## **Application of the CCRT: A Measure of Adequacy of Therapist's Interpretation and a Measure of Patient's Self-Understanding**

Paul Crits-Christoph and Lester Luborsky

#### 1. Introduction

One of the central concepts in the theory of the curative action of psychoanalytic psychotherapy is the power of transference interpretations for augmentating self-understanding (Luborsky 1984). Despite the importance of transference interpretation and patient self-understanding to theory, there have been few attempts to empirically investigate these aspects of psychoanalytic psychotherapy. It is the purpose of this chapter to present two psychotherapy process rating scales: (a) adequacy of therapist's response to transference, and (b) patient's self-understanding. We will first review relevant research and then describe the beginnings of our new quantitative approaches based upon the Core Conflictual Relationship Theme Method (Luborsky 1977).

Before proceeding with the description of our psychotherapy process measures, it is important to define some of our main concepts. Transference is a term used in a variety of ways by clinicians. Often, transference is defined as the patient's distorted attitudes and feelings specifically toward the therapist. This pattern is seen as originating from early conflictual relationship with significant parental figures. We use the term transference in a broader sense to refer to the maladaptive relationship patterns that are evident in relationships outside of the therapeutic situation as well as with the therapist. Freud (1912b) seemed to have this latter definition in mind when he stated, "It is not a fact that transference emerges with greater intensity and lack of restraint during psychoanalysis than outside it." (p. 101)

We should also say a few words about our use of the concept of selfunderstanding. The term "insight" is a more commonly used one, but our preference is for self-understanding because it is a broader term. An important distinction can also be made between self-understanding as knowledge about one's self versus "emotional insight." Assessment of self-understanding as knowledge about one's self runs the risk of tapping into patients' over intellectualized self views rather than "real" understanding. The term "emotional insight," however, is often used to describe the process of being in touch with and experiencing one's emotions (Hohage and Kübler, this volume), rather than the acquisition of understanding about specific content that was previously outside of awareness. Our interest is primarily in the latter phenomena.

### 2. Research on Therapist's Response to Transference

A variety of studies have attempted to measure the amount of emphasis on transference interpretation during psychotherapy sessions. Usually these measures consist of ratings or content coding systems scored by clinical judges. Those studies are reviewed below.

One of the many variables judged by the paired comparisons method in The Menninger Foundation Psychotherapy Project (Kernberg et al. 1972) was "Focus on Transference." Judges used process notes and other test and interview data collected at termination to evaluate this dimension. Results indicated that for high skill therapists treating patients with low initial ego strength, high focus on transference was associated with better global improvement at follow-up.

Malan (1976b) used therapists' process notes to document an association between the frequency of transference interpretations and treatment outcome. These findings were extended by Marziali (1984), who examined the frequency of transference interpretations using audio recordings of sessions. The frequency of interpretations with therapist-parent links and therapist-parent-other links correlated significantly with several psychodynamic outcome scales.

The earliest precise analysis of the immediate effects of transference interpretations within psychodynamic psychotherapy sessions was by Garduk and Haggard (1972). Using a sample of four cases, they compared the immediate effects during the 5 minutes after transference interpretations versus after noninterpretations. Interpretations were shown to elicit more defensive associations, more transference-related

material, more understanding, and more affect than were noninterpretations.

Luborsky et al. (1979) examined the immediate preconditions and consequences of 16 transference interpretations for each of three patients in psychoanalysis. There was a clear parallel between the positivity of the immediate response to interpretation and the outcome of the three treatments.

Similarly, Silberschatz (1984) examined the immediate impact of transference interpretations in three cases. The accuracy of transference interpretations were rated by using the Plan Diagnosis Method (Rosenberg et al. 1986) to independently describe patients' psychodynamic themes. For each patient, Silberschatz found high correlations between the accuracy of interpretations and scores on the Experiencing Scale (Klein et al. 1970) which was applied to the segment of patient speech following interpretations.

