THE ACCURACY OF THERAPISTS' INTERPRETATIONS AND THE DEVELOPMENT OF THE THERAPEUTIC ALLIANCE

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The extent to which the accuracy of therapists' interpretations predicts changes in the therapeutic alliance from early-in-treatment to later-in-treatment was investigated using a sample of 33 patients in psychodynamic treatment of moderate length. Accuracy of interpretation was assessed by judges' ratings of whether the contents of therapists' interpretations were congruent with patients' core conflictual relationship themes (CCRT). The results indicated that accuracy on the wish plus response from other dimension of the CCRT strongly predicted changes in the therapeutic alliance but accuracy on the response of self dimension did not. The findings support the hypothesis that therapist actions are important in maintaining good alliance and repairing problematic ones.

A number of studies have investigated the relationship between the quality of the therapeutic alliance in psychotherapy and treatment outcome. Twenty-four such studies were reviewed recently by Horvath and Symond (1991) who concluded that relatively robust evidence exists that the alliance is meaningfully correlated with treatment outcome (average $r = .26$).

Given the importance of the alliance in clinical theory and the consistent research findings that the alliance relates to outcome, attention has turned to the examination of variables that lead to the establishment and maintenance of a positive alliance. A positive alliance has been found to be correlated with good pretreatment interpersonal relations (Moras & Strupp, 1982), demographic similarities between patient and therapist (Luborsky, Crits-Christoph, Alexander, Margolis, & Cohen, 1983), pretreatment social adjustment (Marziali, 1984), low levels of pretreatment symptomatology (Eaton, Abeles, & Gutfreund, 1988), and lower pretreatment patient defensiveness (Gaston, Marmor, Thompson, & Gallagher, 1988).

Although research indicates that the therapeutic alliance during the early phase of treatment might be determined largely by what the patient brings to therapy, a number of clinical writers have suggested that therapists need to manage the alliance through appropriate technical interventions (e.g., interpreting patients'
problematic feelings towards their therapists), particularly with difficult patients (Foreman & Marmar, 1985; Greenson, 1965; Safran, Crocker, McMain, & Murray, 1990; Zetzel, 1956). Thus, the extent to which (a) the alliance continues to be positive, or (b) a negative alliance is repaired, would depend more on how the therapist responds to the patient as treatment unfolds.

Two studies have examined the relation between therapist behavior during treatment and the quality of the therapeutic alliance. Kiesler and Watkins (1989) found positive relations between patient-therapist interpersonal complementarity and both patients' and therapists' perceptions of the alliance. The second preliminary study was done by Foreman and Marmar (1985) who examined six therapy cases that had initially poor alliances. Three of the cases ended up with good alliances and good treatment outcomes while the other three cases ended with poor alliances and poor outcomes. The results were that for the three positive outcomes, the therapist had directly addressed problematic feelings that the patient had toward the therapist, and had linked the problematic feelings to defenses used to avoid the feelings. In the three poor outcomes the therapist did not address the problematic feelings in the therapeutic relationship, nor link them to the defenses.

In our research (Crits-Christoph, Cooper, & Luborsky, 1988) we have been developing a measure of the adequacy of the therapists' responses to patients' central issues. Accuracy of therapists' interpretations is defined in terms of a match in content between interpretations and independently derived core conflictual relationship themes (Luborsky & Crits-Christoph, 1990). This measure proved to be a strong predictor of the outcome of dynamic therapy ($r = .44$ with residual gain on a composite measure of general adjustment; Crits-Christoph et al., 1988).

The current study investigated the relation between the accuracy of therapists' interventions and the development of the therapeutic alliance. Our hypothesis was that while the early treatment alliance may be more a function of patient pretreatment characteristics, therapists' interpretive accuracy would influence the quality of the alliance later in treatment. Alliance was measured at two points in time (early-in-treatment and late-in-treatment) and accuracy of interpretation was measured at the first point in time. This allowed for an examination of whether accuracy at time 1 predicts alliance at time 2, controlling for alliance at time 1. Such an analysis would reveal whether therapists' accurate responses are related to the development of or change in the therapeutic alliance. In addition, we were interested in examining whether any successful prediction of change in the alliance by therapists' accuracy was a function of other "third" variables. It is possible that pretreatment characteristics (e.g., general level of psychological health-sickness) of patients which have been found to be prognostic of outcome may facilitate therapists' accuracy and also lead to improvements in the alliance. In addition, patients who improve more over the course of treatment may also be the same patients who improve their alliance over treatment. Thus, it was of interest to see if prediction of change in alliance was independent of the effects of treatment outcome.

