Psychotherapy Process in the National Institute of Mental Health Treatment of Depression Collaborative Research Program

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ABSTRACT

This study examined psychotherapy process in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. Transcripts of brief interpersonal and cognitive—behavioral therapies were rated using the Psychotherapy Process Q Set (PQS), an instrument designed to provide a standard language for describing therapy process. Results demonstrated that there were important areas of overlap and key differences in the process of the treatments. There were important differences in therapist stance, activity, and technique that were consistent with theoretical prescription, but patient characteristics within sessions were quite similar. Patient in-session characteristics as measured by the PQS were related to outcome across the treatment samples. These findings are linked to theoretical models, which may help explain the role of nonspecific factors associated with nondifferential treatment outcome in brief therapy.

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The National Institute of Mental Health (NIMH)—sponsored Treatment of Depression Collaborative Research Program (TDCRP) was a carefully conducted and methodologically sound multisite, clinical trial comparing different forms of brief outpatient treatment for depression. Participants from three sites were randomly assigned to one of four treatment conditions: interpersonal psychotherapy (IPT), cognitive—behavioral psychotherapy (CBT), imipramine plus clinical management (IMI—CM) as a standard reference treatment, and pill placebo plus clinical management (PLA—CM) as a double-blind control group. Initially, few differences in effectiveness of the four treatments were found at posttreatment (Elkin et al., 1989) and at 18-month follow-up (Shea et al., 1992). However, further analyses revealed slight differences in
effectiveness. IMI—CM and IPT were marginally superior to both CBT and PLA—CM in the treatment of more severely depressed clients (Elkin et al., 1995) and when clinically significant overall improvement was assessed (Ogles, Lambert, & Sawyer, 1995). There was no evidence that the different psychotherapies were operating by means of the mechanism of change that their respective theories propose. Outcome measures were selected for presumed sensitivity to the different treatments, but no mode-specific effects were found (Imber et al., 1991). In short, the TDCRP replicated the well-established finding of a lack of systematic differences in the effectiveness of brief treatments for psychological disorders (Miller & Berman, 1983; Smith, Glass, & Miller, 1980; Stiles, Shapiro, & Elliott, 1986).

These findings concern outcome only and do not refer to the treatment process. Understanding what promotes therapeutic change requires examining the treatment process in addition to outcome. There have been a few studies of the treatment process in the TDCRP. These studies have focused either on therapist adherence to treatment protocols or on the construct of therapeutic alliance. In the studies of alliance, ratings of patient contribution to the therapeutic alliance were significantly related to treatment outcome across all four treatment groups (Krupnick, Sotsky, Elkin, Watkins, & Pilkonis, 1996). Other investigators also found that the quality of the therapeutic relationship rated by the patient early in treatment contributed significantly to positive change (Blatt, Zuroff, Quinlan, & Pilkonis, 1996). The predictive power of the therapeutic relationship was moderated by the patient's level of perfectionism. These findings are consistent with numerous studies that have shown the therapeutic alliance to be related significantly to outcome (Gaston, 1990). In short, studies of alliance in the TDCRP seem to have confirmed the oft-noted conclusion that so-called nonspecific effects explain the lack of differential outcomes of different forms of brief psychotherapy.

Although the therapeutic alliance is an important element of the therapeutic process, it is a diffuse construct that can be easily confused with the treatment process as a whole, and it does not explain how therapy helps patients get better (Frieswyck et al., 1986). The construct locates processes that are presumably common to all treatments at too high a level of abstraction. To better understand what nonspecific factors such as therapeutic alliance represent and how they help patients improve, one must first describe such factors at a microanalytic level. The present study examined the TDCRP therapies using the Psychotherapy Process Q Set (PQS), a comprehensive 100-item instrument designed to describe the overall process of therapy in empirical yet clinically relevant terms. Item-by-item analysis of Q sorts of individual therapy hours is used to describe precisely the nature of both specific and nonspecific factors in brief therapy.

There is some overlap between the methods and the item content of this study and the previous process studies of the TDCRP, but there are many more important differences than similarities. Both the previous studies and this study rely on external judges who listened to or read whole sessions to rate items that require some level of inference. However, the PQS does not intend to measure a particular construct; rather, it provides a language for describing what occurs in the patient—therapist interaction. There is some overlap in actual item content between the PQS and the measures of alliance and adherence that have already been applied to the TDCRP. Krupnick et al. (1996) examined the role of therapeutic alliance in the TDCRP using a modified version of the Vanderbilt Therapeutic Alliance Scale (VTAS; Hartley & Strupp, 1983). A study of the extent of overlap between the PQS and the VTAS found that 69% of the variance in the VTAS was explained by just 3 of the 100 items of the PQS (Soo Hoo, 1988). More recently, Price and Jones (in press) examined the extent of overlap between the PQS and another widely used measure of alliance, the California Psychotherapy Alliance Scale (CALPAS). Only 24 of the 100 items of the PQS correlated significantly with alliance scores on the CALPAS. When the PQS items were subjected to a factor analysis, only 18 of the 100 items of the PQS were included in factors that correlated significantly with alliance. The PQS can capture the aspects of process referred to as the therapeutic alliance, but it is also more broadly descriptive of the therapy process. The overlap between the PQS and the alliance measure that has already
been applied to the TDCRP is particularly modest. In addition, in contrast to studies of therapeutic alliance in the TDCRP (Blatt, Zuroff, et al., 1996; Krupnick et al., 1996), results in this study are presented at the individual item level to identify the specific ingredients of the therapies. Because of the PQS's breadth of content and the relative specificity of results afforded by this approach, this methodology contributes to understanding the process of these therapies beyond the above-mentioned studies of therapeutic alliance.