Despite the promising findings reported in these studies, many questions remain. No attention has been paid to the development of a psychometrically sound scale of the accuracy or adequacy of interpretation. Aside from the Silberschatz (1984) report which was based on only three cases, no study has employed an independent measure of the content of the transference on which clinical ratings could be based. Judges were allowed to define the transference as they saw fit. In contrast, the measure we have begun to develop is a guided clinical rating. The judge assesses the extent to which the therapist accurately addresses transference as defined by an independent criterion: The Core Conflictual Relationship Theme (CCRT) (see the chapter by Luborsky and Crits-Christoph for a full description of this method). Guided clinical ratings have frequently been found to have better predictive validity than unguided ratings (Holt 1978). It is this use of a guided clinical rating that we feel represents an important methodological advance.

# 3. Development of a Measure of Adequacy of Therapist's Response to the Transference (ATRT)

Our measure of adequacy of therapist's response to the transference is a set of guided clinical ratings. The rater uses the CCRT formulation for the particular session as a guide in judging the adequacy of the therapist's interpretations.

The validity of these ratings, of course, depends upon the extent to which the CCRT method is a measure of transference. Recent results (Luborsky et al. 1985; Luborsky et al. 1986) have supported this proposition. In fact, the CCRT method has produced data which is consistent with nine of Freud's observations about transference (Luborsky and Crits-Christoph , this volume).

The rating scale of adequacy of the therapist's response consists of three items that correspond to the three main components of the CCRT method. After reading a given session and becoming familiar with the independently derived CCRT formulation for that session, the judge then rates the accuracy of the therapist's responses to (1) the main wish component of the CCRT, (2) the main response from other component, and (3) the main response from self component.

### 4. Reliability

The accuracy of therapist's response scale has been applied thus far to a pilot sample of 12 sessions drawn from the treatments of patients in psychoanalysis and psychoanalytically oriented psychotherapy.

The per judge reliabilities for the ratings of therapist response to (1) the main wish, (2) main response from other, and (3) main response from self were: .66, .60, and .81, respectively. For the pooled judges ratings, the coefficients were .79, .75, and .90, respectively. For the sum of the three items, the per judge agreement was .72, and the pooled judge reliability, .84. Finally, the internal consistency reliability (combining judges scores for each item) was .92.

These data suggest that judges can agree reasonably well as to when the therapist's interpretations are accurate, i.e., match the content of the independently derived CCRT. In addition, the high internal consistency figure indicates that when therapists are accurate on one component of the CCRT, they tend to also be accurate with the other components. This may reflect differences in general skillfulness of therapists, or, alternatively, accuracy may vary from session to session, independently of therapist's skill.

#### 5. Problems and Questions for Future Research

We are currently in the process of utilizing our ATRT scale of accuracy of interpretations to predict the treatment outcomes of 43 patients in psychoanalytic psychotherapy. Our experiences so far with the scale have raised a number of practical and theoretical concerns. First, we have recognized that although CCRT formulations usually are expressed in terms of the highest frequency of each of three components, lesser frequency themes may still be important for the therapist to address. We have, therefore, expanded our rating scales to include assessment of the accuracy of the therapist's response to lesser frequency themes as well.

A second issue involves the nature of the sample to which these ratings can be applied. In order to successfully predict the outcomes of psychotherapy, the sample used must contain an adequate range of therapist's general level of accuracy of interpretation. Fortunately, our sample of 43 patients drawn from the Penn Psychotherapy Project (Luborsky et al. 1980) appears to contain a sufficient range of skillfulness among the therapists. Similarly, the choice of which sessions in the treatments are sampled is important. Sessions chosen must be representative of how each therapist worked with each patient and should contain a certain minimum number of interventions by the therapist on which ratings can be based. This latter point raises the question of the appropriateness of ratings of this type for research on psychoanalysis per se, as opposed to psychodynamic psychotherapy. The relative fewer therapist responses present in a classical psychoanalytic treatment may make it more difficult to judge the therapist's general level of accuracy. On the other hand, our experience with the application of the rating scale to the 12 pilot sessions, half of which were sessions of psychoanalysis, indicated that judges can make reliable inferences as to a therapist's accuracy of responding, even when the number of therapist interventions is low.

