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LUBORSKY'S CORE CONFLICTUAL RELATIONSHIP THEME:
A REVIEW OF THE LITERATURE

A Doctoral Research Paper
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In Partial Fulfillment
of the Requirements for the Degree
Doctor of Psychology

by
Corinne Ruth Heinzelmann
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ABSTRACT

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The purpose of this paper is to review and critique the literature on Luborsky's contributions to process and outcome research on dynamic psychotherapy. Luborsky focused on the following key curative factors: helping alliance, transference, transference interpretations, psychiatric severity, and self-understanding. His major contribution to the field has been the development of measures designed to assess these curative factors. The focus of this paper is on the development and application of the Core Conflictual Relationship Theme method (CCRT). Results indicate a positive relationship between helping alliance and outcome; between accuracy of interpretations and helping alliance; between change in responses of the self and outcome; and a negative relationship between psychiatric severity and outcome.
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LUBORSKY'S CORE CONFLICTUAL RELATIONSHIP THEME:
A REVIEW OF THE LITERATURE

Introduction

Process and outcome research on psychodynamic psychotherapy over the past several decades has yielded confusing and contradictory results (Orlinsky & Howard, 1986). Consequently, scientific findings have had little impact on dynamic clinical practice. Yet within the field several researchers have made progress towards identifying and operationally defining key curative factors in the process of psychotherapy and their contributions to positive therapeutic outcomes. Lester Luborsky, Ph.D. has been engaged in ongoing research on psychodynamic therapy for decades. Garfield (1990), longtime observer and evaluator of psychotherapy research, identified Dr. Luborsky as one of a few outstanding psychodynamic researchers, along with such names as Strupp, Bergin, and Kazdin. For his many contributions to the field, Dr. Luborsky received the Division 12 award for Distinguished Contributions to Scientific Clinical Psychology at the 1986 APA convention.

Luborsky was one of the earliest psychologists to address the deficiencies in psychotherapy research and he has been a pioneer in developing new and innovative ways to address these deficiencies.

The goal of psychotherapy research is to provide scientific evidence of the variables or factors which contribute to successful psychotherapy and to therefore influence the practice of psychotherapy in order to improve its usefulness to clients. Luborsky (1969) began his work by concluding that the
body of research gathered at the time could not yet influence clinical practice. He observed that the traditional determiners of a therapist's style of practice were not based on quantitative research, that the relevant research to specific clinical questions had not been adequately reviewed with a view toward spelling out clinical applications, and that the findings of quantitative psychotherapy research were not yet strong enough to draw firm conclusions from which to practice. At the time, research had focused on individual factors, including the therapist, the techniques of treatment, the patient variables, the patient-therapist similarity variable, outcome measures, and the problems in each. These research factors were drawn from specific clinical questions without the benefit of an overall theory of therapy to guide the research or its application. Furthermore, Luborsky found that objective standards and techniques for assessing the outcome or process of any form of therapy were not yet available. He concluded that like beauty, therapeutic effectiveness was in the eye of the beholder. (Luborsky, 1969)

Luborsky's research employs the CCRT method and other instrumentation to find scientific evidence for the theoretical construct of supportive-expressive dynamic therapy to support and improve clinical practice. The purpose of this paper is to acknowledge, review and critique the literature on Luborsky's research. The first step will be a detailed description of Supportive Expressive theory and the CCRT method. Then, Luborsky's instrumentation as they relate to his curative factors will be discussed. Thirdly, this paper will review and critique the applications of these measures in exploring Luborsky's five curative factors and their impact on therapy outcome. A clear sense of the progression of his research measures, the current status in comparison to other dynamic psychotherapy
researchers will also be provided. This will bring into focus informative results and their implications for clinical practice, as well as potential areas of concern and directions for future research of further research.

**Description of Supportive-Expressive Psychotherapy (SE)**

Luborsky (1984) calls his form of therapy dynamic Supportive-Expressive psychotherapy (SE). A description of therapy was first published in his manual entitled *Principles of Psychoanalytic Psychotherapy: A Manual for Supportive-Expressive Treatment* in 1984. The term **supportive** describes those techniques which attempt to maintain or strengthen the existing defenses and level of functioning, while **expressive** refers to those techniques which attempt to foster increased self-understanding, through the patient's revelation of information and the therapist's interpretations of what has been revealed. By encouraging the therapist to draw an adequate balance between supportive versus expressive techniques the SE is flexible enough to deal with a wide range of problems from mild situational maladjustment to borderline or psychotic conditions. In general, the greater the psychiatric severity, the more supportive and less expressive the therapy. Luborsky's SE treatment reflects his focus on relationship patterns, and it creates the forum for the use of his Core Conflictual Relationship Theme (CCRT).

Luborsky's method of SE was originally open-ended in length of treatment; however, the model was later adapted for short-term therapy (Luborsky & Mark, 1991). Additionally, a special version of time-limited SE has been developed for work with drug dependence (24 session limit), and depression (16 session limit). The central techniques of time-limited SE treatment are very similar to the original form of SE. These techniques in
order of relative importance, are 1) "Be sensitive to allowing the patient to form a helping alliance" (p. 120); 2) "Formulate and respond about the central relationship patterns" (p. 122); 3) "Attend and respond to each sphere of the relationship triad, including the one with the therapist" (p. 124); 4) "Understand and respond where the symptom fits into the pattern" (p. 124); 5) "Attend to and respond to concerns about getting involved in the therapy and then separating" (p. 124); 6) "Responses should be timed in relation to the patient's awareness" (p. 125); 7) "Recognize the patient's need to test the relationship in transference terms" (p. 126); 8) "Frame the symptoms as problem-solving or coping attempts" (p. 126); 9) "Reflect on your usual types of counter transference responses" (p. 127); 10) "Interventions should be timed to suit the length of a session" (p. 128); 11) "Interventions should be limited in complexity and length" (p. 128); 12) The patient's shifts in mental state can be an opportunity for responses" (p. 128); 13) "The match of patient's with therapist's messages is a measure of the adequacy of the therapist's responses" (p. 129).