Another process study of therapy in the TDCRP focused on therapist adherence (Hill, O'Grady, & Elkin, 1992). Observers rated sessions using the Collaborative Study Psychotherapy Rating Scale (CSPRS; Hollon et al., 1988), a 96-item instrument consisting of scales measuring modality-specific and non-modality-specific interventions. Although there is some overlap between the items on the CSPRS and the PQS, Hill et al. used the CSPRS specifically to measure adherence in the TDCRP rather than to provide a detailed description of the general process of therapy, as is done in this study using the PQS. The CSPRS was designed specifically for this purpose of differentiating between cognitive therapy, interpersonal therapy, and clinical management pharmacotherapy for depression. In contrast, the PQS is a pantheoretical instrument that was designed to describe the process of psychotherapy, not to measure adherence to particular approaches. Furthermore, although the CSPRS assesses the process purely from the therapist's perspective (in terms of adherence), the PQS also captures patients' behaviors, thoughts, and feelings, as well as more interactive aspects of therapy process. In summary, this study used an instrument that is more comprehensive in scope toward a different aim than studies of adherence in the TDCRP.

This study describes with great specificity what specifically occurred in these therapy sessions in the TDCRP. Although IPT is one of the most well-studied brief therapies, many clinicians seem to have difficulty when asked to describe what such a treatment entails. A review of the literature reveals what in theory should occur in IPT. According to interpersonal theory (Weissman & Markowitz, 1994), IPT is not concerned with the origin of depressive symptoms but uses their connection with interpersonal problems as a treatment focus. IPT for depression is a focused treatment for depressive symptoms and is not aimed at personality or character change. In principle, the interpersonal therapist adopts a hopeful, supportive, nonneutral, and active stance. The unit of observation and the target of interventions in IPT is face-to-face interaction with significant others. The treatment focuses on elucidating patterns in interpersonal relations and linking recent interpersonal events to recent mood (Klerman, Weissman, Rounsaville, & Chevron, 1984; Weissman & Markowitz, 1994). Specific techniques of IPT include reassurance, clarification, improving communication (frequently by encouraging patients to tell others how they feel), testing perceptions and performance through interpersonal contact (similar to CBT), and decision analysis (helping patients to explore different possibilities and their consequences in interpersonal relations).

IPT has three phases. During the first phase of treatment, which generally consists of one to three sessions, the therapist conducts a careful diagnostic interview and gathers pertinent psychiatric history. Particular attention is devoted to detailing the patient's current close relationships and patterns of social functioning. Any changes in interpersonal relationships proximal to the onset of depression are highlighted as a way of defining the treatment focus and establishing the context in which depressive symptoms will be understood. The interpersonal therapist clearly links the patient's depression to his or her interpersonal relationships in the here and now. The therapist also explicitly discusses the diagnosis with the patient and explains what the treatment will entail during this first phase. The middle phase of IPT for depression consists of the application of techniques described in the treatment manual (Klerman et al., 1984), which focus on one of four interpersonal problem areas: grief following the death of a loved one, role disputes (conflicts with a significant person in the patient's life), role transitions (changed life situations), or interpersonal deficits (significant social skills problems, including starting and maintaining relationships). In the case of grief, the therapist facilitates the mourning process and helps the patient discover new activities and relationships to compensate for the
loss. In the case of role disputes, the therapist helps the patient explore the nature of the relationship and ways to resolve the conflict. If there are significant disputes that cannot be resolved, the possibility of ending the relationship is considered. With regard to role transitions, the therapist acts as a guide in recognizing the positive and negative aspects of the new role as well as the old role that has been abandoned. The final phase of IPT is aimed at recognizing and consolidating treatment gains and discussing preventive measures for the future. This study describes empirically how interpersonal theory is translated into actual practice.

This study also describes the process of CBT in detail. Cognitive—behavioral theory clearly delineates what should occur in therapy. In theory, CBT consists of a progressive series of interventions that focus first on activating behavior, then changing specific distortions in thinking, and finally identifying and modifying core depressive schemas. Cognitive—behavioral theory is based on the assumption that depressed people commit frequent errors in logic or thinking (such as overgeneralization) that produce a negative view of the self, the world, and the future (known as the "cognitive triad"). CBT seeks to provide new information-processing skills through strategic interventions designed to identify errors in logic that produce maladaptive beliefs or cognitions, test the beliefs against reality, and finally modify them if indicated. The process of CBT is often viewed as "collaborative empiricism," where the therapist and patient work together to gather data to disconfirm core depressive beliefs. Specific techniques used in CBT for depression include interventions focused specifically on target symptoms; for example, graded tasks are assigned to combat psychomotor retardation, pleasurable activities are scheduled to counteract anhedonia, and peremptory cognitions are suppressed in an effort to improve concentration. Each session of CBT theoretically begins by setting an agenda. The cognitive—behavioral therapist adopts an active stance and behaves in a teacherlike manner by coaching the patient to recognize and alter maladaptive patterns of thinking and behavior. Previous studies of the process of CBT have demonstrated that cognitive—behavioral theory tends to translate accurately into practice (Jones & Pulos, 1993). That is, the process of actual CBT sessions adheres to what is prescribed by the theory (Ablon & Jones, 1998). This is probably largely due to the conceptual clarity and coherence of the model. This study describes how cognitive—behavioral theory translates into actual practice in a randomized, controlled clinical trial.

