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1996

Characteristics of the effective therapist: Further analyses of the NIMH TDCRP

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SPECIAL FEATURE

Characteristics of Effective Therapists: Further Analyses of Data From the National Institute of Mental Health Treatment of Depression Collaborative Research Program

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Analyses of the data of the National Institute of Mental Health-sponsored Treatment of Depression Collaborative Research Program have primarily examined the effects of types of treatment and patient characteristics on outcome, but scant attention has been directed toward evaluating the contributions of the therapist. With an aggregate of residualized therapeutic change scores of the 5 primary outcome measures for each patient at termination as an overall measure of improvement, an average therapeutic effectiveness measure was derived for each of the 28 therapists based on the outcome of the patients they saw in active treatment. The distribution of the therapists was divided into thirds, and comparisons indicate that more effective therapists are more psychological minded, eschew biological interventions (i.e., medication and electroconvulsive therapy) in their ordinary clinical practice, and expect outpatient treatment of depression to take longer than did moderately and less effective therapists.

The National Institute of Mental Health (NIMH)-sponsored Treatment of Depression Collaborative Research Program (TDCRP), a comprehensive, well-designed, and carefully conducted multisite, randomized clinical trial, evaluated several forms of brief (16–20 session) outpatient treatment for depression. Prior analyses of these data compared the relative efficacy of four treatment conditions and the effects of patient characteristics on outcome, but little attention has been directed to evaluating the therapists and their contributions to the therapeutic process.

Therapists' contribution to treatment outcome has long been of concern in psychotherapy research (e.g., Beutler, Crago, & Arizmendi, 1986; Gurman & Razin, 1977). However, as noted

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We are indebted to the National Institute of Mental Health (NIMH) and the members of the Treatment of Depression Collaborative Research Program (TDCRP) research team for making available the empirical data of the TDCRP. The analyses presented in this article were conducted without support from or the endorsement of the NIMH.

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by Luborsky and his colleagues (Luborsky & Auerbach, 1985; Luborsky et al., 1986; Luborsky, Diguer, McLellan, & Woody, 1995) and by others (e.g., Frank, 1959; Lambert, 1989; Najavits & Strupp, 1994) the therapist is an often neglected and poorly understood variable (Beutler, Machado, & Neufeldt, 1994). Although some therapists consistently achieve better results than others (e.g., Lambert, 1989; Lafferty, Beutler, & Crago, 1989; Luborsky, Woody, McLellan, O'Brien, & Rosenzweig, 1982; Luborsky et al., 1986; Orlinsky & Howard, 1980), few characteristic of more effective therapists have been identified. Consistent with earlier reviews (Parloff, Waskow, & Wolfe, 1978), Beutler et al. (1994) found that only a few qualities have even a modest effect on outcome: cognitive level (Holloway & Wampold, 1986), capacity to establish a therapeutic alliance (e.g., Horvath & Symonds, 1991), a background in short-term therapy (e.g., Lyons & Woods, 1991; Miller & Berman, 1983), professional background (e.g., Smith, Glass, & Miller, 1980; Stein & Lambert, 1984), and the lack of directiveness in treatment (Svartberg & Stiles, 1991). On the basis of peer ratings, Luborsky, McLellan, Woody, O'Brien, and Auerbach (1985) found that therapists' psychological health and skill, as well as interest in helping patients, correlated positively with their patients' improvement. Possibly because of the small sample size, however, these relationships did not reach statistical significance. The degree to which the therapist adhered to the treatment manual and the degree to which the patient, in the third treatment session, reported experiencing the therapist as helpful was also correlated with treatment outcome (see also Blatt,

Zuroff, Quinlan, & Pilkonis, 1996). Despite the limited number of therapists' qualities that can be identified as influencing treatment outcome (Beutler et al., 1994), Luborsky et al. (1986, pp. 509-510) still concluded that the "frequency and size of the therapists' effects generally overshadowed any differences between different forms of treatment . . ." and that therapist effectiveness should be evaluated in all psychotherapy outcome studies.

Rather than attempting to relate qualities of therapists to outcome, Luborsky et al. (1995) suggested that a more productive approach might be to compare relatively effective and ineffective therapists. Several such studies have been conducted (e.g., Crits-Christoph, Baranackie, Kurcias, & Beck, 1991; Crits-Christoph & Mintz, 1991; Luborsky et al., 1985, 1986, 1995; McLellan, Woody, Luborsky, & Goehl, 1988; Najavits & Strupp, 1994; Orlinsky & Howard, 1980; Ricks, 1974) with some success. In the present study, estimates of therapeutic efficacy were obtained for the 28 therapists in the TDCRP and attempts were made to identify characteristics of the more effective therapists.