**METHOD**

*Patients.* Thirty-three patients from the Penn Psychotherapy Project (Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988) served as the sample for testing our hypothesis. These patients were selected from the larger group of 73 patients from the Penn Psychotherapy Project. Selection included a range of patient outcomes and
excluded cases that were relatively brief in treatment length (less than 20 weeks), so that we could study changes in alliance over longer term therapy.

Table 1 summarizes the descriptive characteristics of the patients and Table 2 presents their diagnoses. These diagnoses were made as part of a semistructured prognostic interview by a clinical evaluator (Auerbach, Luborsky, & Johnson, 1972). The diagnoses were made according to the *Diagnostic and Statistical Manual of Mental Disorders*, second edition (DSM-II; American Psychiatric Association, 1968).

### Table 1. Descriptive Characteristics of Patients

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### Table 2. Patient Diagnoses

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criteria. The diagnoses were later translated from second edition to third edition (DSM-III; American Psychiatric Association, 1980) by two clinicians working together using the DSM-II diagnoses and case notes.

**Therapists** Twenty-five therapists (all psychiatrists) treated the 33 patients, each therapist treating one or two patients. The therapists ranged in age from 26 to 55 years ($M = 35.3$). Thirteen were fourth-year psychiatric residents, 8 were post-residency but had less than 10 years experience, and 4 therapists had greater than 10 years experience. About one-third of the therapists described their orientation as psychoanalytic, and the rest as eclectic. The ones who described themselves as eclectic, however, were primarily dynamically oriented, since almost all of the therapist supervision was performed by psychoanalytically oriented supervisors.

**Treatment Characteristics.** A detailed description of the treatments in the Penn Psychotherapy Project is given in Luborsky, Crits-Christoph, Mintz, and Auerbach (1988). In brief, individual psychodynamic psychotherapy was the treatment mode used for all patients. Treatment length varied from 21 to 149 weeks, averaging 55.5 weeks. About two-thirds of the patients were seen in an outpatient clinic setting and one-third in a private practice setting. Most of the therapists had targeted personality change rather than mere symptom relief as the goal of treatment. No medications were used in two-thirds of the cases. Although the data was collected before the advent of treatment manuals, ratings of the conformity of the treatments to Luborsky's (1984) manual for psychoanalytic psychotherapy revealed that the treatments were generally consistent with this approach (Luborsky et al., 1988).

**Sessions.** The sessions selected for study included two early-in-treatment sessions (typically sessions 3 and 5), and two late-in-treatment sessions. The late-in-treatment sessions were selected from the point at which about 75% of treatment had been completed (sessions near termination were not used to avoid the typical resurgence in symptoms and negative transference which might occur at that time). For the average patient, these sessions were after about 40 weeks of treatment.

**MEASURES**

**Identifying Interpretations.** The transcripts for the two early-in-treatment sessions were given to two judges for classification of each therapist statement. Crits-Christoph et al. (1988) gives the full details of this process. Cohen's kappa assessing interrater reliability for coding therapist statements as interpretations versus all other statements was .56, with agreement equal to 95% (Crits-Christoph et al., 1988). Only statements that were coded by both judges as interpretations were retained. For the 33 patients used in the current study, the median number of interpretations during the two early sessions was six.

**Core Conflictual Relationship Theme (CCRT) Method.** This method provides a way for clinical judges to formulate patients' central relationship patterns from psychotherapy session material and is described in detail elsewhere (Luborsky & Crits-Christoph, 1990).

Working independently of each other, the CCRT judges identified three components in each of ten narratives told by patients about their relationships with others: (a) the patient's main wishes, needs, or intentions toward the other person in the narrative; (b) the responses of the other person; and (c) the responses of the self. Both positive and negative types of responses were identified. Within each component, the types which occur most often across all relationship episodes were identified and combined. This combination formed the CCRT.
Interjudge agreement for formulating CCRTs has been found to be adequate: Wish and negative response of self had weighted kappa values of .61 and negative response from other was .70 (Crits-Christoph et al., 1988).

Each of the two early treatment sessions for the 33 patients was scored by two or three independent CCRT judges. The final CCRT for each patient was a composite of the judges’ CCRT formulations. The judges at times expressed their CCRT formulations with different wordings. To allow for direct comparisons between formulations, their specific wordings were coded into a standardized language (Barber, Crits-Christoph, & Luborsky, 1990). Two judges coded the CCRT judges’ formulations into standardized categories according to lists of standard wishes, responses from other, and responses of self. For example, if the original CCRT judge specified the wish “to be friends,” this was translated into the standard category “wish to be close to other.” This task was done with very high agreement (greater than 95%).