Compared to other time-limited dynamic therapies, such and those of Davanloo (1987), Malan (1986), and Sifneos (1984), SE techniques are more exploratory than educative or interpretive in focus, and they incorporate some of the ideas of either object relations theory or interpersonal theory as well as classical elements into their model. This broadens the goal to improving interpersonal functioning with less distinct focus on making the unconscious conscious. In time-limited SE there is more processing of the meaning of termination and separation and interpretations are much more geared to the patient's level of readiness than exists in other models. Additionally, Luborsky is the only short term psychotherapist to include an
emphasis on the need for therapists to study their own countertransference feelings (Demos & Prout, 1993).

Dr. Luborsky's stated goal over the past several decades has been to provide theory-based research which could support the theoretical propositions of psychodynamic psychotherapy. Within his theory of SE therapy there are several process variables which Luborsky (1987) proposes are correlated with therapy outcome. The propositions he has attempted to operationally define and explore are as follows: 1) A therapeutic alliance must develop if the patient is to benefit from dynamic psychotherapy; 2) Patients display a central relationship theme (Transference); 3) The therapist's accurate interpretations of the relationship pattern with the therapist will be especially beneficial; 4) Patients gain understanding about themselves and their relationships with others during psychodynamic treatment, and this understanding leads to better outcome; and 5) Improved patients will show a greater change in their transference patterns than unimproved patients, and initial severity of symptoms will impact how much they improve (Luborsky, Barber, & Crits-Christoph, 1990).

These theoretical tenants have been widely held among psychodynamic therapists; however, they have remained elusive to quantification in a manner useful to the clinical setting. This paper will explain the development and procedures of Luborsky's main quantitative contribution—his guided clinical formulation method, or Core Conflictual Relationship Theme to facilitate an analysis of its reliability and validity, and its use in change process research.

Description of the Core Conflictual Relationship Theme (CCRT)
In 1976 Luborsky developed the first quantitative session-based transference measure in the field of dynamic psychotherapy research. He was working on developing measures to examine the alliance between therapist and client when he became curious about this alliance within the context of the client's general pattern of relationships. He began to notice redundancies in the client's narratives of relationship patterns and problems, and began to try to formalize these patterns into a theme. The CCRT was devised as a system to guide clinical judgment towards a formalized concept of the content of the central relationship patterns in psychotherapy sessions. The procedures Luborsky found most useful in arriving at this central theme begin with actual tape recordings of sessions. From these, Luborsky developed a scoring guide to identify what he named relationship Episodes (RE) which are the client's verbalizations of specific relationships. In his research procedure, one set of clinical judges identifies a minimum of ten REs and another clinical judge scores these RE's for three main components: 1) the patient's main wishes, needs or intentions toward the other person in the narrative; 2) the responses of the other person either positive or negative; and 3) the responses of the self, either positive or negative. Within each of the three components the types with the highest frequency across all relationship episodes are identified and their combination constitutes the CCRT. It should be noted the concept of conflict is left to be inferred by the judge from the rated components. This judgment is also done in the context of the entire therapy transcript.

The judges also delineate between unconscious and conscious conflicts. The manual specifies five rules for identifying unconscious conflicts. For example, if a component has an opposite then the conflict is likely to be
unconscious. Instances of denial are also evidence that a conflict is unconscious. For research purposes Luborsky has completed both a tailor made CCRT scoring system in the patient's own words and a standardized CCRT using ready-made categories (Luborsky & Crits-Christoph, 1990). The categories consist of 32 wishes, 20 responses from others, and 29 responses of self. Studies using these categories have yielded much higher inter-rater reliability than using tailor made categories as will be shown later. The steps in the CCRT system are intended to represent the usual inference process of clinicians. The decision to score only the relationship episodes was reinforced by the study of ratings of transference (Luborsky, Graff, Pulver, & Curtis, 1973). The study found that rating of "transference as expressed to specific objects" were found to yield higher interjudge agreement than rating of "transference as expressed in the entire segment." This study indicated that transference stated in specific relationship verbalizations is more easy to identify than drawing conclusions from an entire transcript, thus the CCRT selected specific verbalizations for further study given the inter rater reliabilities found.

Luborsky and Mark (1991) stated that the "CCRT is a general relationship pattern that recurrently becomes activated throughout the therapy and perhaps throughout life." Luborsky's CCRT formulation is very similar to Freud's description of transference; however, the CCRT is operationally defined so that it facilitates inter-rater agreement. All CCRT judges work independently. Judges are trained by first reading the CCRT Manual and trying several standard practice cases. The judges then receive feedback from the research team about their performance. Research judges have included experienced clinicians with a psychoanalytic orientation,
psychiatrists, cognitive-behavioral therapists, and graduate students. The reliability of CCRT rests in the selection and training of the judges to accurately identify the REs and components, as measured by the judges inter-rater agreement. The process through which the CCRT was constructed is included here in some depth to illustrate the complexity and pitfalls of designing a measure of transference based on clinical sessions. This will be discussed further in methodological concerns.

Luborsky’s research employs the CCRT method and other instrumentation to find scientific evidence for the theoretical construct of supportive-expressive dynamic therapy to support and improve clinical practice. The purpose of this paper is to acknowledge, review and critique the literature on Luborsky’s research. The first step has been the detailed description of Supportive Expressive theory and the CCRT. Luborsky’s instrumentation as it relates to his curative factors will now be discussed. The strengths and weaknesses of the methodology employed in Luborsky’s work as well as the reliability and validity of the measures of curative factors will be explored with a special emphasis on the CCRT.

Methodological Analysis

There have traditionally been two aspects of concern within the field of psychotherapy research. Some research focuses solely on selected interactions or responses that occur during the therapy session, which is considered process research. Other research concentrates primarily on evaluating the effectiveness of the therapy provided, which is considered outcome research. It is most desirable in terms of utility of research to combine these two aspects to provide a link between what is actually done in
therapy and how effective it is. Additionally, a third type of research which is called change process research measures the process that brings about change over the entire course of therapy. However, due to the many difficulties encountered in planning and conducting a study, and a lack of methodological sophistication, process-outcome and change process research studies are seldom done. One major problem is that the field of process-outcome research lacks universally accepted operational definitions of variables, or process measures that would permit true research and the proliferation of assessment techniques increases the potential diversity of answers that can be reached about alternative treatments (Orlinksy & Howard, 1986).