This study also represents a replication and extension of an earlier study that examined the process of brief psychotherapies. Jones and Pulos (1993) used the PQS to compare the process of psychodynamic and cognitive—behavioral treatments. Results demonstrated that although some features were common to both treatments, there were important differences in the process of brief psychodynamic and cognitive—behavioral therapies. Cognitive—behavioral therapy promoted control of negative affect through the use of intellect and rationality combined with rigorous encouragement, support, and reassurance from the therapists. In contrast, the psychodynamic process was characterized by an emphasis on the evocation of affect, on bringing troublesome feelings into awareness, and on integrating current difficulties with past experiences using the therapeutic relationship as an agent of change. Psychodynamic strategies were correlated with positive outcome in both the psychodynamic and cognitive—behavioral therapies, whereas cognitive—behavioral therapies were not associated with patient change. Patient resistance and negative affect were associated with negative outcome across both treatment modalities. This study applies the same methodology to describe the therapy process and identify process—outcome links in IPT and CBT in the TDCRP. By using the same instrument (the PQS) and methodology, comparison of findings across studies is possible.

In summary, despite the large number of studies that have been conducted using the wealth of carefully collected TDCRP data, there remains a dearth of information about what went on in the process of the psychotherapies and what helped patients change. It is clear that both IPT and CBT were effective, but only general, nonspecific factors have been identified as active ingredients in these therapies. This study is the first
investigation of the overall process of IPT and CBT in the TDCRP. A global measure of therapy process, the PQS, was applied to transcripts from IPT and CBT to describe the interaction between therapist and client in clinically relevant terms. The data describe how interpersonal and cognitive—behavioral theories are translated into practice using a broader instrument and with more specificity than has been previously done in studies of adherence and therapeutic alliance. In contrast to most existing studies of the TDCRP therapies, these results detail what went on in the treatments, not just how they turned out. Similarities and differences in treatment processes are identified, as well as the particular ingredients that predict positive outcome. Process predictors of outcome are examined closely to understand the mechanisms by which nonspecific factors, such as therapeutic alliance, exert their effects in brief therapy.

Method

The NIMH TDCRP Participants.

Participants were outpatients between the ages of 21 and 60 years who met Research Diagnostic Criteria (Spitzer, Endicott, & Robins, 1978) for a current episode of major depressive disorder and who scored 14 or higher on a revised 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967). Exclusion criteria included certain other psychiatric disorders (bipolar and psychotic disorders), concurrent psychiatric treatment, medical conditions that contraindicated use of imipramine, and the need for immediate intervention (e.g., active suicide potential). Two hundred fifty potential participants met these criteria and were randomized into one of the four treatment conditions. The 239 participants who entered treatment were primarily women (70%) and Caucasian (89%). The average age was 35 years. Seventy-seven participants terminated prematurely (defined as before completing at least 12 sessions of therapy and 15 weeks of treatment). There were no significant differences among the psychosocial treatments in the number of premature terminations (Elkin et al., 1989). The remaining 162 participants are referred to as the completer sample. The mean number of sessions in the completer sample was 16.2, and the maximum, 20.

Therapists and treatments.

The IPT and CBT treatments in the TDCRP were carried out in accordance with detailed manuals (Beck, Rush, Shaw, & Emery, 1979; Klerman et al., 1984). Ten therapists delivered IPT, and 8 delivered CBT. The therapists, 71% of whom were men, averaged over 11 years of clinical experience. They were all trained in the treatment they provided, and tapes of sessions were reviewed to monitor adherence to treatment protocols (Elkin, 1994).

Assessment of outcome.

Treatment outcome was measured from a variety of perspectives and with an array of different measures. For example, the clinical evaluator-rated HRSD (Hamilton, 1967) and the client-rated Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) measured depressive symptoms, and the clinical evaluator-rated Global Assessment Scale (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974; Endicott, Spitzer, Fleiss, & Cohen, 1976) and the client-rated Hopkins Symptom Checklist (Derogatis et al., 1974) measured overall functioning. The participants also provided a 7-point Likert-type rating of their overall satisfaction with the treatment they received. Information on the procedure and methods of the TDCRP beyond what is presented here is available in the Elkin, Parloff, Hadley, and Autry (1985) and Elkin et al. (1989) studies.
The PQS

The PQS is a 100-item instrument that furnishes a language and rating procedure for the comprehensive description, in clinically relevant terms, of the therapist—patient interaction in a form suitable for quantitative comparison and analysis (Jones, 1985). Clinical judges read verbatim transcripts of an entire therapy hour and then sort the 100 items in the Q set on a continuum from least characteristic (Category 1) to most characteristic (Category 9). The middle pile (Category 5) is used for items deemed either neutral or irrelevant to the particular hour being rated. Each item contains a description of the two opposite ends of the continuum along which the items are to be rated. Note that placement in the uncharacteristic direction does not signal that a particular behavior or experience is irrelevant. On the contrary, an uncharacteristic ranking signals that the item is meaningful in its absence, which is important to capture in the Q-sort description. Most items have specific instructions that provide examples of the distinction between uncharacteristic and neutral ratings. For example, Q-item Number 9 describes the therapist as "distant or aloof" when rated in the characteristic range. However, when rated in the uncharacteristic range, the item indicates that the therapist was "genuinely responsive or affectively involved" (the opposite of "distant or aloof"). Only if the item was irrelevant to the description of the hour would it be placed in the neutral range. The number of cards sorted into each category of the Q sort (from 5 at the extremes to 18 in the middle or neutral category) conforms to a normal distribution, requiring judges to make multiple evaluations among items and thereby avoid halo effects and response sets (Block, 1961). Unlike most psychotherapy process measures, the PQS uses an entire hour as the unit of observation. The items are tied to specific actions, behaviors, and statements. A detailed coding manual provides the Q items and their descriptions as well as operational examples.