The TDCRP, a collaborative clinical trial, compared three brief outpatient treatments for depression. In a 3 (Research Site) \times 4 (Treatment Condition) factorial design, 239 randomly assigned patients entered one of four treatment conditions: cognitive-behavioral therapy (CBT), interpersonal therapy (IPT), imipramine plus clinical management (IMI-CM) as a standard reference, and pill placebo plus clinical management (PLA-CM) as a double-blind control. Clinical management (CM) was included as part of the two medication conditions to monitor possible side effects of the medication and to provide general support and encouragement as a minimal therapeutic condition to deal with ethical concerns about treating severely depressed patients with placebo (Elkin, 1994). CM included "clinically indicated and appropriate supportive psychotherapeutic measures and interventions. . . interventions related to specific organized systems of psychotherapy [were]...not permitted" (Fawcett, Epstein, Fiester, Elkin, & Autry, 1987, p. 320).1

Therapists in the four treatment conditions at each research site were experienced MD- and PhD-level clinicians (10 each providing IPT and pharmacotherapy, and 8 providing CBT), with an average of more than 11 years of experience. All therapists received training in the treatment they provided in the research protocol, and only therapists who met competency criteria participated in the study. Tapes of sessions were reviewed to assure adherence to treatment protocols, and therapists received consultation during the study (Elkin, 1994).

Patients were nonbipolar, nonpsychotic outpatients who met research diagnostic criteria for major depressive disorder (Spitzer, Endicott, & Robins, 1978) and who scored 14 or higher on an augmented, 20-item version of the 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960, 1967). Measurement of treatment outcome included interview and self-report measures of depression; (the HRSD and the Beck Depression Inventory [BDI], respectively), interview and self-report measures of general clinical functioning (Global Assessment Scale [GAS] and Hopkins Symptom Checklist [HSCL-90], respectively), and an interview measure of social adjustment (Social Adjustment Scale; SAS; Weissman & Paykel, 1974).

Prior analyses of the TDCRP data indicate only modest differences in therapeutic outcome among the three brief treatments for depression; IPT and IMI-CM were somewhat more effective than CBT but primarily with more seriously depressed patients (Elkin et al., 1989). Consistent with prior research (e.g., Crits-Christoph, 1992; Crits-Christoph & Mintz, 1991; Luborsky et al., 1986; Miller & Berman, 1983; Smith et al., 1980; Stiles, Shapiro, & Elliott, 1986), however, outcome in the TDCRP appears to be more related to differences among patients and therapists than types of treatment. Several pretreatment characteristics of patients predicted outcome in specific treatment conditions (Sotsky et al., 1991) and pretreatment perfectionism, as assessed by one of two factors of the Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978), had a significant negative effect on outcome (Blatt, Quinlan, Pilkonis, & Shea, 1995). In addition, the degree to which patients perceived their therapist at the end of the second treatment hour as empathic, caring, open, and sincere, as assessed on the Barrett-Lennard Relationship Inventory (B-L RI; Barrett-Lennard, 1962, 1985), significantly predicted the patient's outcome at termination and reduced significantly the negative effects of perfectionism, especially at midlevels of perfectionism (Blatt et al., 1996). Thus, although differences among treatment conditions appear to be minimal, significant outcome differences emerged as a consequence of personality qualities patients bring to the treatment process.

In terms of qualities of the therapist, Krupnick et al. (1996), using the Vanderbilt Therapeutic Alliance Scale, found that mean therapeutic alliance, assessed across the 3rd, 9th, and 15th sessions of the TDCRP, was significantly related to outcome across treatment groups. This effect was determined, however, primarily by the patients' rather than the therapists' contributions to the alliance (Krupnick et al., 1996). In summary, and consistent with prior reports (e.g., Blatt et al., 1996; Burns & Nolen-Hoeksema, 1992; Horvath & Symonds, 1991; Krupnick et al., 1996), findings suggest that therapeutic gain in the TDCRP is significantly influenced by interpersonal dimensions of the treatment process—by patient and therapist capacity to establish a therapeutic relationship. Research has identified aspects of the patients' contribution to this relationship and therapeutic outcome, but the therapist's contributions still re-