This reflects one of the largest problems in the field of process research, as identified by Orlinsky and Howard (1978). These authors observe that there is no standard definition of what occurs in therapeutic process, nor of the intended effects of therapy. Thus, it is difficult to arrive at a consensus concerning the selection and measurement of meaningful process and outcome variables. Luborsky's work, like that of other process-outcome dynamic therapy researchers, has remained idiocratic with individually devised process measures; however, his work has laid a foundation for identifying critical links between interventions and outcome in that he provides operationalized constructs that psychodynamic theory has postulated are important.

This is perhaps his greatest achievement in that the measures he has created may assist in providing a consensus on dynamic process variables. According to Orlinsky and Howard (1986), a high degree of operationalization is needed to investigate outcome questions. Luborsky has followed what has
been termed the classical model of content analysis which emphasizes objective and quantitative analyses of the manifest content of communications in therapy. He has thus provided an operational definition of the central relationship pattern, the helping alliance, transference, transference change, and psychiatric severity.

Experimental Design

The majority of Luborsky's work falls into the category of qualitative or quasi-experimental design as defined by Cooke and Campbell (1979). This is primarily due to the non-random assignment of subjects and the lack of direct manipulation of discreet variables or controls. This design seems to ignore a host of variables which would threaten internal validity such as maturation, history, etc. This makes statements about causal relationships questionable. Nonetheless, good qualitative analysis invariably precedes good quantitative analysis. Decisions concerning what to measure, and how to turn these observations into a numerical index are qualitative decisions. The index can only be as good as the procedure on which it is based. The epistemological worth of these decisions comes down to how well they permit the making of valid comparisons and the drawing of inferences. Quantification is not the only route to causal explanation nor does it give direct access to it, and without detailed qualitative analysis, categories will remain ambiguous and thus inherently incapable of excluding contaminants (Luborsky, Barber, Binder et al., 1993). It is this avenue of adding to the field of research that Luborsky has pursued.

A major methodological contribution to research has been Luborsky's manualized treatment for dynamic psychotherapy, and his scoring system for the measurement of therapy components. Manuals were first developed
within the field of behavior therapy, but Luborsky's work represents the first effort to bring them and the methodological advances they afford to dynamic therapy research. The manual creates a vehicle for objective comparisons of psychotherapies in research studies in that they provide a measure of homogeneity of treatment. If treatments are held consistent, then the variable of the patient-therapist interactions will be more evident. Additionally, one can more easily compare therapies, without the distortion of inconsistent applications of the techniques, to determine ways in which therapies are distinct from each other as well as areas in which they overlap (Luborsky & DeRubeis, 1984). The manual also provides the means to measure the degree to which a given therapist provides what is intended in a given approach. This concept has been termed purity.

Luborsky, McLellan, Woody, O'Brien, and Auerbach (1985) operationally define purity as the ratio of the use of treatment techniques in the therapists' own manual over the use of all techniques. This measure was highly correlated with the therapists' success. It should be noted that the above-referenced study found significant differences among the psychotherapists in the study. A later study (McLellan, Woody, Luborsky, & Goehl, 1988) further examined therapist differences and found differences in outcome for patients who were transferred to a different therapist during their treatment. This variable will be discussed further in the Helping Alliance section below. For now, it is important to note that the CCRT manual provides for a measure of purity of treatment which is one of several therapist differences.

Luborsky's work allows for the comparison of groups of patients using the methodology derived from the quantitative study of individual case
records. Recent methodological developments have provided the vehicle for quasi-experimental studies such as Luborsky's to provide systematic research on basic psychological processes. Luborsky's work has been directly responsible for this improvement in allowing the field to move away from the rudimentary research and statistical sophistication of a case study. He developed an approach called the replication by segmentation. Luborsky has moved beyond process or outcome research towards the study of change process variables. This has been named change process research by Greenberg (1986). Luborsky's change process research is characterized by a focus not only on what is going on in therapy (process) and how it effects outcomes (outcome); but also on identifying, describing, explaining and predicting the effect of the processes that bring about therapeutic change over the entire course of therapy. Change process research is event or episode-based, and is studied in the context of therapy as a whole. Luborsky's replication by segmentation method allows for improved scientific study of transcripts in a time series manner. The approach is evident in his CCRT research which focuses on associations between events. The method was originated by Luborsky has recently been called the new research paradigm by Rice and Greenberg (1984). The four components to this replication by segmentation paradigm are: 1) the therapeutic record (transcript) is sampled and segmented into different episodes or events; 2) the segments are selected on the basis of a particular kinds of recurring events such as relationship components; 3) a particular, measurable dimension assumed to be causally related to the recurring events is identified and measured such as the central relationship theme; and 4) the hypothesis is formulated and tested
concerning a possible association between the measures identified and the events noted.

This type of research is discovery oriented. It is episode-based, explanation-oriented and it can lead to a number of different conclusions. It can lead to specification of what type of in-therapy performances lead to what type of extratherapy changes. This method assumes that outcome is not a single unitary event. It allows for a more empirical study than a simple case study method; however, at present the statistical validity or the validity with which studies permit conclusions about covariation between the assumed variables is threatened by the low statistical power of most of the studies reported using this method, given the high number of episodes necessary to detect a relationship. Luborsky has been careful to protect statistical power by requiring at least ten RE's per transcript using the method shown above. This is based on the finding that at least ten episodes are necessary in each group to show a significant effect size (Luborsky & Crits-Christoph, 1989). This assures that the average segment of transcript containing the item of interest or RE differs in its ability to produce a scorable RE from the other non-RE segments of the transcript by at least one standard deviation.

The true experimental design has yet to be established in psychoanalytic research. This would require the systematic manipulation of the treatment not fully present in quasi-experimental designs. For instance, random assignment of subjects was found to be negatively correlated with outcome presumably because it compromises the formation of a therapeutic alliance (Luborsky, Mintz et al., 1980). It is unlikely that psychoanalysts would ever find themselves able to relegate their commitment to their patients' welfare to a point that would permit the artificial manipulation of
the treatment condition. Instead most research has consisted of psychoanalytic case studies which depend on the post hoc examination of naturally elicited treatment records.