The PQS was developed pantheoretically to assess therapist actions valued across therapies, so it is especially useful for comparing the theory process of different therapies (Jones, Hall, & Parke, 1991; Lambert & Hill, 1994). The PQS has been used to rate archived hours of both psychodynamic and cognitive—behavioral therapies for which outcome measures are also available (Jones & Pulos, 1993). It has also been used to rate client-centered, Gestalt, and rational—emotive therapies (Jones, Cumming, & Horowitz, 1988). The PQS has demonstrated both reliability and validity across the variety of studies and treatment samples (Jones et al., 1991). Interrater reliability, which is calculated by correlating the Q sorts of multiple raters across all 100 items of the PQS, has been consistently satisfactory, with alpha coefficients ranging from .83 to .89 for two raters. Reliability calculated at the individual Q-item level has also been consistently satisfactory, ranging from .50 to .95, across several different samples. There is also considerable evidence of the construct and discriminant validity of the instrument (Jones et al., 1988, 1991; Jones, Krupnick, & Kerig, 1987; Jones & Pulos, 1993).

Q ratings for this study were completed by a pool of nine research-oriented psychologists and master's-level graduate students in a clinical psychology doctoral program. All raters were trained in the application of the Q technique. Two verbatim transcripts, a session early in treatment (Session 4) and a session late in treatment (Session 12) were selected for each patient in the IPT and CBT samples. When transcripts of these sessions were not available, the next closest session was selected. The length of treatments for these patients ranged from 12 to 20 sessions, with an average length of 16.2 sessions. Transcripts were only available from the TDCRP archive for two of the three sites that participated. Therefore, transcripts were available for only 35 of the 47 participants who received IPT and 29 of the 37 participants who received CBT. All of the transcripts (N of treatment sessions = 128) were randomized, and independent ratings were completed by at least two judges who were unaware of treatment type and session number. When agreement was below r = .50, the author of the PQS, who is a licensed and practicing clinical psychologist (Enrico E. Jones), was added as a third rater. Periodic calibration meetings were conducted to correct rater
drift. The independent Q sorts of the judges for each transcript were then composited, as they have been in previous studies using the PQS.

Results

Q Descriptors of the Therapy Process

Average alpha coefficient reliability for Q sorts of therapy sessions for the entire sample (N = 128) achieved .82. There were no significant differences in reliability between the two treatment modalities. We compared the Q-item ratings of the sessions early in treatment with those of the sessions later in treatment by submitting each of the 100 items to a two-tailed t test. The process of the early sessions was remarkably similar to the process of sessions late in treatment, as evidenced by the fact that only 4 of the 100 Q items significantly differentiated between the early and late sessions (p <= .01).

The comparison of process data from the IPT and CBT treatments was conducted in two stages. The most and least characteristic items of the therapy process were identified for each treatment modality. Then differences in the process of the two therapies were analyzed. Q-item means for all 100 items were calculated to determine the process descriptors that most strongly characterized each treatment. Individual Q-item placements for each session were used (for IPT, n = 70; for CBT, n = 58). The Q items were rank ordered, and the 10 most and 10 least characteristic items of each treatment were identified (see Tables 1 and 2). The Q-item means ranged from a high of 8.44 to a low of 1.55 on a scale ranging from 1 to 9. The Q-item numbers refer to items in the tables; the word reversed (r) indicates that the variables required reflection to be oriented comparably in the narrative.

IPT: Most and least characteristic Q items.

As would be expected, IPT sessions were characterized by much discussion of the patient's interpersonal (Q 63) and love and romantic relations (Q 64). Current life situations (Q 69) (rather than the past) were emphasized in these discussions. The patient's self-image was also a focus (Q 35). The therapists in these treatments adopted a supportive stance (Q 45), conveyed a sense of nonjudgmental acceptance (Q 18), and were judged by the raters to be sensitive and attuned to the patient's feelings (Q 6) and not condescending (Q 51, r) or tactless (Q 71, r). Possibly in response to these therapist behaviors, the patients generally felt understood by their therapists (Q 14, r), accepted the therapist's comments and observations (Q 42, r), and were undemanding (Q 83, r) and compliant or deferential (Q 20, r). The compliant stance of the patients could also have been due to depressive symptomatology. The IPT therapists were responsive and affectively involved in the sessions (Q 9, r) and frequently asked for more information or elaboration (Q 31). The patients were also judged to be active in initiating topics (Q 15, r) and did not typically have difficulty beginning the hour (Q 4, r). Consistent with the activity level of both therapist and patient, silences rarely occurred during the sessions (Q 12, r). The therapists' primary interventions included clarifying, restating, or rephrasing the patient's communication (Q 65) and identifying recurrent themes in the patient's experience or conduct (Q 62).