An additional potential problem that may arise particularly in applying the scale to psychoanalysis concerns the level of inference about a patient's relationship pattern that is made by the CCRT judges versus the therapist. The CCRT judges rely only upon patient material present in the few sessions which they score. Therapists, however, can make inferences at deeper levels because they are familiar with the subtleties of patients' themes from material in previous sessions. Ultimately, these questions relate to the validity of the rating scale, and remain to be answered by the results of our studies in progress.

#### 6. Research on Self-Understanding

Most research on self-understanding and insight has been in the context of determining its predictive power for the outcome of psychotherapy. Specifically, such studies are aimed at determining whether patients who come to treatment with high levels of self-understanding or patients who develop self-understanding in the course of treatment have better outcomes. In a review of studies of factors influencing the outcomes of psychotherapy (Luborsky et al. 1971), five of such studies were found for non-hospitalized non-psychotic patients.

The earliest study was by Raskin (1949). Patient statements were rated for insight and understanding. Change in insight was found to be highly correlated with outcome for a sample of 10 patients. In another study, Rosenbaum et al. (1956), found that pre-treatment level of insight as judged by the therapist was not related to outcome. In a brief abstract Zolik and Hollon (1960) report that insight significantly predicted outcome of treatment. More recently, Morgan et al. (1982), measured insight with a 10-item rating scale applied by clinical judges to two sessions from early in treatment and two sessions from late in treatment for 20 patients. Level of insight correlated moderately but non-significantly with outcome. Finally, O'Malley et al. (1983), had judges rate "self-examination and exploration of feeling" from early psychotherapy sessions. Significant prediction of a therapist outcome measure was obtained, but no significant findings were present for patient or clinical observer measures.

In addition to the above rating methods, a "self-observation" content analysis scale has been described by Cartwright (1966). The scale has two parts, one for therapist's statements and the other for patient's responses. The therapist's statements are classified into one of the eight categories according to their relation to the patient's job of observing himself. These range from "non-observation statements" to "interpretations." The patient's six categories of responses were: (1) non-self, (2) focusing, (3) self as object, (4) self as presently experienced and not fixed, with appropriate affect, (5) observing an immediate experience, (6) integration of self-observation. These scoring categories were applied to four cases; for each case the sessions selected were all of the first interview, every fifth interview thereafter, plus the last interview. The four patients were two female patients in treatment with two male therapists, one a psychoanalyst and the other a client-centered therapist, and two male patients in treatment with two male therapists, likewise,

one an analyst and the other client-centered. The data indicated that although each therapist of the matched patients behaved quite differently, patients responded quite similarly in terms of the six self-observation categories. It was found that matched patients can reach high levels of self-observation response to either analytic or client-centered techniques (although client-centered theory did not specifically deal with self-observation as a variable necessary to the change process). It appears from these four cases, therefore, that the level of self-observation reached by the patient depends more on what he brings to treatment than on specific techniques followed by the therapist – this, of course, is restricted to the comparison of client-centered and analytic treatments, both of which have in common a high level of therapist's clarification responses.

Although some positive findings are evident in the above studies, the results have been inconsistent. Several investigators employed single item ratings of insight and often no reliability data was presented. One of the studies, O'Malley et al. (1983), used a measure of the extent to which the patient was attempting to self-explore rather than a measure of the amount of acquisition of self-understanding per se. Only two of the five predictive studies actually consisted of psychodynamic psychotherapy. The main point, however, is that all of these existing measures of self-understanding are unguided clinical ratings. As with the measure of accuracy of therapists' response, the measure that we have recently begun to develop is a guided clinical rating based upon the Core Conflictual Relationship Theme.

## 7. Development of a New Measure of Self-Understanding: Self-Understanding of CCRT

The 13 items for the Self-Understanding Scale were derived from the guidelines provided in Luborsky's (1984) manual for Supportive-Expressive Psychotherapy. The items (each rated on a five point scale from no understanding to very much) tap the patient's self-awareness of different facets of the core theme (wish, response from self, response from others), awareness of the CCRT in the patient's relationship with the therapist, with others outside of treatment, and in past relationships, the extent to which the patient understands the relationship of the CCRT to his or her main symptom, and a few other areas.