Luborsky, Diguer et al. (1993) conclude that most standard statistical tests, particularly of the parametric kind such as analysis of variance and regression analysis are inappropriate for the analysis of individual case data because the error components of scores are not independent. Chi-squared tests and the t and F tests are also not suitable. However, the individual case methodology, particularly the replication by segment strategy, is uniquely suited to psychoanalytic clinical practice in certain respects, because of the relatively long term nature of psychoanalytic investigations, the attention to uncontrollable as well as controllable conditions, the attention to events occurring during treatment and during measurement, and the influence of specific features of history, to name a few.

Subjects. The majority of Luborsky's research subjects were drawn from the Penn Psychotherapy Project. This project began in 1967 with a five year grant from the National Institute of Mental Health (Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988). The data consist of the 83 pretreatment measures, 83 posttest measures, and tape recordings of dynamic psychotherapy for 73 patients most of whom are from the outpatient psychiatric clinic of the Department of Psychiatry at the University of Pennsylvania. A smaller number were referred from private practitioners. The samples consisted of 74% females and 26% males with a median age of twenty-four years. Ninety-one percent of the subjects were Caucasian, 43% had some college education and 63% had never been married. Their DSM-III diagnosis included dysthymic disorder, generalized anxiety disorder, schizoid
personality disorder, and histrionic personality disorder. All patients were non psychotic. The 73 patients were seen by 25 therapists who had experience in psychotherapy ranging from one to ten years. Treatment length varied from 21 to 149 weeks with a median length of 43 weeks. Of this population 65% showed improved outcome from treatment. This data represents one of the largest resources on dynamic psychotherapy in the world. The Penn Psychotherapy Project investigated the factors influencing outcomes of psychotherapy.

Several factors impact the generalizability of results using these subjects. The median subject was white, female, had never married, was not psychotic, and had some college education. Consequently, whether or not these results could be generalized to individuals who don't fall in this category is questionable. Additionally, all clients who dropped out of treatment early were not reported among helping alliance and outcome results, thus biasing the sample towards those who most likely had a positive experience overall in therapy. Again, this limits the generalizability of results.

A second pool of subjects was gathered from the Philadelphia Veteran Administration Drug Dependence Treatment Unit. This facility offers methadone maintenance, narcotic antagonist, and drug-free outpatient treatment to veterans requesting drug dependence rehabilitation (Woody et al., 1984). This study has been named the VA-Penn study. In this study 110 methadone-maintained male opiate addicts were randomly assigned to three treatment groups: 1) drug counseling only; 2) supportive/expressive psychotherapy plus drug counseling; and 3) cognitive/behavioral psychotherapy plus drug counseling provided once each week for six months.
The subjects and their therapists and their drug counselors were given the Luborsky's Helping Alliance Questionnaire (HAQ) and his Addiction Severity Index (ASI) which are outlined in the instrumentation section. The baseline ASI measures were partialled out to correct for intersubject differences in pretreatment status. Given the more controlled nature of the drug treatment clinic, studies with this population more closely approximate true research design, with random assignment, and manipulation of treatment variables. However, the VA-Penn project and the resulting research is offered secondarily in this paper to further elaborate on certain curative factors. Given the focus of the paper on the CCRT, the Penn Project study and its derivatives has been emphasized here.

Reliability of the CCRT. Luborsky and his colleagues have put forth great effort to demonstrate that the CCRT narratives which form the basis for the CCRT formulation can be reliably identified and scored. To begin they make an effort to only use the most complete instances of relationship descriptions which clearly include an exchange between the self and the other person in terms of the wishes and the responses from the other person and of the self, as well as the outcome of the event. Luborsky found that specific accounts of events were probably more informative than accounts that generalize about several incidents, although the general ones still are often acceptable. Each narrative is rated on the degree of completeness on a scale from one to five, from least to most detailed (Crits-Christoph & Luborsky, 1990).

Crits-Christoph, Cooper, and Luborsky (1988) found that judges agreed moderately well on the rating of completeness in the Penn Psychotherapy project with an intraclass correlation of .68 (p< .001) for two pooled judges.
(Landis & Koch, 1977) proposed the reliability coefficients from .61 to .74 reflect substantial strength of agreement. Agreement was also moderately good for locating the beginning and end of the episode (Bond, Hansell, & Shevrin, 1987). The agreement in identifying the main other person was also high with 97% of judges selecting the same other person (Crits-Christoph, Luborsky, Dahl et al., 1988). It was also found that ratings of brief segments and of whole sessions could be made with acceptable levels of interjudge reliability. Most of the pooled reliability ranged from .50 to .80. This reliability is unique in the field of transference measures. Dahl's (1988) work on the Frame method is the only other researcher who has found reliability for the identification of narratives which he calls frames. These frames are much smaller units of narratives than the CCRT's relationship episodes and are therefore easier to identify completely (Luborsky, Barber, Binder et al., 1993).

There are two problems, however, in using the judges' ratings of reliability. The first problem is judge biases. Given that the CCRT method entails scoring a transcript in its entirety, any given score could be biased by the judges' perception of the trend in the session, rather than the specific verbalization. Although this closely approximates clinical formulation, it does not allow one to sort out the client's actual meaning from the judges interpretation in scoring. Therefore, the client may give an entirely different meaning to a specific RE than the judge. To sort this out, it would be helpful to have judges score RE's randomly selected from patient transcripts as well as the current method and compare these.