¹CM in the pharmacotherapy conditions included creating a supportive interpersonal context for the treatment; psychological support (e.g., conveying a sense of hope and optimism, providing reassurance); instruction, education, and provision of information; simple advice (e.g., encouraging greater physical activity); and ventilation of feelings. Interventions not permitted included focusing on specific psychological themes, especially those related to interpersonal relations or cognitive distortions; interpretations, especially those related to possible depressogenic influences; clarification of the patient's feelings regarding significant others or the therapist; specific behavioral instructions (apart from simple advice); explorations of the psychodynamics of depression (e.g., an examination of suppressed anger or shame); or encouraging any "involved interpersonal interaction" (Fawcett et al., 1987, p. 321). The intensity of initial training was comparable for pharmacotherapists and psychotherapists (with videotaping of all sessions and weekly supervision), and the intensity of monitoring during the actual study was also equivalent (i.e., supervisors continued to review videotapes and to provide monthly consultation).

main relatively obscure. To explore more fully the therapists' contributions, the present analyses sought to identify characteristics of more effective therapists by comparing therapists at three levels of therapeutic efficacy, as defined by the average therapeutic gain achieved by the patients of each therapist in the TDCRP.

Method

Factor analysis of the residualized change scores of the five primary outcome measures at termination in the TDCRP (HRSD, BDI, GAS, SCL-90, and SAS) revealed that they loaded substantially (p > .79) on a single factor with an eigenvalue of 3.78, accounting for 75.6% of the variance (Blatt et al., 1996). No other eigenvalue approached 1.0, indicating that this factor is a consistent measure of therapeutic change. Thus, a composite of these 5 residualized change scores at termination was used as the measure of therapeutic outcome for each patient.² This composite measure, averaged for all patients seen in active treatment by each therapist, yielded an estimate of each therapist's overall therapeutic efficacy. The distribution of these mean outcome scores was divided into thirds, thus identifying three groups of therapists: (a) more effective, moderately effective, and less effective. As is discussed in the Results section, several effects were nonlinear (i.e., the mean of the middle group of therapists did not lie midway between the means for the other two groups). Thus, it seemed inappropriate to use the mean level of therapists' efficacy as a continuous measure as well as statistical techniques that assume linearity (e.g., correlations and linear regressions). Differences among the therapists were clearer when three tiers of therapists were compared.

Demographic characteristics and details of professional history were available for the 28 therapists: (a) age, sex, race, marital status, religion, and profession (MD or PhD level); (b) years of general clinical experience and in treating seriously depressed patients, percentage of prior depressed patients treated by psychotherapy alone, medication alone, or a combination of psychotherapy and pharmacotherapy; and (c) kinds of treatment ever used in treating seriously depressed patients (longterm dynamic psychotherapy, short-term dynamic therapy, cognitivebehavioral therapy, behavior therapy, eclectic psychotherapy, pharmacotherapy, and ECT). Therapists were also asked to rate their attitudes and expectations, on a 7-point scale, about the etiology of major depression and components they considered essential to successful outpatient treatment of major depression.3 They also indicated the percentage of seriously depressed outpatients whom (a) they had treated who had at least moderate improvement; (b) they expected to show at least moderate improvement with adequate treatment and without treatment; (c) when change might be first manifested in treatment; and (d) the length of time generally necessary for successful treatment of seriously depressed outpatients.

Attitudes about the etiology of depression were grouped into four clusters: biological (biochemical imbalance and genetic predisposition), environmental events (adverse life experiences, stressful events, chronic environmental stress), interpersonal (pathogenic social relations or social isolation), and psychological factors (learned maladaptive behavior, distorted cognitions, predisposing personality traits, sense of helplessness).

Components considered important in the successful treatment of seriously depressed patients were also clustered into categories: medical (pharmacotherapy), cognitive-behavioral (reinforcing adaptive behavior, substituting realistic cognitions), interpersonal (developing more adequate interpersonal behavior), psychodynamic (genetic reconstruction and uncovering unconscious conflict), and general therapeutic (establishing a supportive therapeutic relationship, helping patients to feel less helpless).

Characteristics of the three groups of therapists were compared using

one-way ANOVA and chi-square. In addition, the group of more effective therapists was contrasted with the other two groups.