With the formulations thus standardized, a composite CCRT was formed by extracting the wishes and responses which were most frequently noted by the different judges. This resulted in a final CCRT formulation for each patient that comprised up to two wishes, three negative responses from other, and three negative responses of self (positive responses from other and responses of self did not occur at a high enough frequency to be included in final CCRTs).

Accuracy of Interpretations. This measure assesses the degree to which the contents of the therapist’s interpretations are compatible with the contents of the patient’s CCRT. A 4-point rating scale was used by three independent clinical judges to indicate the extent to which they believed that the patient’s CCRT wishes, responses from others, and responses of self were addressed by the therapist’s interpretation.

The judges were given composite CCRT formulations and therapist interpretations that were extracted from transcripts from the two early-in-treatment sessions for each of the 33 patients. Before making the accuracy ratings of each wish, response from other, and response of self, the judges became familiar with the patient’s CCRT formulation.

An example will help clarify how accuracy of interpretations is scored. For one patient in the study, the CCRT included one wish (to make contact with others, to be close), two negative responses from other (critical, unhelpful), and two responses of self (uninvolved with people, anxious). The following interpretation was made by the therapist to this patient in one session:

I hear you saying that. My thought about it runs as follows: if you get close to somebody else, your perception is that they can then control you and make you do things and tell you to do things and . . . not wanting to be controlled would make a distance between you and others.

This interpretation was judged to be accurate for the wish, and the first response from self (uninvolved with people), but not for the second response from self or the responses from other.

Each of the two wishes, three responses from other, and three responses of self were separately rated for accuracy. Ratings for the two wishes were averaged to yield a composite wish dimension for each patient, as were ratings for three responses from other and three responses of self. These composite accuracy scores were then averaged across all interpretations for each patient. These final accuracy
scores, because they are averages across all interpretations and across the two to three different wishes, responses from other, and responses of self that are contained in a given CCRT, cast a wide net for allowing a therapist to be accurate. The scores do not necessitate that the therapist was ever accurate in capturing the whole theme in an interpretation, or was accurate for the CCRT material that immediately preceded the interpretation. Despite the wide net cast by our method of scoring accuracy, the average level of accuracy displayed in this sample was low (slightly less than 2 on the 1 to 4 scale).

Interjudge reliability was examined using the intraclass correlation coefficient. For this sample of 33 patients, pooled judge reliabilities were .77 for accuracy on the wish, .75 for accuracy on response from other, and .83 for accuracy on the response of self component of the CCRT. The three judges' ratings were therefore averaged for subsequent analyses.

Because the accuracy on the wish and accuracy on the response from other dimensions were found to be highly correlated \(r = .67\), these two scores were averaged to form a composite accuracy scale. This composite score can be interpreted as reflecting the therapist's accuracy on the more interpersonal components of the CCRT, while the accuracy on the response from self dimension reflects the therapist's accuracy in addressing patient's feeling states. Accuracy on the response of self dimension was uncorrelated \(r = .15\) with the composite accuracy on the wish plus response from other dimension.

Helping Alliance Scale. Two other independent judges applied the helping alliance counting signs method (Luborsky et al., 1983) to the first 30 minutes of each of the two early and two late sessions for each patient. With this method judges scan transcripts of sessions for specific patient statements indicative of a positive or negative alliances. The interjudge reliability (intraclass correlation) of this method has been found to be .57 (Luborsky & Crits-Christoph, 1990). This marginal reliability was a function of one judge scoring somewhat more signs than the second judge. This method was found to significantly predict outcome in a larger sample of 43 patients from the Penn Psychotherapy Project. Therefore, we selected this measure for the current analysis.

A number of the specific types of Helping Alliance signs listed in the manual (Luborsky et al., 1983), however, are reflective of positive improvement or progress made by the patient (e.g., “I am feeling better recently”). These categories of signs were deleted from the scoring of the measure for this study so that we could examine changes in the alliance concept uncontaminated with direct signs of improvement. This revised measure of the alliance correlated highly with the original measure \(r = .86\) and had a comparable level of interjudge reliability \(\text{intraclass } r = .60\). In addition, the revised measure correlated highly with another measure of the alliance, the Helping Alliance Rating method (Morgan, Luborsky, Crits-Christoph, Curtis, & Solomon, 1982), for 20 patients \(r = .82, p < .001\). The revised measure assessed during the late-in-treatment sessions significantly correlated with treatment outcome (Residual Gain—see below) \(r = .41, p < .05\), but the early-in-treatment scores did not \(r = .11\).