It should also be noted, however, that Luborsky's practice of reporting the pooled judges' scores distorts the individual differences in the judges and
in their ability to determine what is being measured. The training and experience of judges used in the studies presented here always varies, although Luborsky puts a strong emphasis on judge training. It would be more useful to calibrate judges' scores for their differences rather than pooling them. For example, Luborsky, Mintz et al. (1980) reported a .27 pooled interjudge correlation. This figure conceals the following range of correlations for four individual judges: .48, .42, .32, .06. These figures suggest that one judge functioned at only a chance level while two other judges were very skilled. Even more dramatic differences among judges could be found when the predictions were correlated with residual gain scores in the same study. The pool correlation was .8 while the individual correlations were .34, .33, -.13, -.16. Sandell (1988) found that the accuracy of interjudge agreement for outcome predictions was correlated with the judges' level of experience. He studied 16 judges, eight of whom were psychotherapeutically trained psychologists, and eight of whom were psychology students in their first year of college. Sandell found that the students attended to irrelevant information and made insignificant predictions of therapy outcome. Of the trained therapists, five out of eight made predictions above a chance level, but not all of them did. Therefore, training is not a guarantee of accuracy. With this in mind most judges used by Luborsky were experienced Ph.D. and M.D. level psychodynamically oriented psychotherapists who were selected because of their ability to formulate CCRT's close to those formulated by expert judges. Some BA-level assistants were also trained and received feedback on practice cases before acting as a judge.
Sandell (1988) further speculated that rating scales might blur the intuitive process in making clinical predictions. He stated that using rating systems might result in less accurate prediction than intuition alone. However, Luborsky found that interpretations and outcome were significantly better correlated when guided by the CCRT rating system than when unguided.

The CCRT reliability correlations were initially based on the tailor-made CCRT formulations. These allow for a great deal of variability in wording, amount of detail, and level of inference in each judge's formulations. To improve reliability, Luborsky developed standard category scores. Crits-Christoph, Luborsky, Popp, Mellon, and Mark (1990) found inter-rater reliabilities coefficients using standard categories resulted in weighted kappas for the wish and negative responses of self of .61. The weighted kappa for negative response of other was .70. All of these values were significant at the p<.001 level. These kappas fall toward the upper end of fair-to-good range and they reflect stronger reliabilities than the tailor-made scores. This is unfortunate given that the tailor-made method allows for unique descriptions of each case as would be found in real life clinical practice. The tailor-made criteria have been used in many of the studies despite the relatively weaker reliabilities, because it is the clinical session and clinical inference process itself about which Luborsky wishes to draw conclusions, and on which his theory is built. Luborsky feels that the tailor-made method is more valid even if it is not as reliable a measure. When the tailor-made version of CCRT is used, some statistics used to determine reliability such as kappa or intraclass R are not applicable. Instead Levine and Luborsky (1981) developed a method to compare the similarities of
independently derived formulations on the same case with those from mismatched cases. In this method items for the wish component are derived for the case in question and from control cases using the tailor made formulation method one. Wish items from formulation method two are then derived for the case alone. Independent similarity judges, blind to whether a wish item is from the case or a control, rate the similarity of items comparing those from formulation two with one on a seven point scale (1 = essentially dissimilar, to 7 = essentially similar). The mean similarity rating of the judges is taken for each similarity comparison. A t-test is calculated to determine whether wishes from the two formulations are significantly more similar for the correctly matched comparisons than for the mismatched comparisons. The paired comparison method provides information on the levels of similarity. Several studies including Crits-Christoph, Luborsky, Dahl et al. (1988) found that the CCRT could be judged reliably on a moderate size sample using this mismatched method. One final note, Luborsky does not report test-retest reliability of judges rating nor the internal reliability of the scoring or formulations, given that much of the later relies of inference rather than discrete steps. However, if a questionnaire method of the CCRT is developed these tests should be reported.

It should be noted that although the standard categories can be more reliably scored they are of questionable validity. Even the standard categories developed later in the Quaint method do not have the empirical base of well-researched content domains such as the Structural Analysis of Social Behavior SASB (Benjamin, 1974). More research is currently underway to use the Structural Analysis of Social Behavior by Benjamin as the system of standard categories for the CCRT. However, Luborsky is looking for ways to do
this without sacrificing the use of a rating scale for components instead of simply coding for presence, or diluting the focus on wishes, responses form other and responses from self.

Validity of the CCRT. To date, research using the CCRT still requires a certain amount of theoretical leaps. Content validity refers to the adequacy with which a specified domain of content is sampled (Nunnaly, 1978). The question to ask of the CCRT is whether the categories and component are sufficient to cover the domain proposed by the measure. Little discussion or empirical research has addressed whether wishes or responses adequately represent the underlying components of the core conflicts and whether other domains should be included, such as defenses or insight (Crits-Christoph, Barber, Miller, & Beebe, 1993). The validity of CCRT categories has received some attention, but whether or not other components should be included has not been discussed. Most of the evidence presented for content validity has consisted of reasoning and common sense. Luborsky himself has used the correspondence between the CCRT and Freud's (1912) observation about transference as one kind of evidence of validity which is a start. However, no quantitatively sound data is available to date.

In terms of predictive validity, some evidence has been provided that interpretations addressing the CCRT are associated with better outcomes. For example, Crits-Christoph, Cooper and Luborsky (1990) found that therapists' accurate interpretation of the wish and the response of other expressed by their patients during the early sessions correlated .44 with residual gain in general adjustment in a group of 43 patient. Additionally, Crits-Christoph, Barber, and Kurcius (1993) found that the extent to which therapists
accurately addressed the CCRT in their interpretations predicted the
development of the therapeutic alliance.

Another way of assessing the validity of the CCRT has been to relate it
to other measures as evidence of criterion validity. However, this is limited
by the fact that no criterion measure of transference has been developed.
This is again why Luborsky's work is so important and so pioneering. One
eexample of an effort to provide some criterion validity can be found in the
study of eight patients by Luborsky, Mellon, Levine et al. (1985). They
hypothesized that the change in the CCRT from early to late in treatment
should be related to independent measures of the outcome of treatment if
changes in CCRT signified a working through of transference. Change in
pervasiveness of the main negative response to self, the positive response of
other and the main wish were all significantly correlated with changes in the
global health sickness rating. This finding lends support to the notion that
the change in CCRT is a valid measure of improved health.