Two judges applied this scale to the pilot sample of transcripts of 12 whole sessions mentioned previously. The judges were instructed to

read the transcript of each session, then read the independently derived CCRT evaluation for that patient in that particular session, then re-read the transcript with the CCRT in mind, and, finally, rate the 13 self-understanding items.

In order to examine whether the same amount of information about self-understanding could be derived from ratings of brief segments – thereby significantly reducing the research time involved – we had two other judges rate the items on 250 word segments, one drawn from each of the 12 sessions. We also wondered whether focusing on a smaller amount of clinical material might increase the reliability of the scale. These segments were selected from the part of the session immediately after and including the therapist's main interpretive statement for that session (2 independent judges had 92% agreement in selecting the main interpretation of each session). We reasoned that the material following the therapist's main interpretation might include the best clues as to the patient's level of self-awareness of the core theme.

Material from the Specimen Hour 5 can be used to illustrate more concretely the nature of the Self-Understanding Rating Scale. The session was first scored by the Core Conflictual Relationship Theme Method. Results indicated that a wish for reassurance, direction, and approval was present, although this wish was not the most dominant one. At one point in the session, the patient says, "I do seek reassurance whenever I talk, even here." Judges would use this statement to rate this session as high (e.g. 5 on the 1 to 5 rating scale) on self-understanding of this wish, and also high on self-understanding of the theme in relation to the therapist.

### 8. Reliability

Table 1 presents the reliability data for the obtained ratings on the 12 sessions. As can be seen, adequate interjudge and internal consistency reliabilities were obtained for the ratings of whole sessions. The pooled judge reliabilities indicate that 2 judges are a sufficient number, with their combined ratings to be used for the subsequent research applications of the scale. The level of internal consistency reliability and examination of the item-total correlations indicated that all 13 items were adding to the measurement of the overall dimension.

The reliabilities of the ratings of brief segments are slightly lower, but still adequate. The correlation between the ratings from sessions and those from brief segments, however, is only modest (r = .44). Without knowing which set of ratings has greater validity it is difficult to make a choice as to the better methodology (segments versus sessions). Our bias at this point is to stay with the whole sessions approach until we have some indication that we can get by with smaller units (both types of ratings can in fact be obtained).

Table 1 Reliability of Self-Understanding Scale

Whole Sessions		
Interjudge		Internal Consistency
Per Judge Pooled (2 judg	es)	
.66	.80	.97
Brief Segments		
Interjudge		Internal Consistency
Per Judge Pooled (2 judg	es)	
.61	.76	.88
Correlation of Sessions Rating	s with Segmo	ents Ratings: $r = .44$

### 9. Problems and Questions for Future Research

Despite achieving adequate levels of reliability with our new scale, several questions remain concerning the application of the measure. The three main problems are: (1) what constitutes good evidence for the existence of a certain degree of self-understanding? (2) how often should we measure self-understanding over the course of treatment? and (3) what form of outcome criteria should be used in assessing the predictive utility of the measure?

(1) What constitutes good evidence for the existence of a certain degree of self-understanding?

It is not clear from our method what type of patient statements are used by the judges to signify the presence of a certain level of self-

understanding. To what extent do judges rely on explicit statements versus a more inferential judgment as to what a patient is or is not aware of at a given time? Knowledge of these "indicators" of self-understanding would be important in developing a manual for the use of the scale by others. Towards this end, we have begun to have our judges write down the evidence they use to make their clinical ratings. Once we compile a list of the types of evidence used by raters, we can conceivably construct a more objective "counting signs" method of scoring self-understanding, rather than having to rely on ratings. In our past research on the helping alliance (Morgan et al. 1982; Luborsky et al. 1983), we followed this approach of beginning with a rating method and subsequently developing a "counting signs" method.