Outcome. In addition to purifying the measure of alliance by removing signs of outcome, it was of interest to also partial actual measures of treatment outcome out of the relationship between accuracy and change in the alliance. This would allow us to be more certain that a prediction of change in alliance over treatment was not simply prediction of outcome. For this purpose we selected Residual Gain, one of the main outcome measures of the Penn Psychotherapy Project. This
measure was a composite (combining patient and clinical observer) measure of
genetal adjustment from which the influence of initial level had been removed via
regression analysis (Luborsky, et al., 1988).

*Psychological Health-Sickness.* Patients’ pretreatment levels of general psycho-
logical health-sickness were measured with the Health-Sickness Rating Scale
(Luborsky, 1975). This widely used measure is an 8-item clinician rated scale
completed after a semistructured clinical interview. The sum of the 8 items was used
in the present study and had an internal consistency reliability (coefficient alpha)
of .87.

RESULTS

CONSISTENCY OF ALLIANCE FROM EARLY TO LATE SESSIONS

Before assessing the extent to which therapist accuracy predicts later alliance,
we examined the extent to which the alliance was consistent over the course of
treatment. If the alliance was highly consistent, the variables that predict early
alliance would also be highly predictive of later alliance. A small Pearson correlation
between the early alliance scores and the late alliance scores was found, indicating
that substantial changes in alliances occurred \( r = .16, \text{n.s.} \). Thus, initially poor
alliances sometimes improved and initially good alliances sometimes deteriorated.
Such changes allowed for a test of whether therapists’ actions were associated with
the development of the alliance.

RELATION BETWEEN ACCURACY OF INTERPRETATION AND ALLIANCE

Simple correlations between accuracy and early-in-treatment alliance revealed
slight positive associations, although not statistically significant with the sample size
used here. The correlation of accuracy on the wish plus response from other
dimension of the CCRT with alliance was .20; for accuracy on the response from self
dimension with alliance, the correlation was .29. Simple correlations between
accuracy and late-in-treatment alliance scores indicated that accuracy on the wish
plus response from other component of the CCRT was highly related to late-in-
treatment alliance \( r = .52, p < .005 \), but accuracy on the response of self
dimension was not \( r = .06 \).

In order to test the main hypothesis of the study, that accuracy would predict
the development of the alliance, we performed partial correlations between late
treatment alliance and the two accuracy scores, controlling for early treatment
alliance. Thus, in this analysis, by partiailing out early treatment alliance we are
assessing the relationship between accuracy and change in alliance. The partial
correlations of each predictor with late treatment alliance were as follows: accuracy
on the wish plus response from other, \( r = .51, p = .004 \); accuracy on the response of
self, \( r = -.05 \). Thus, strong support for our hypothesis was evident for the accuracy
on the wish plus response from other dimension.

Although the wish and response from other accuracy scores were highly
correlated and therefore combined for the above analyses, it was of interest to
conduct an exploratory analysis to see whether the prediction based upon the
combined score was more of a function of the wish dimension or the response from
other dimension. The partial correlation of the accuracy on the wish dimension with
late-in-treatment alliance was .53 \( p < .05 \), while the partial correlation of the
accuracy on the response from other dimension with late-in-treatment alliance was \( .38 (p < .05) \).

Although the above analyses indicate that therapists’ accuracy predicts the development of the alliance, it does not provide information on the nature of the influence. It is possible that (1) when initial alliance is low, therapist accuracy serves to improve the alliance, (2) when initial alliance is high, high levels of accuracy are needed to maintain the alliance and inaccuracy leads to deterioration in the alliance, or (3) both processes could be occurring. These alternatives can be examined through assessment of the interaction of accuracy and level of initial alliance in predicting later alliance. Accordingly, a hierarchical regression analysis was performed using late-in-treatment alliance as the dependent variable. Early alliance and accuracy on the wish plus response from other dimension were entered on the first step of the model followed by a cross-product term of these two predictors on the second step. The cross-product term yields interaction information once the main effects have been partialled from it (Cohen & Cohen, 1975). The interaction was emphatically nonsignificant \( (t = 0.21, p = .83) \), and a breakdown of the sample at the median of the early-in-treatment alliance scores confirmed that accuracy on the wish plus response from other evidenced moderate correlations in both low initial alliance \( (r = .72) \) and high initial alliance patients \( (r = .40) \).

Finally, analyses were conducted to examine the influences of outcome and pretreatment psychological health-sickness on the correlation between accuracy and change in the alliance. In regard to outcome, it should be noted that both accuracy (wish plus response from other) and late-in-treatment alliance correlated significantly with residual gain outcome in this sample. However, in an analysis partialling residual gain in addition to early-in-treatment alliance from the correlation between accuracy (wish plus response from other) and late-in-treatment alliance, a significant relationship was still evident (partial \( r = .37, p < .05 \)). Partialling pretreatment psychological health sickness from the relationship between accuracy (wish plus response from other) and late-in-treatment alliance did not change the partial correlation at all.