Results

Table 1 presents the distribution of mean therapeutic outcome scores of the 28 therapists based on the patients they saw in active treatment. These scores ranged from 1.11 to -1.02, with a mean of -0.075 (SD=0.49). Ten of the 28 therapists with a mean therapeutic outcome score that ranged from 1.11 to 0.16 were labeled less effective (Group 1). Nine therapists with a mean outcome score that ranged from 0.09 to -0.27 were labeled moderately effective (Group 2), and 9 therapists with a mean outcome score that ranged from -0.44 to -1.02 were labeled as more effective (Group 3). No significant difference was found in therapist efficacy across the three active treatment groups (CBT, IPT, and IMI-CM) or across the three research sites. The Treatment \times Site interaction was also not significant. Table 1 also presents some demographic features and aspects of the usual clinical practice of these therapists.

To test for possible artifacts that might influence comparisons of these three groups of therapists, the demographic (i.e., age, sex, education, marital status) and pretreatment clinical characteristics (i.e., BDI, HRSD, GAS, SCL-90, SAS, and the Need for Approval and Perfectionism factors of the DAS) of the patients randomly assigned to these therapists were compared. Results indicate that the patients treated by less effective, moderately effective, and more effective therapists were essentially equivalent at the start of treatment. In addition, the three groups of therapists were assigned approximately the same average number of patients in the three active treatment conditions (6.20 [SD = 2.90], 6.67 [SD = 2.00], and 6.11 [SD =2.57], from less to more effective, respectively). Four therapists had less than 3 patients complete treatment; 3 of these therapists were in the less effective group, two of them providing IMI-CM and the other CBT. A fourth therapist from the more effective group, who treated only 1 patient who completed treatment in IPT, had relocated to another city and could not continue to participate in the research program. Thus, less effective therapists tended to have fewer treatment completers (shown later in Table 4).

² Because each of the residualized outcome scores were calculated by regressing the score of a particular scale at termination on the pretreatment value of that variable, a negative score indicates more effective outcome. The resulting factor scores are scaled in the same direction, with negative scores indicating better outcome. In obtaining the mean therapeutic outcome score for each therapist, we included only patients in active treatment and did not include those patients who were in the placebo group because they would not be expected to demonstrate as much therapeutic change as patients in active treatment. Thus, the mean therapeutic outcome score was calculated for each therapist based only on patients in active treatment (CBT, IPT, and IMI-CM). Six of the 131 patients who completed one of the three forms of active treatments lacked one or more of the five primary outcome measures. These patients were omitted from these analyses.

³ One of the 28 therapists, a male psychiatrist providing IPT who was in the moderately effective group, failed to complete the form assessing attitudes and expectations about the etiology and treatment of depression. Thus, the sample size in these comparisons were reduced to 10, 8, and 9 for the less effective to the more effective therapists, respectively.

Table 1
Demographic and Practice Characteristics of Therapists in the NIMH TDCRP

Managhana	NI- (101) - 041 -		Demographics		% Clinical practice			
Mean therapy efficacy	No. (and %) of therapy completers ^a	Treatment	Sex	Profession	Therapy alone	Medication alone	Combination	
			Group 1	: Less effective		•		
1.11 (less)	5 (83)	IPT	M	MD	66	0	34	
.91	7 (78)	CBT	M	PhD	50	Ō	50	
.49	7 (64)	CBT	M	MD	25	0	75	
.37	1 (50)	IMI	M	MD	10	10	80	
.31	2 (40)	IMI	M	MD	20	0	80	
.29	3 (60)	CBT	F	PhD	98	Ō	2	
.29	5 (50)	CBT	M	MD	2	75	23	
.27	1 (25)	CBT	F	PhD	85	0	15	
.21	5 (83)	IPT	M	MD	50	ĺ	49	
.16	3 (75)	IMI	M	MD	15	5	80	
		Gre	oup 2: M	oderately effective	ve			
.09	4 (67)	IMI	M	MD	50	0	50	
.02	3 (100)	IMI	F	MD	5	10	85	
.00	4 (50)	IPT	M	PhD	60	0	40	
13	6 (86)	IPT	M	MD	40	0	60	
15	4 (100)	IPT	F	MD	10	70	20	
15	4 (57)	IPT	M	MD	75	0	25	
18	4 (50)	IMI	M	MD	10	0	90	
24	9 (100)	IMI	M	MD	10	40	50	
27	5 (62)	IMI	M	MD	5	10	85	
		i	Group 3:	More effective				
44	1 (100)	IPT	F	PhD	100	0	0	
50	3 (60)	CBT	M	PhD	85	0	15	
54	7 (100)	CBT	M	PhD	95	0	5	
55	7 (78)	IPT	M	PhD	75	0	25	
56	7 (88)	IPT	F	PhD	95	0	5	
61	7 (88)	CBT	M	PhD	85	0	15	
63	4 (80)	IPT	M	MD	99	0	1	
67	4 (50)	IMI	F	MD	20	40	40	
-1.02 (more)	3 (75)	IMI	F	MD	10	20	70	