CBT: Most and least characteristic Q items.

In CBT, the discussion centered on ideational themes, beliefs, and constructs used to appraise the self, others, or the world (Q 30). There was frequent discussion of specific activities for the patient to attempt outside of session (Q 38). The patient's current life situation (Q 69), self-image (Q 35), and interpersonal
relationships (Q 63) were also emphasized in the discussion. The cognitive—behavioral therapists adopted a teacherlike or didactic stance (Q 37). They tended to give explicit advice and guidance (Q 27) and be nonneutral (Q 93, r; frequently expressing opinions or taking positions). At the same time, they were supportive, encouraging, and approving (Q 45). The cognitive—behavioral therapists were responsive and affectively involved (Q 9, r), actively exerted a great deal of control over the interaction (Q 17), and frequently asked for more information and elaboration (Q 31). They did not interpret unconscious or warded-off content (Q 67, r). Possibly in response to the therapist's activity, the patients in these treatments were neither demanding (Q 83, r) nor controlling (Q 87, r). On the contrary, they tended to be compliant or deferential (Q 20, r) and accept the therapist's comments (Q 42, r). The patients did not have trouble beginning the hour (Q 25, r) and were not distant from their affect (Q 56), despite the fact that the therapists did not emphasize affect (Q 81, r) in these cognitive—behavioral therapies.

Differences in therapy process across treatments.

We compared the Q-item ratings for the IPT sample (n = 70) and the CBT sample (n = 58) by submitting each of the 100 items to a two-tailed t test. The process of IPT and CBT in the TDCRP was quite different, as evidenced by the fact that 48 of the 100 Q items significantly differentiated between the two treatments. The significance level was set at p <= .01 to reduce experimentwise error for 100 tests of significance. Table 3 lists these 48 items. The items that provide the most clear distinctions between IPT and CBT are reviewed below. In describing differences between Q-item means in the narrative, some Q items are said to be more or less characteristic of a treatment, when in fact the item may be in the characteristic or uncharacteristic end of the continuum for both treatments. Thus, such statements are relative in nature. This analysis attempts to include those items that may be rated as highly characteristic or uncharacteristic of both treatments because meaningful differences in the ratings may still exist between the treatments. It is also important to emphasize again that placement in the uncharacteristic direction does not signal that a particular behavior or experience is irrelevant. On the contrary, an uncharacteristic ranking signals that the item is meaningful in its absence, which is important to capture in the Q-sort description. Furthermore, differences between mean ratings that fall in the neutral range should not be regarded as irrelevant because the ratings of the Q items for IPT and CBT were averaged across 78 and 50 sessions, respectively, for this analysis.

As would be expected, IPT was characterized by more focus on interpersonal (Q 63) and love and romantic relationships (Q 64). Memories or reconstructions of infancy and childhood were also more frequently topics of discussion (Q 91). As expected, the cognitive—behavioral therapies focused much more on cognitive themes (Q 30) and homework for the patient to attempt outside of session (Q 38). Therapist stance was quite different in the two treatments. The interpersonal therapists were judged to be significantly more empathic and sensitive to the patient's feelings (Q 6) and convey more of a sense of nonjudgmental acceptance (Q 18). They also more accurately perceived the patient's experience of the therapy relationship (Q 28). The interpersonal therapists were rated as being significantly more neutral (Q 93), although the Q-item means were in their uncharacteristic range for both treatments. This therapeutic "space" that the interpersonal therapists provided may have allowed patients in IPT to be more controlling (Q 87) and to more frequently blame others or external circumstances for their difficulties (Q 34).

Cognitive—behavioral therapists, on the other hand, exerted much more control over the interaction (Q 17), were much more didactic and teacherlike (Q 37) in their stance, and tended to self-disclose more often (Q 21). In response to the higher level of therapist activity and structure in the cognitive—behavioral sessions, patients were judged to be more passive in initiating topics (Q 15). The cognitive—behavioral therapists were also judged to be more tactless (Q 77) and condescending or patronizing (Q 51) than the interpersonal therapists, and their own emotional conflicts more often intruded into the relationship (Q 24).
consequence, patients in CBT were judged to have felt less understood (Q 14).

Items describing therapist techniques also captured important areas of difference between the two modalities. The interpersonal therapists' remarks were more focused on facilitating patient's speech (Q 3), such as asking for more information or elaboration (Q 31) and clarifying or restating the patient's communication (Q 65). Consistent with these therapist behaviors, which were designed to promote self-reflection, patients in IPT were judged to be significantly more introspective (Q 97). The interpersonal therapists were judged to be more confident (Q 86) and their speech more clear and coherent (Q 46) than the cognitive—behavioral therapists; as a result, patients in the cognitive—behavioral therapies had more difficulty understanding the therapist's comments (Q 5). A major point of difference between the two therapies was the emphasis on affect: The interpersonal therapists emphasized the patient's feelings much more than did the cognitive—behavioral therapists (Q 81). Interpersonal therapists also used more psychodynamically oriented techniques, such as pointing out the patient's use of defensive maneuvers to ward off threatening information or feelings (Q 36), drawing attention to feelings regarded by the patient as unacceptable (Q 50) or not clearly in awareness (Q 67), linking the patient's feelings to situation or behavior in the past (Q 92), and drawing connections between the therapeutic relationship and other relationships (transference interpretations; Q 100). Note that although these psychodynamically oriented techniques were significantly more characteristic of the interpersonal therapies, the Q-item means were all in the uncharacteristic range for both interpersonal and cognitive—behavioral therapies. Cognitive—behavioral therapists more frequently gave direct advice and guidance (Q 27) and assigned tasks for the patient to attempt outside of session (Q 38). Consistent with a focus on cognitive themes, the cognitive—behavioral therapists tended to challenge the patient's views (Q 99), reframe experiences by presenting them in a different perspective (Q 80), and actively differentiate between real meanings of experience versus distortions of thought and erroneous assumptions (Q 69). The cognitive—behavioral therapists also explained their rationale behind their therapeutic approach to patients (Q 57) more frequently than did interpersonal therapists. Finally, the cognitive—behavioral therapists more usually acted to help the patient avoid or suppress disturbing feelings or ideas (Q 89).