**DISCUSSION**

Our results support the hypothesis that one aspect of therapist skill is important to the development and maintenance of the therapeutic alliance during moderately long dynamic oriented treatment. Although we have not, of course, ruled out the influence of “third variables” on our correlational findings, the data suggests that changes in the therapeutic alliance over time are best viewed as not simply random fluctuations or a function of patient pathology, but are intimately connected to an aspect of the technical actions of the therapist. The importance of improving the alliance over treatment has recently been documented in a study by Klee, Abeles, and Muller (1990), who found increases in the alliance in the subgroup of patients who benefited from treatment. A positive therapeutic alliance late in treatment may also be particularly important to the maintenance of treatment gains beyond termination.

These findings lend further support to the concept of accuracy of therapists’ interventions. Measures of accuracy have been shown to predict immediate, within session patient progress (Silberschatz, Fretter, & Curtis, 1986), treatment outcome
(Crits-Christoph et al., 1988), and, in the current project, the development of the therapeutic alliance.

It is of interest that, of the two measures of accuracy of interpretation used in the study, only the accuracy on the wish plus response from other dimension yielded a strong prediction of the development of the alliance. This same differential prediction was evident in the relationship of accuracy scores to the outcome of treatment (Crits-Christoph et al., 1988). Note that accuracy on the response from self component is not irrelevant to the therapeutic alliance, as it was modestly correlated with early in treatment alliance. It may be that therapists' interpretations about patient feeling states (response from self component of the CCRT) help foster the initial bond in therapy. In order to maintain a strong alliance or repair a disrupted one, however, it appears that interpretation of the interpersonal aspects of core conflictual themes is more important.

A number of limitations of the findings presented here should be noted. Most research on the therapeutic alliance in dynamic therapy has examined the alliance within the context of brief dynamic therapy. The treatment studied here was not brief dynamic therapy (typically less than 25 sessions). It is likely that longer treatment in this project increases the likelihood that changes in the alliance could occur. In brief treatments, an initially strong alliance might carry through to the end of treatment regardless of the accuracy of the therapist's interventions. However, rather than assuming that there is consistency in alliance scores, and therefore that they can be averaged over early, middle, and late phases of brief dynamic therapy, it would seem appropriate to first examine the amount of consistency in these variables over time and how they might interrelate.

It is not known whether the findings reported here would generalize to other treatment sessions beyond the early and late sessions selected for study. It is possible, for example, that accuracy on the response of self dimension might show some impact on changes in the alliance over a shorter span of sessions in the initial phase of treatment. The influence of the length of treatment and the selection of sessions on these relationships can be pursued in future research.

The findings might also be limited by the particular sample of patients used. The extent to which accurate interpretation is useful for building an alliance or outcome may depend on the specific diagnosis or patient presenting problem. With some psychiatric problems, accuracy of interpretation may be less relevant to either the alliance or outcome because other treatment approaches besides a psychodynamic one might be more beneficial. On the other hand, a wide range of outpatient problems and diagnoses were represented in this sample and strong results were still found. The sample as a whole, however, tended to be highly educated with a fair proportion of college and graduate students. The particularly important role of accurate interpretations in shaping the alliance may be restricted to this highly educated sample.

Within the psychodynamic model, it is possible that other aspects of interpretations (e.g., their timing, degree of supportiveness, or object) may also be relevant to the alliance in addition to accuracy. In addition, a more fine-grained analysis of specific therapist interventions and their impact on various aspects of the alliance, or ruptures in the alliance (see Safran et al., 1990), might begin to unravel the complexities of the intervention-alliance relation and yield more direct clinical recommendations. It might be worth considering other definitions of accuracy, for example, that examine therapist interpretations relative to the immediately preced-
ing clinical material. Alternatively, it is possible that our measure of accuracy is a marker for some more general measure of therapist skill, and it is the quality of this general skill level, rather than accuracy per se, which is important.

Despite the limitations, the current study strongly suggests that accuracy of interpretation, when accuracy is defined as being consistent with the patients’ central interpersonal issues as formulated with the CCRT approach, is associated with a positive alliance later in treatment. Future research can examine the generalizability of the findings by examining the variables studied here in different patient groups and by measuring other dimensions of interpretations. In addition, future studies with larger sample sizes could begin to more directly test the complex causal relationships among patient characteristics, technique variables, alliance, and outcome using more sophisticated statistical techniques, such as structural equation modeling.

REFERENCES


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