Note. NIMH TDCRP = National Institute of Mental Health Treatment of Depression Collaborative Research Program; IPT = interpersonal psychotherapy; M = male; CBT = cognitive-behavioral psychotherapy; IMI = imipramine; F = female.

To assess the stability of the differences in therapeutic efficacy among the three groups of therapists, several ANOVAs were conducted to evaluate whether the variability of therapeutic outcome among the therapists was greater than the variability of therapeutic outcome within therapists. Patients in the PLA-CM condition were not included in these analyses. Also, the 4 therapists who had less than 3 patients complete treatment were not included; a total of 24 therapists had sufficient data to be included in these analyses. Therapist was treated as a fixed effect that was nested within the three levels of active treatment (CBT, IPT, and IMI-CM), and patients were nested within therapists. The error term used in evaluating therapist effects was the average variability of patients' outcome scores within therapists. The overall therapist effect across the 24 therapists was not significant, F(21, 90) = 1.35, p < .17, suggesting that there were no significant differences among the entire group of 24 therapists. This comparison, however, is unduly conservative because it aggregates differences among the more effective and less effective therapists, which might be substantial, as well as

differences among moderately effective, more effective, and less effective therapists, which would be smaller. Accordingly, we conducted a planned comparison of the outcomes of the 73 completer patients who were treated by the 8 more effective and the 7 less effective therapists who had at least 3 patients complete treatment. The therapist effect was significant, F(12, 58)= 1.99, p < .05, indicating that the patients of the more effective therapists improved to a significantly greater degree than the patients of less effective therapists. We also compared the outcomes of patients seen by the 8 more effective therapists with the outcome of the patients of the 9 therapists in the moderately effective group and also compared the outcome of patients seen by therapists in the moderately and less effective groups. In neither case was the effect of therapist significant. Thus, moderately effective therapists were not significantly different from their more effective and less effective colleagues, but the more effective and less effective therapists differed significantly.

Interestingly, the mean variability of the therapeutic outcome scores within each therapist was significantly correlated with

Number of patients completing active treatment (CBT, IPT or imipramine plus clinical management) whether or not they had all five primary outcome measures.

Table 2
Demographic and Professional Characteristics of Less Effective and More Effective Therapists

				χ^2 or F		
	The	rapeutic effectiv		Contract		
Characteristic	Less (n = 10)	Moderate $(n = 9)$	More (<i>n</i> = 9)	Overall	Contrast (Groups 1 and 2 vs. 3)	
Demographic				$\chi^2(2)$	$\chi^2(1)$	
Sex (male/female)	8/2	7/2	5/4	1.65	1.64	
Profession (MD/PhD)	7/3	8/1	3/6	6.27*	5.53*	
Types of therapy used with depressed patients (yes/no)	•	·	·			
Long-term dynamic	7/3	7/2	6/3	0.29	0.15	
Short-term dynamic	9/1	9/0	8/1	0.23	1.84	
CBT	6/4	4/5	4/5	0.62	0.16	
BT	4/6	2/7	3/6	0.70	0.01	
Eclectic	6/4	8/1	5/4	2.73	0.92	
Pharmacotherapy	9/1	8/1	4/5	6.61*	6.60**	
ECT	5/5	7/2	1/8	8.12*	6.65**	
	M (and SD)			ANOVA (F)		
Clinical experience (in years) Previous clinical experience with depressed patients	11.0 (5.8)	10.9 (8.2)	12.0 (7.50)	0.07	0.36	
Hr/week	16.4 (8.7)	16.7 (10.4)	13.1 (7.2)	0.45	0.95	
Total no.	129.5 (93.1)	211.7 (151.6)	185.0 (215.8)	0.68	0.22	
% Clinical practice devoted to:	. 27.5 (75.1)		(=10.0)	2.30		
Psychotherapy alone	42.1 (33.0)	29.4 (27.1)	73.8 (34.4)	4.69*	2.96**	
Medication alone	9.1 (23.4)	14.4 (24.6)	6.7 (14.1)	0.31	0.59	
Combination	48.8 (29.5)	56.1 (26.1)	19.6 (22.9)	4.86*	3.08**	