## (2) How often should we measure change in self-understanding over the course of treatment?

Clinical theory holds that understanding increases as treatment unfolds. For research purposes, this implies that it is necessary to assess self-understanding at multiple points during treatment rather than in one simple measurement. Figure 1 illustrates this point vividly. We applied our scale to three sessions each of two patients in psychoanalysis (Ms. A. and Mr. D.). Early in treatment (about session 15) both patients had about equal levels of self-understanding of their CCRT's. Later in treatment, however, one case (Mr. D.) had a substantial gain in self-understanding while the other did not (Ms. A.).

Incidentally, the analyst for the Mr. D. case rated the treatment as moderately successful, but the Ms. A. case had been rated by her analyst as only very slightly successful. Whether discrimination of successful versus unsuccessful cases can be achieved in a larger sample with our measure of self-understanding remains to be seen.

The question of which sessions to select for assessment of self-understanding is clearly important. In short-term dynamic therapy, gains in self-understanding might be evident in the first few sessions. In the analytic cases shown here, little progress had ben made by session 15. Ideally, we would have a baseline level of self-understanding of core themes that is determined before treatment starts. We could then measure change in self-understanding to any point in the treatment process. Measuring pre-treatment level, however, means building into our research design a preliminary interview or test that would yield such information.

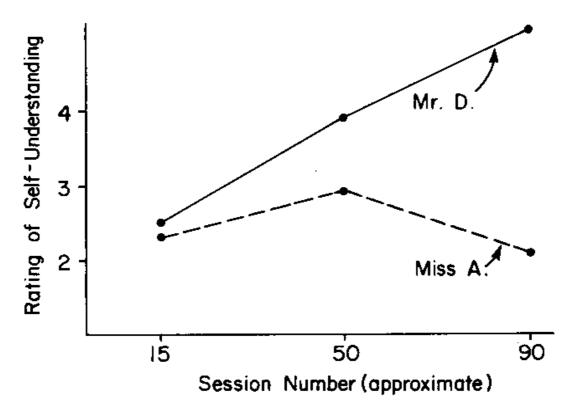


Figure 1 Change in Self-Understanding Over Time in Two Patients in Psychoanalysis

A final related question here is whether self-understanding increases in gradual increments or whether there are "key" events in treatment (Rice and Greenberg 1984) where there are large advances in self-understanding. If there is a consistent, gradual change, the selection of which specific sessions to rate is not crucial. On the other hand, if episodic change is the rule, many sessions might first have to be screened to identify where key events are occurring.

### (3) What form of outcome criteria should be used in assessing the predictive utility of the measure?

Theoretically, gains in self-understanding of core conflicts should be associated with general symptom reduction. It is more likely, however, that a greater association would exist with improvement on the specific relationship conflict than on a global outcome scale. The question, then, is what would be the measure of change in specific relationship problems? It is tempting to use the CCRT method itself as this measure of change in specific relationship conflicts. The possibility of contamination between the predictor (self-understanding of CCRT)

and the criterion (change in CCRT) would exist here. Applying the CCRT change measure to different sessions than the ones used for the self-understanding measure is one solution. Another might be developing a patient self-report measure of core relationship problems (Crits-Christoph 1986).

In summary, this research is a first step toward developing a guided measure of self-understanding. The scale appears to have adequate reliability and can be applied to whole sessions or brief segments of psychotherapy transcripts. Questions remain as to the validity of the scale, particularly in terms of its relationship to outcome of treatment. The few cases that we have to date, however, seem to indicate that we are on the right path in this regard. If successful, this program of research will begin to fill the gap between the widespread clinical emphasis on self-understanding and the paucity of research in this area.

### 10. Summary

Two new measures derived from the CCRT are described here: (1) A measure of the adequacy of the therapist responses to transference, and (2) a measure of the patient's self-understanding. These methods were tested on a pilot sample of transcripts of sessions and found to have adequate reliability and promising indications of usefulness in an area that has had great need for such measures. These measures will help to test the theory of the curative action of psychoanalytic psychotherapy, which holds that transference interpretations have a special power for augmenting self-understanding.