**Similarities in therapy process across treatments.**

Some of the most defining characteristics of the treatment process were shared between IPT and CBT. Five of the 10 most characteristic and 5 of the 10 least characteristic items of IPT were also among the 10 most and least characteristic items of CBT. These 10 items are indicated in Tables 1 and 2 by a superscript. Some of these items were described in the previous results because there were subtle but important differences in the Q ratings between the two treatments, despite the fact that they were highly characteristic or highly uncharacteristic of both IPT and CBT. Interpersonal relationships (Q 63) and the patient's current life situation (Q 69) and self-image (Q 35) were rated as being highly characteristic themes of both IPT and CBT. Patients in both IPT and CBT had very little difficulty beginning the sessions (Q 25, r), tended to frequently agree with and accept the therapists' remarks (Q 42, r), and were seen as highly compliant (Q 20) and not demanding (Q 83, r). Although these items were among the most highly characteristic and uncharacteristic items of both IPT and CBT, there were still some important differences in how characteristic they were of the treatments.

Statistically speaking, 52 Q items did not significantly distinguish therapy process in IPT and CBT, and of these, 29 were items describing patient attitudes or emotional states. Thus, although there were some important differences in the ways the therapists in the two treatments behaved, the patients were quite...
similar. For example, there were no differences in the levels of animation (Q 13) or painful affect (Q 26), such as depression (Q 94), anxiety (Q 7), and shame or guilt (Q 71), that patients experienced during sessions. Feelings of inadequacy or inferiority (Q 59) and embarrassment or humiliation (Q 61) were also similar across treatments. In addition, there were few differences in patients' attitudes toward their therapists. For instance, patients were equally approving of the therapists (Q 1) and accepting of their comments (Q 42), compliant (Q 20), collaborative (Q 83, r), trusting (Q 44), and nonresistant (Q 58). There were also no differences in patients' understanding of what was involved in therapy (Q 72), as well as their commitment to the treatment (Q 73) and their tendency to bring up significant issues in material (Q 88). In both groups, patients felt equally helped (Q 95) and achieved equivalent amounts of new insight during sessions (Q 32). In summary, there were no differences in levels of patient collaboration and working capacity, which was quite characteristic of both IPT and CBT.

Important therapist techniques that were equally characteristic of both interpersonal and cognitive—behavioral therapists included support (Q 45), reassurance (Q 66), encouraging independence of action or opinion in the patient (Q 48), and suggesting alternative ways of relating to others (Q 85).

**Process Correlates of Outcome**

To determine which Q items were associated with patient improvement, we calculated partial correlations (controlling for pretreatment) of outcome scores and scores on the Q items across both treatments. Exploratory analysis indicated that there were few differences in which Q items predicted outcome across both interpersonal and cognitive—behavioral sessions. Outcome was measured by the clinical evaluator-rated HRSD (Hamilton, 1967) and the patient-rated BDI (Beck et al., 1961). As revealed in Table 4, 23 of the 100 Q items were significantly correlated with outcome on the BDI and the HRSD at the \( p \leq .01 \) level (the significance level again was set at \( p \leq .01 \) to reduce experimentwise error for 100 tests of significance).

Of importance is the fact that 22 of the 23 items identified as process correlates of outcome were Q items describing patient characteristics, experiences, or qualities of the patient within session. Furthermore, 18 of these 23 patient items that predicted outcome were rated as equally characteristic of both IPT and CBT. Items that were positively correlated with outcome included the patient feeling helped (Q 95) or understood (Q 14, r), having a cathartic experience (Q 60), and achieving a new understanding or insight (Q 32). Items describing aspects of what is sometimes referred to as "patient working capacity" or "collaboration" in the therapeutic alliance literature also predicted positive outcome: the patient being introspective (Q 97), clear and organized in self-expression (Q 54), animated or excited (Q 13), understanding the nature of therapy (Q 72), being committed to the work of therapy (Q 73), and conveying positive expectations about therapy (Q 55). Accordingly, a set of Q items that described patient resistance (or lack of collaboration) were negatively associated with outcome: patient is provocative (Q 20), rejects therapist's comments (Q 42), feels wary or suspicious (Q 44), experiences ambivalence (Q 49), and verbalizes negative feelings (Q 1) toward the therapist. Another set of Q items that was negatively associated with outcome described the patient's negative affect: feeling sad or depressed (Q 94), inferior or inadequate (Q 59), anxious or tense (Q 7), or shy or embarrassed (Q 61) and experiencing discomforting affect (Q 26). Finally, the degree to which patients were judged to seek greater intimacy with their therapists (Q 10) was correlated positively with outcome.