For many of the concepts reviewed in this paper, such as transference,
accuracy of interpretations, helping alliance, and psychiatric severity,
Luborsky's main contribution has been to provide an operational definition
and to prove they can be used reliably. This provides a foundation for
research to work in relationship to this measure to develop criterion
measures. Where available, Luborsky does use a larger criterion measure as
he does in the adequacy measures of interpretations. Much more work needs
to be done on CCRT as an objective measure of transference. In terms of
discriminant validity, it must be demonstrated that these measures provide
information beyond that already available through general personality
measures and diagnostic assessment systems.
A brief discussion of the CCRT compared with other similar methods will now be presented to elucidate the constructs that underlie the CCRT and to discriminate it from the constructs of other methods. At present there is no statistical comparison of two dynamic methods. Therefore, a descriptive comparison will be provided as a starting place. Luborsky, Barber, Binder et al. (1993) reviewed fourteen new guided measures of transference based on psychotherapy have been developed and applied. These include the Plan Diagnosis (PD) method developed by Weiss, Sampson and the Mount Zion Psychotherapy Research Group; the Structural Analysis of Social Behavior developed by Benjamin, the Configurational Analysis Method developed by M. Horowitz; the Frame Method created by Teller and Dahl; the Tomkin's Script method created by Carlson; the Patient's Experience of Relationship with Therapist Method created by Gill and Hoffman; the Cyclical Maladaptive Pattern Method developed by Schacht Binder and Strupp; the Plan Analysis Method developed by Grawe and Casper; the Impact Message Inventory created by Kiesler, Anchin, and Perkins; the Clinical Evaluation Team method by Bond & Shevrin; the Seattle Psychotherapy Language Analysis Schema created by Maxim; the Psychotherapy and Interpersonal Transactions by Kiesler; the Idiographic conflict formulation method developed by Perry Augusto and Cooper; and the Consensual Response Formulation developed by L. Horowitz (cited in Luborsky, Barber, Binder et al., 1993).

These measures have four major characteristics in common. Specifically, they all rely on relationship interactions and patterns in psychotherapy sessions to assess psychological conflicts. They all abstract from these interactions the most pervasive patterns, and therefore the most central conflictual relationship patterns. In all of these measures the
pattern is evaluated by clinical judgment rather than the patient's self report alone; and the pattern is measured by a system that gives at least moderate agreement of judges. To date no empirical comparison between any two of these manual guided dynamic therapies has been done, although much has been written descriptively comparing them. An empirical study is needed to better assess were the methods converge and where they discriminate constructs. This type of a study would add to the limited knowledge of validity of the various instruments. As a starting place, however, this paper will compare the CCRT method with another well developed model to lay a foundation for what is unique about Luborsky's work and what concepts may be also assessed through different means.

The CCRT (Luborsky & Crits-Christoph, 1990) and the Plan Diagnosis (PD) (Weiss, Sampson, & The Mount Zion Psychotherapy Research Group, 1986) methods are the earliest examples of guided transference measures. Each method has a long history of psychometric advances in terms of information provided about reliability and validity. A brief comparison of these two methods will further clarify the strengths and weaknesses of the CCRT and show an alternative approach to similar concepts. The PD method grew out of studies of a particular cognitive psychoanalytic theory of therapy developed Weiss et al. (1986) called Control-Mastery Psychoanalysis. Weiss' basic proposition is that psychopathology stems from unconscious pathogenic ideas that are typically based on traumatic childhood experience. According to his model, patients come to therapy with the desire to master conflicts and with an unconscious plan for achieving mastery. The patient's plan may be thought of as a strategy for disconfirming pathogenic beliefs by developing greater understanding of them in therapy and by testing them in
the relationship with the therapist. The method enables clinicians to construct comprehensive and reliable case formulations that include Weiss' components: the patient's goals for therapy; the inner obstructions or pathogenic beliefs that prevent or inhibit the patient from attaining goals; the ways the patient is likely to test the therapist to disconfirm pathogenic beliefs; the insights that will be helpful to the patient; and traumas that led to the development of pathogenic beliefs (Weiss et al., 1986).

The original procedure involved three steps. First a consensus formulation was developed by a group of clinicians or formulation team. This formulation was then broken down into component parts: goals, obstructions, insight, etc. The formulation team also included alternative items for each case that they thought plausible but less relevant. Finally, the real and alternative items within each component were rated for their relevance to the case by an independent team of clinical judges which was considered the reliability team. Reliability statistics were then calculated for the agreement among the reliability judges and between reliability and formulation judges.

The method has been applied to the study of psychoanalysis and a variety of brief psychotherapies (Weiss et al., 1986). The PD method has also led to the development of measures of therapist accuracy, as well as measures of therapy process and outcome. These studies have demonstrated that accurate interventions lead to patient progress. Furthermore, some studies indicate that accurate interventions are correlated with favorable patient outcome.

The PD method studies have demonstrated good reliabilities using intraclass correlations, which have averaged in the .7 to .9 range for each of the plan components: goals, obstructions, tests, and insights. For example, in
five cases Rosenberg, Silberschatz, Curtis, Sampson, and Weiss (1986) reported the correlations among the reliability judges using the mean intraclass correlation coefficients across the five cases as follows: Goals, .90; obstacles, .86; tests, .78; insights, .90. The average coefficients across these cases between the formulation and reliability teams were: goals .85; obstacles, .81; tests, .81; and insights, .91.

Several problems were inherent in these reliability findings using the original procedures. More recent research has been conducted so that following the formulation team members' creation of their item lists, the lists are compiled into master lists, with each judge's contributions randomly and anonymously distributed within each component. The master lists are then returned to the eight formulation team judges who then independently rate all items on a five point Likert scale for their relevance to the case. Both the PD and CCRT currently report two figures for the agreement among judges. They report the intraclass correlation coefficient for the estimated reliability of the typical judge, and the reliability of the mean of the judges' ratings which is coefficient alpha. For example (Perry, Luborsky, Silberschatz, & Popp, 1989), in a study using eight judges, found intraclass correlation coefficients from .445 (goals) to .561 (insights), and coefficient alphas ranging from .865 (goals) to .911 (insights). Because all subsequent data analyses utilized the mean of the judges' ratings, coefficient alpha was selected as the appropriate reliability figure.