Note. CBT = cognitive-behavioral therapy; BT = behavioral therapy; ECT = electroconvulsive therapy; ANOVA = analysis of variance.

their average level of therapeutic outcome, r(24) = .64; p < .001. More effective therapists had significantly less variability among the therapeutic outcome of their patients. The average within-therapist variability for the 24 therapists with three or more treatment completers in the less, moderate, and more effective groups was 1.18, 0.81, and 0.59, respectively, a statistically significant (p = .023) difference. In summary, the distinction among the three groups of therapists, based on the average therapeutic outcome of the patients they treated, appears to be a reasonably reliable and accurate estimate of the level of the therapeutic efficacy of the therapists.

As indicated in Table 2, the three groups of therapists did not differ significantly in age, sex, race, religion, marital status, and level of clinical experience. No significant differences were found in their prior use of long- or short-term dynamic therapy, CBT, behavior therapy, and eclectic psychotherapy. Significant differences emerged, however, in their use of pharmacotherapy and ECT. The ratio of use to nonuse of pharmacotherapy by level of therapeutic efficacy, from less to moderately to more effective was 9:1, 8:1, and 4:5, respectively (p = .037); for ECT, the ratio of use to nonuse was 5:5, 7:2, and 1:8, respectively (p = .017). These results are consistent with significant difference in professional training of the therapists. The ratio of MD-level to PhD-level therapists in each of the three levels of therapeutic efficacy (from less to moderately to more effective) was 7:3, 8:

1, and 3:6, respectively. A significantly (p < .04) higher percentage of PhD-level than MD-level therapists (60.0%, as compared with 16.7%, respectively) were in the therapeutically more effective group.

Table 2 also presents a comparison of the general clinical practice of these three groups of therapists: the percentage of patients previously treated with psychotherapy alone, medication alone, or a combination of psychotherapy and pharmacotherapy. The more effective therapists reported that they had treated significantly more of their depressed outpatients with psychotherapy alone and relatively rarely used medication, either alone or in combination with psychotherapy. Less and moderately effective therapists reported that they more often use medication, either alone or in combination with psychotherapy. In summary, these findings indicate that more effective therapists had a psychological rather than a biological orientation in their treatment of depressed outpatients.⁴

^{*}p < .05. **p < .01.

⁴ These overall findings were statistically significant despite the fact that the 3 most effective therapists in this study were psychiatrists and that the two most effective therapists were female in the pharmacotherapy condition (IMI-CM and PLA-CM) whose preferred mode of intervention with depressed outpatients was a combination of psychotherapy and medication (70% and 40%, respectively). Because the characteristics of these two more effective therapists run counter to the predomi-

Table 3
Clinical Attitudes and Expectations of Less Effective and More Effective Therapists

,			ANOVA(F)		
	M (and SD)) for therapeutic ef	fectiveness		Cantanat
Attitudes and expectations	Less (n = 10)	Moderate $(n = 8)$			Contrast (Groups 1 and 2 vs. 3)
Etiology of depression					
Biological factors	4.2 (1.4)	4.5 (1.2)	4.0(1.2)	0.40	0.72
Traumatic events	4.4 (0.9)	3.6 (0.8)	4.5 (0.8)	2.88‡	1.48
Interpersonal difficulties	4.9 (1.1)	3.9 (1.6)	4.8 (1.4)	1.48	0.71
Psychological factors	5.1 (0.8)	3.8 (0.7)	4.4 (0.7)	7.21**	0.06
Components of successful treatment					
Medication	4.5 (0.8)	4.6 (1.3)	3.7 (0.9)	2.37	2.17*
Cognitive-behavioral	5.2 (1.5)	4.6 (1.2)	4.8 (0.9)	0.48	0.15
Interpersonal	4.9 (1.3)	5.12(1.0)	5.0 (0.9)	0.09	0.03
Psychodynamic	2.8 (1.0)	3.1 (1.0)	2.9(1.3)	0.20	0.18
General therapeutic	5.45 (1.4)	6.3 (0.8)	5.4(1.0)	1.58	0.93
% Depressed patients previously treated who improved	82.3 (12.9)	83.8 (11.6)	81.4 (16.5)	0.06	0.28
% Depressed patients expected to show improvement					
With treatment	83.9 (9.5)	85.0 (6.0)	81.4 (8.5)	0.42	0.89
Without treatment	47.8 (14.8)	48.8 (10.9)	40.0 (3.0)	1.05	1.45
Sessions necessary for depressed patients to begin to manifest	, ,	• /	, ,		
therapeutic change	3.4 (1.3)	3.6 (1.9)	5.3 (3.0)	2.18	2.06*
Time necessary for successful treatment of depressed patients	` ,	` ,	` '		
(in months)	6.2 (2.2)	6.5 (5.0)	10.1 (10.3)	0.97	1.38