**Discussion**
The Q-sort descriptions of therapy process measured how interpersonal and cognitive—behavioral theory translated into actual practice in the TDCRP. Consistent with techniques prescribed by interpersonal theory, discussion in the interpersonal treatments from the TDCRP centered on the patient's immediate social context (i.e., current relationships with important people in one's life) rather than childhood or developmental issues. The IPT therapists frequently clarified, restated, or rephrased the patient's communication and identified recurrent themes in the patient's experience or conduct. These techniques were used most likely in an effort to encourage self-reflection about one's role in interpersonal relationships. Our results also suggest that IPT represents a kind of "common factor" or Rogerian (Rogers, 1992) treatment with an emphasis on empathy, support, and nonjudgmental acceptance from the therapist.

The brief treatments in the TDCRP represent another demonstration of the clarity of the techniques prescribed by cognitive—behavioral theory. The cognitive—behavioral therapies in the TDCRP were found to be quite similar to other brief cognitive—behavioral therapies that have been studied by using the PQS (Jones & Pulos, 1993). Discussion centered on cognitive themes and the patient's current life situation. The therapists adopted an active and didactic stance and frequently provided explicit advice. Our results replicated previous findings by Jones and Pulos that the cognitive—behavioral therapists also provided strong support, encouragement, and approval in an effort to control negative affect.

When process in IPT and CBT was compared, a number of important differences emerged on the individual Q-item level, particularly in the areas of therapist stance, activity, and technique. However, there were no significant differences between the treatments on more than half of the Q items. Both IPT and CBT shared an emphasis on similar themes of current relationships and self-image. In both treatment modalities, therapists were very supportive, and patients were highly accepting, compliant, and agreeable. Patients in the two samples were similar across many dimensions of therapy process.

Our study of process—outcome links in interpersonal and cognitive—behavioral therapies provided a possible explanation for the absence of differential treatment outcomes in the TDCRP. We found that patient characteristics during the sessions, which were similar across treatments, were associated with treatment outcome in the TDCRP. This finding is consistent with previous research from the TDCRP by other investigators who examined patient pretreatment characteristics (Sotsky et al., 1991; Blatt, Quinlan, Pilkonis, & Shea, 1995; Blatt, Zuroff, et al., 1996). Our results demonstrate that the patient descriptors that were process correlates of outcome were remarkably similar across treatments. It is not at all surprising, then, that interpersonal and cognitive—behavioral therapy in the TDCRP produced such similar outcomes by most accounts. This study is consistent with the psychotherapy process research literature that states that patient characteristics, which are common to and equivalent across most treatment modalities, can contribute to outcome in randomized, group designs.

A question arose as to the conceptual overlap of the process Q ratings and outcome, particularly for the ratings taken late in treatment (usually Session 12). We investigated the extent to which the process ratings were merely early outcome ratings by comparing the Q ratings from Sessions 4 and 12. As reported, only 4 of the 100 items of the Q set significantly distinguished between the sessions early in treatment and the sessions later in treatment. Thus, the process of the therapies changed very little over the course of the treatments. The Q ratings do not appear to be confounded with outcome unless all of the positive gains were already reached by Session 4, when the first process ratings were taken. This possibility is quite unlikely given what is known about dose-response curves in psychotherapy (Howard, Kopta, Krause, & Orlinsky, 1986).
A number of the process predictors of outcome identified by the PQS seem to describe nonspecific factors that are often referred to as patient working capacity or alliance. Other investigators using the TDCRP data also have found these factors to be equivalent in predicting outcome across treatment modalities (Krupnick et al., 1996). Although the patient's ability to work in therapy may be a necessary condition of successful outcome, it does not help explain how patients improve as a result of therapy. It does not necessarily follow that symptoms of depression will improve just because the patient is capable of working well with the therapist. However, careful examination of the Q items that predicted positive outcome through a richer theoretical lens may offer an explanation of the mechanism by which such nonspecific factors as alliance promote positive outcome. In both IPT and CBT, the Q items associated with positive outcome seem to describe two types of patient experience: a positive sense of self and an idealized view of the therapist. Patients' experiences of a sense adequacy, effectiveness, self-assurance, trust, security, and relaxation were related to positive outcome. Improvement was also associated with patients being compliant, admiring or approving of their therapists, desiring greater closeness with them, and accepting their interventions without ambivalence or suspiciousness. This process was observed to happen rather quickly—by the fourth session at least—because the process was quite stable over the course of the treatments. This rapid attachment to the therapists can certainly be described as a positive therapeutic alliance, but again such an atheoretical description does not help explain how patients improved in the therapy.