Both the CCRT and the PD demonstrate their usefulness as a basic research tool and as a guide for treatment. Both provide a specified format with instructions for guiding interference. Both demonstrate reliability through greater similarity of matched pairs of formulations compared to
mismatched pairs, and interjudge agreement. Close inspection of these two methods also reveals commonalities in their basic categories. They both have similar initial components: wishes and needs, intentions and goals. Both methods also list countervailing or antithetical ideas that often inhibit the fulfillment of the wishes: responses from other, and obstructions. Both methods emphasize conflict, especially for impulse versus executive functions. Both methods describe some results from the interaction of the first two elements of conflict. This resultant is described as responses from the self in CCRT, and tests in PD. Here the methods diverge. The CCRT focuses partly on the interpersonal consequences of conflict in reality or fantasy while the PD method has a particular relevance for assessing patient-therapist interactions within therapy. The PD method focuses on these in therapy while the CCRT focuses on the relationship patterns in or out of the treatment situation (Luborsky, 1984; Weiss et al., 1986).

Additionally, each method offers certain elements that are not found as clearly in the other. The PD has several particular assets. It integrates the patient's presenting problems and goals, the role that the therapist plays in helping the patient attain therapeutic goals, and potential obstacles to a positive therapy outcome. The plan concept provides a link between therapist behaviors and the specific problems, needs, and goals of the patient. Formulation of the patient's plan yields case-specific predictions about the way a patient is likely to work in therapy and specifies how a therapist's interventions may help the patient's progress toward achieving the treatment goals. The PD research indicates that the plans can be inferred with high level of interjudge reliability. The plan concept also has been shown to have predictive validity in that it correctly specifies how a patient
will work in therapy and respond to the therapist’s interventions. Research has shown that trained clinicians can use a plan formulation and make reliable judgments concerning the suitability of therapist behaviors (Weiss, et al., 1986). These studies also indicated that patients show immediate progress following plan-compatible interventions while no progress follows plan-incompatible interventions. The plan diagnosis method thus provides a very promising approach to psychotherapy research with strong statistical support for its reliability. A weakness of the PD lies in the fact that most of its research has been conducted on one long-term therapy case (N=1), with later studies using at most three subjects. The significance of their findings is therefore limited by the small size and lack of diversity of their samples. This limits the generalizability of their results to the population at large. To its credit, the CCRT method has been applied and studied on hundreds of long-term patients. Therefore, it is difficult to compare reliability results between the CCRT and the PD given this extreme difference in sample sizes.

Many other differences make comparison of results difficult. Namely, the CCRT separates largely conscious from unconscious conflicts and notes their intensity. The PD method notes insights that would be valuable for the patient to develop and tests that the patient is likely to enact during treatment, thereby describing elements of conflict that focus on the therapy process and its attempt to foster dynamic change. The CCRT has a number of other assets as a relationship pattern measure that the PD does not provide. First, it is designed for maximum simplicity. Given an interview transcript with the relationship episodes noted, the formulation time required for each judge is only about one to three hours per session. In its unscored clinical
form it takes even less time and can be used as part of clinical practice, since its categories arise naturally out of the relationship episodes in psychotherapy sessions. In addition, for research purposes, a set of standard categories is available to simplify the estimation of reliability. It has appended subscales that make explicit distinctions between conscious and unconscious conflicts so that the reader knows at what level of inference the formulation is pitched. Only the CCRT demonstrates reliability through nomothetic scale scores derived from rating independent formulations of same cases; however, as will be noted later, little attention has been paid to the content validity of these nomothetic scales. Only the CCRT has shown reliability in short-term treatments, and only CCRT shows statistical sensitivity to long-term change.

In conclusion, the evidence provided in this section represent the beginnings of the goal of substantiating validity. However the findings and conclusions of Luborsky research are subject to the inherent limitations of all correlational research. It is not possible, as it would be in multiple regression or analysis of variance research, to determine the direction of relationships or the factors for this relationship clearly. One can only speculate as to the nature or direction of the relationship. In correlational research, it is always possible that an alternative hypothesis or third variable accounts for the relationship between the two factors being studied. Yet, these results provide hints and direction for future research.

Other Instrumentation Used to Measure Curative Factors

Given that the development of measures is Luborsky's major contribution to the field of research, the specifics of his measures will now be reviewed. A brief description of their development and utility will be
discussed. However, these are provided to facilitate the discussion of curative factors below and are not intended to be exhaustive analysis of the properties as found in the discussion of the CCRT above.

**CCRT**

The first instrument, the CCRT method, has already been described in detail. As a measure of transference, it is a significant improvement over the questionnaire approach, usually in the form of the Q-sort method commonly used in the field (Luborsky, Barber, Binder et al., 1993). These measures suffer from questionable validity in that they may not measure the same construct as measured by the clinically inferred transference pattern. Accordingly, measures of transference based on psychotherapy sessions such as the CCRT need to be compared directly with measures of transference derived from questionnaires to determine the correlation between the two. The CCRT has not proven that it measures transference. Rather, indications are that it helps to formulate a central repetitive theme from verbalized content. This is step in the right direction; however, many questions remain to be answered about the validity and reliability of the measure and its applications.

Furthermore, the CCRT method relies on the frequency of components in the REs. It is not clear whether frequency is the most valid indication of the fundamental relationship theme. It is assumed that what clients talk about with the greatest frequency is inherently the most salient feature of their relationship theme. Luborsky's use of frequency assumes that his narratives contain a schema or an embedded CCRT identified by specific statements. Over the years since this was first assumed, Luborsky has offered many findings to support this assumption. He has found that narratives have
relationship components that are consistent or pervasive across the
narrative. These components have a lasting quality, and the general
relationship pattern identified by relationship episodes appears to be similar
in dreams and in waking narratives. The pattern in the CCRT appears both in
narratives that are told outside of therapy as well as those told in the therapy,
and there is a parallel in the CCRT from narratives told about the therapist as
well as from narratives told about other people (Luborsky, Barber, & Diguer,

Helping Alliance Measures: HAQ/HAcS/HAr

Luborsky began in 1975 to operationalize the definition of therapeutic
alliance. He began to quantify the concept of alliance through a system of
counting signs. In 1983 Luborsky developed the Helping Alliance counting
sings (HAcS) method. The counting signs (HAcS) method entails counting
literal or almost literal signs of alliance within a transcript. This measure
consists of seven subtypes of two broad types of helping alliances described
later as type one and type two. A judge reviews a transcript to pull out patient
statements or signs which fit with each helping alliance subtype. Each
patient's score is the sum of the number of signs weighted by the intensity
ratings. The reliability of this measure is difficult to determine given that
each judge must first locate a statement and score it. This compromises the
scoring agreement when different statements are located between judges.

