroth, 2000; Book, 1998; Fosha, 2002; Luborsky, 1984; Luborsky and Crits-Christoph, 1997; Luborsky et al., 1990, 1995; Malan, 1979; Strupp and Binder, 1984; Wachtel, 1993), whereby a supportive environment and relationship are developed with the therapist that may allow the patient to better tolerate the expression and exploration of painful affect. When this painful affect is engaged or avoided, then interventions are focused "in the moment" (including issues related to the therapeutic relationship) for further expression and elaboration.

Assessment of CB interventions was conducted to evaluate one potential competing hypothesis for the basis of patient change. It is important to note that the negative, nonsignificant relationship between CB interventions and change in depressive symptoms that was observed needs to be understood within the context of this specific study. These findings indicate that within a study of STPP for outpatient depression, the very limited amount of CB interventions utilized within this larger psychodynamic treatment did not contribute to outcome. This finding should not be generalized beyond this limited context. The positive relationship between CB interventions and outcome has been demonstrated in previous research (DeRubeis and Feeley, 1990; Feeley et al., 1999; Tang and DeRubeis, 1999). However, we thought it was important to assess the impact of these alternative treatment interventions within psychodynamic psychotherapy. We believed this was an important methodological issue to address because prior research has shown a few techniques historically understood to be psychodynamic in nature (either interventions distinctive to or emphasized significantly more in PI therapy than CB treatments; Blagys and Hilsenroth, 2000) employed within a CB treatment have been significantly related to patient improvements (Ablon and Jones, 1998; Castonguay et al., 1996; Gaston et al., 1998; Hayes and Strauss, 1998; Jones and Pulos, 1993).

One limitation of this study was that the patient sample primarily suffered from mild to moderate levels of distress and impairments in functioning. Further research is necessary using inpatient samples exhibiting severe levels of distress and functional impairment to extend the implications of the present findings. In addition, the small sample size and open-ended psychodynamic treatment provided by advanced graduate trainees will necessitate future research to ascertain whether these changes are generalizable to other treatment settings, with therapists possessing greater levels of experience or varying treatment modalities. Finally, the lack of an experimental design does not allow us to conclusively rule out the potential impact of common factors on our observed treatment-related effects.

These limitations notwithstanding, this treatment study is one of the first to integrate the assessment, technique, and training aspects of an efficacy model within a naturalistic setting (Seligman, 1996). The incorporation of these efficacy features in this otherwise naturalistic treatment delivery setting provides important information regarding the nature of the treatment that is not often evaluated in general psychotherapy effectiveness studies. As such, this study represents a more naturalistic examination of STPP for depression as delivered in an outpatient community clinic. The present results demonstrate that robust statistical and clinically significant improvement can occur in STPP for depression. In addition, a significant positive relationship between psychodynamic techniques and subsequent changes in depressive symptomatology was observed in a manner consistent with a psychodynamic model of change (Blagys and Hilsenroth, 2000; Book, 1998; Fosha, 2002; Luborsky, 1984; Luborsky and Crits-Christoph, 1997; Luborsky et al., 1990, 1995; Malan, 1979; Strupp and Binder, 1984; Wachtel, 1993).

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