Note. ANOVA = analysis of variance. *p < .05. **p < .01. \$p = .076.

Another approach to identifying characteristics of more and less effective therapists was to compare their attitudes and expectations about the etiology and treatment of seriously depressed outpatients. As indicated in Table 3, the relative lack of

nant findings in these data, we explored the possibility that these two therapists were unusually effective in establishing a therapeutic alliance with their patients. Although no significant differences were found among the three groups of more, moderate, and less effective therapists in the mean or standard deviation of their BL-RI scores after the second treatment hour (see Table 4), it is noteworthy that the standard deviations of the BL-RI scores of these two therapists in IMI-CM were 23.10 and 21.88, respectively, substantially below the mean standard deviation of 35.34 for the other 26 therapists. These two therapists were also among the most effective of the 10 therapists in PLA-CM. The mean therapeutic outcome score of the 10 therapists treating patients in PLA-CM condition ranged from 1.01 to -0.88, roughly approximating the range of therapeutic efficacy scores of the 28 therapists in the three active treatment conditions that ranged from 1.11 to -1.02. These 2 therapists ranked third and fourth highest in therapcutic efficacy among the 10 therapists treating patients in the PLA-CM condition.

The therapist with the second best therapeutic efficacy score, however, had a low percentage of patients who completed treatment—50% (4 of 8) in IMI-CM (as compared with an average of 72% for the other 27 therapists in the three active treatment conditions) and only 44% (4 of 9) of her patients in PLA-CM completed treatment (as compared with an average of 66% for the other 9 therapists). In contrast, the most effective therapist had 75% (3 of 4) treatment completers in IMI-CM and 100% (3 of 3) in PLA-CM. It is noteworthy that this therapist's high level of therapeutic effectiveness was accomplished while seeing patients for a relatively brief time each week (approximately 25 min) as part of CM in IMI and PLA—a procedure designed as a minimal therapeutic condition to provide only general support and encouragement.

emphasis placed on medication significantly differentiated more effective therapists from moderately and less effective therapists. Attitudes about etiology of depression also related significantly to therapeutic efficacy. Less and more effective therapists tended to consider psychological factors and adverse environmental experiences as more central to the etiology of depression than moderately effective therapists.

No significant differences were found between therapeutic efficacy and optimism about treating seriously depressed outpatients. All therapists expected over 80% of seriously depressed patients to show moderate improvement with treatment. Also more effective, as compared with less effective, therapists expected therapy to require somewhat more sessions before depressed patients manifested treatment-related changes and that successful outpatient treatment of serious depression required a longer time. This latter finding, however, did not reach statistical significance.

Table 4 presents additional data about the three groups of therapists—the percentage of patients completing treatment and mean and standard deviation of the B-L RI scores they received from their patients after the second treatment hour. Although more effective therapists had a greater percentage of patients complete treatment and greater consistency (lower standard deviation) in their B-L RI scores than did moderate or less effective therapists, these differences were not significant.