The PQS descriptors of process correlates of outcome appear to capture the presence of a positive, dependent attachment to the therapist, a type of therapeutic relationship that can mobilize certain change processes. For example, Blatt, Stayner, Averbach, and Behrends (1996) and Blatt, Averbach, and Levy (1997) have also found that clinical improvement correlates with patients viewing therapists as increasingly benevolent, warm, and constructive. These investigators have conceptualized the idealized view of the therapist in terms of mental representation, which is a central theoretical construct in psychoanalytic theory and research, cognitive science, and developmental psychology (see Blatt, Stayner, et al., 1996, for a review). Through careful examination of the function of mental representations in therapeutic process, Blatt et al. (1997) have demonstrated that the therapeutic relationship provides a mechanism for patients to rework impaired or distorted interpersonal schemas into more adaptive cognitive—affective representations of self and other. Patients idealize therapists by constructing in the therapist qualities they may feel they lack themselves. These desired qualities, which are externalized or projected onto the therapists, are then internalized by the patient through identification with experiences of them in the therapeutic relationship (Blatt et al., 1997; Blatt, Stayner, et al., 1996). From a social learning theory perspective, it is also likely that when patients identify with certain qualities in the therapist, they become more receptive to the acquisition of new skills and more adaptive behavior through modeling by the therapist. Patients in the TDCRP began treatment meeting criteria for depression, which is often associated with poor self-image and low self-esteem. Positive outcome was associated with patients experiencing a positive sense of self and an idealized view of their therapists in the treatment sessions. Patients may have achieved this revised self-concept by identifying with the desired attributes seen in the therapists.

Psychodynamic theorists have discussed mechanisms by which a positive, dependent attachment to the therapist can facilitate positive change in brief treatments (Glover, 1931; Strachey, 1934). For instance, some patients may make efforts to win the therapist's affection and admiration. Although it was not directly assessed in the present study, it is possible that some depressed patients have strong dependency needs and tend to seek out authority figures with whom they develop deferential and submissive relationships. New, more adaptive and assertive behavior in their lives can be based on an unacknowledged (or hidden), new submission in the therapy relationship. In other words, the patient may risk different, more assertive behavior to maintain a passive, dependent relationship with a therapist who takes the role of a benevolent parental...
If changes in brief therapy are brought about by means of a positive, dependent attachment to the therapist, it is unclear whether such changes are capable of enduring after termination. For example, changes in mental representations may be lost when the therapist in whom the desired qualities are invested is no longer present. Gains made in brief treatment by means of modeling, skill acquisition, and reinforcement also require substantial practice before becoming enduring and adaptive traits. Indeed, it has been shown that treatment gains from IPT and CBT in the TDCRP were not maintained at follow-up (Shea et al., 1992). Longer term treatment may be necessary to allow more opportunity for mental representations to become fully internalized or for more adaptive behaviors to be practiced.

Whether the ingredients of change identified by the PQS are conceptualized in terms of therapeutic alliance, positive, dependent transference, or mental representation, one might be left asking what the role of specific therapist techniques is in helping the patient to improve. Even though therapist techniques as measured by the PQS were not correlated with patient change, note that null correlations do not necessarily mean that a process component is inert (Stiles & Shapiro, 1994). The study of therapeutic alliance in the TDCRP also found that therapist contribution was not significantly associated with outcome, although low reliability and variability of therapist factor scores may have contributed to the nonfinding (Krupnick et al., 1996). Despite these methodological ambiguities, our results continue to suggest that specific techniques are not capable of independently predicting outcome in group designs in the way that patient characteristics are (Jones, Parke, & Pulos, 1992). Therapist techniques occur as part of a complex interaction with the patient, and their effect is determined by this context. In other words, specific interventions do not have fixed meanings independent of context and cannot be assumed to contribute discretely and uniquely to outcome. This is one important reason why it has been difficult to identify the effects of particular kinds of interventions (e.g., decision analysis or correcting errors in logic or thinking) in group designs that average effects across patient—therapist pairs. This conclusion highlights the importance in psychotherapy research of an investigative strategy that alternates between group designs and intensive, quantitative single-case designs (e.g., Jones, Ghannam, Nigg, & Dyer, 1993; Jones & Price, 1998; Pole & Jones, 1998), which directly study how the reciprocally influencing interaction of patient and therapist affects outcome.

References


Table 1. Rank Ordering of Q Items for Interpersonal Therapy

Table 2. Rank Ordering of Q Items for Cognitive—Behavioral Therapy

Table 3. Differences Between Q-Item Means for Interpersonal Therapy (IPT) and Cognitive—Behavioral Therapy (CBT)
Table 4. Process Correlates of Outcome in Interpersonal and Cognitive—Behavioral Therapy

<table>
<thead>
<tr>
<th>Outcome Correlate</th>
<th>Interpersonal Therapy</th>
<th>Cognitive-Behavioral Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>0.34</td>
<td>0.25</td>
</tr>
<tr>
<td>Session 2</td>
<td>0.42</td>
<td>0.38</td>
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<tr>
<td>Session 3</td>
<td>0.30</td>
<td>0.29</td>
</tr>
<tr>
<td>Session 4</td>
<td>0.45</td>
<td>0.40</td>
</tr>
<tr>
<td>Session 5</td>
<td>0.48</td>
<td>0.42</td>
</tr>
<tr>
<td>Session 6</td>
<td>0.50</td>
<td>0.45</td>
</tr>
<tr>
<td>Session 7</td>
<td>0.52</td>
<td>0.47</td>
</tr>
<tr>
<td>Session 8</td>
<td>0.54</td>
<td>0.48</td>
</tr>
<tr>
<td>Session 9</td>
<td>0.56</td>
<td>0.50</td>
</tr>
<tr>
<td>Session 10</td>
<td>0.58</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Note: The table above represents the process correlates of outcome for both Interpersonal and Cognitive-Behavioral Therapy across different sessions, with correlation coefficients indicating the relationship strength.