Discussion

The present analyses of the data of the TDCRP indicate that significant differences exist in therapeutic efficacy among thera-

Table 4
Treatment Characteristics of Less Effective and More Effective Therapists
Within the NIMH TDCRP

	M (and SD)	for therapeutic	ANOVA F (2, 25)		
Clinical characteristics	Less (n = 10)	Moderate $(n = 9)$	More (n = 9)	Overall	Contrast (Groups 1 and 2 vs. 3)
% Patients seen who completed treatment	60.8 (19.6)	74.7 (21.8)	79.8 (16.7)	2.43†	1.52
Barrett-Lennard Relationship Inventory					
M	61.6 (22.5)	58.7 (15.3)	67.3 (11.2)	0.57	1.02
SD	36.6 (20.4)	30.4 (13.8)	25.0 (10.6)	1.19	1.26

Note. NIMH TDCRP = National Institute of Mental Health Treatment of Depression Collaborative Research Program; ANOVA = analysis of variance. $\dagger p = .108$.

pists, even within the experienced and well-trained therapists in the TDCRP. Differences in therapeutic efficacy were independent of the type of treatment provided or the research site and not related to the therapists' level of general clinical experience or in treating depressed patients. Differences in therapeutic efficacy, however, were associated with basic clinical orientation, especially about treatment. More effective therapists had a more psychological rather than biological orientation to the clinical process. They reported using predominantly psychotherapy with depressed patients and rarely using biological interventions (i.e., medication and ECT). The more effective therapists were more likely to be psychologists than psychiatrists. (The same basic findings were obtained when the therapeutic outcome of patients in the PLA-CM condition was included in the estimates of therapeutic efficacy of therapists in the medication condition.)

Less effective therapists, somewhat like the more effective therapists, reported that they primarily tend to use psychotherapy in their clinical practice (42.1% of the time) but, more often than the more effective therapists, they combine their psychotherapeutic efforts with medication with almost half (48.6%) of the depressed patients they treat. More effective therapists, in contrast, primarily use psychotherapy alone (73.8%) and only occasionally (19.6%) combine their psychotherapy with medication. Moderately effective therapists, as compared with less and more effective therapists, primarily use medication, either alone (14.4%) or in combination with psychotherapy (56.1%), and relatively rarely use psychotherapy alone (29.4%). Thus, moderately effective therapists appear to be more biologically oriented. Less effective therapists, like the more effective therapists, are primarily interested in psychotherapy but combine their psychotherapy with the use of medication more often than effective therapists. Additionally, more effective therapists, compared with less and moderately effective therapists, expect therapy to require more treatment sessions before patients begin to manifest therapeutic change.

It is noteworthy that most of the significant differences between relatively more and less effective therapists were found in reports about their clinical practice with depressed outpatients. Relatively few significant findings were obtained when comparing attitudes about the etiology of depression or about techniques considered essential to successful treatment. Although attitudes of therapists about the etiology of depression and the nature of the therapeutic process may not have a direct relationship to therapeutic efficacy, these attitudes may still influence therapeutic outcome, possibly indirectly in interaction with the attitudes and expectations that their patients have about the etiology and treatment of depression. We will examine this possibility in subsequent analyses of the TDCRP data.

The findings of the present analyses also raise an important question about the nature of mutative forces in the outpatient treatment of depression. The overall results indicate that qualities of the therapist are important dimensions that appear to influence therapeutic outcome. In addition, as noted in Footnote 4, the fact that one therapist could be so very effective even when providing only CM with patients receiving a placebo, suggests that the therapeutic alliance established by a talented clinician may be an essential component of effective treatment. These conclusions are consistent with prior findings (e.g., Blatt et al., 1996; Burns & Nolen-Hoeksema, 1992; Horvath & Symonds, 1991; Krupnick et al., 1996) that therapeutic outcome is significantly influenced by interpersonal dimensions of the treatment process—by personal qualities patient and therapist bring to the treatment process and their ability to establish an effective therapeutic relationship. Future research should be directed toward exploring these interpersonal dimensions in detail, such as evaluating the therapeutic sessions of more effective therapists. As typescripts of the TDCRP treatment sessions become available, for example, aspects of the therapeutic relationship and therapeutic technique of the more effective therapists in the TDCRP should be studied more fully, especially the female psychiatrist in the pharmacotherapy condition of the TDCRP who, as noted in Footnote 4, had the highest therapeutic efficacy score, as well as a very high percentage (86%) of treatment completers in both IMI-CM and PLA-CM.

In summary, significant differences were found in the TDCRP among therapists who achieved different levels of therapeutic efficacy. These differences are impressive because they occurred in a relatively homogenous group of well-trained and experienced therapists across three well-specified treatment

conditions in three independent research sites. These findings support the contention that it is important to differentiate among therapists and to include dimensions of therapists in studies of therapeutic outcome.

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Received October 17, 1995
Revision received March 19, 1996
Accepted March 21, 1996