Luborsky developed the Helping Alliance rating (HAr) in 1982. The
HAr method is a global rating method which requires more inference from
the rater than the HAcS method. This method uses the same categories as the
HAcS and these are given an overall rating by a judge from an entire session
transcript to infer the degree to which the patient experiences a helping
alliance. When experienced clinicians were used, interjudge correlations were obtained in the .8 to .9 range (Mintz, Luborsky, Christoph, 1989).

Luborsky also developed the helping alliance questionnaire (HAQ) in 1985. This is completed by the patient and the therapist after the third session and at the six-month point. The questionnaire consists of 12 items that estimate the degree to which the respondent experiences a therapeutic relationship as helpful. Items are rated on likert scales from one to six and summed to produce a total score. Luborsky found this measure to have an internal consistency reliability for the patient version of .80 and for the therapist version of .88. Validity information was given in terms of its ability to predict outcome (Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988).

Each method assesses approximately the same 10 categories. The reliability of each of these three measures is satisfactory. Morgan, Luborsky, Crits-Christoph, Curtis, and Solomon (1982) report internal reliability coefficient alphas of the helping alliance scales of .96 and .94. The measures also show some predictive validity in their correlations with various outcomes of psychotherapy. Another sign of the validity of these measures is that they correlate with other independent measures in meaningful ways. One interesting example is the correlation of basic similarities between the therapist and client with helping alliance.

Luborsky also developed the Therapist Facilitative Behaviors Rating Scale (TFBr) consisting of ten items that parallel the items on the Helping Alliance Rating Scale. The Therapist Facilitating Behaviors counting sign (TFBcs) method consists of items similar to those in the TFBr, but the judge scores and counts all signs of each item of the therapist in the transcript rather than providing only a global rating of their intensity. The interjudge
reliability correlations for the TFBcs ranged from .77 to .88. Internal consistency for the sum of 10 items was .94. Internal reliability coefficient alphas for the two measures were found to be .86 and .92 (Morgan et al., 1982)

Health-Sickness Rating Scale (HSRS)

While working at the Menninger Foundation, Luborsky (1969) was part of a group of clinician-researchers who developed the Health-Sickness Rating Scale (HSRS). The group assembled 30 psychological health-sickness-ranked sample case descriptions from which they abstracted the seven specific criteria of mental health-sickness. This final form of the HSRS consists of eight graphic 100 point scale. A global scale and seven specific criterion scales are used: the need to be protected or supported versus the ability to function autonomously, the seriousness of the symptoms, subjective discomfort and distress, effect on the environment, utilization of abilities, interpersonal relationships, and breadth and depth of interests. In rating these scales the rater first considers where in the rank of the 30 sample cases the person under consideration falls, then the rater makes a global rating and seven specific criterion ratings (Luborsky, Diguer et al., 1993). The HSRS is easy to learn and to use, offers good agreement among judges, and provides separate subscales for the seven criteria of psychological health or sickness. The scale can be applied to case records by independent judges, not just by the therapists. The HSRS is a useful addition to diagnosis. Of interest, Robert Spitzer (Endicott, Spitzer, Fleiss, & Cohen, 1976) was granted permission by Luborsky to adapt the HSRS. He developed the GAS (GAF) currently used in the DSM IV (American Psychiatric Association, 1994).

The HSRS has the most research evidence on its correlates of any health sickness rating scale. Luborsky found that the HSRS measure is most
highly correlated with other observer-rated measures of adequacy of psychological functioning. A factor analysis of the measure revealed that the most highly loaded factors were quality of interpersonal relationships (.93), level of psychosexual development (.89), anxiety tolerance (.82) and ego strength (.79). When used as an outcome measure its first factor is Change, which accounts for 74% of the variance. In this change factor the components were global improvement, increase in ego strength, and transference resolution. All of these findings support its use with the CCRT to measure dynamic curative factors (Luborsky, Diguer et al., 1993).

Addiction Severity Index (ASI)

Luborsky is one of few dynamic psychotherapy researchers to study treatment with drug-addicted individuals. To facilitate this work Luborsky has developed several specific measures. Luborsky developed the Addiction Severity Index, which is a 40 minute clinical research interview designed to assess the severity of problems in seven areas of functioning commonly associated with treatment problems in alcohol and drug abuse patients: medical, legal, alcohol abuse, drug abuse, employment, family/social, and psychological. In each of these areas, both objective and subjective questions are asked to measure the number, extent, and duration of problem symptoms in the patient's lifetime and in the past 30 days. Sets of objective and subjective items from each of the problem areas are standardized and summed to produce composite or factor scores that provide reliable and valid general estimates of problem severity at each evaluation point (McLellan, Luborsky, Cacciola et al., 1985).

These measures have been described in detail to facilitate the discussion of their use in research on the process and outcome of dynamic
psychotherapy. This paper will now present and evaluate literature that addresses Luborsky's research on theoretical propositions of psychodynamic psychotherapy. Several major theoretical propositions of curative factors and the research support provided by Luborsky's CCRT method for them will now be discussed. It has been Luborsky's goal to provide evidence on the efficacy of key curative domains commonly supported by clinical wisdom: Therapeutic alliance, Transference themes, Transference interpretations, Self-understanding, and Psychiatric severity (Luborsky, 1976).

Luborsky's Curative Factors and the Results of Research

Therapeutic Alliance

Luborsky has sought to find scientific evidence to substantiate the proposition that a therapeutic alliance must develop if the patient is to benefit from dynamic psychotherapy. Within the field of dynamic therapy the concept of alliance has been fiercely debated (Piper, Joyce, McCallum, & Azim, 1993). There are those in the field who hold that all feelings towards one's therapist stem from unresolved prior experiences or transference. To these theorists the concept of alliance waters down the thrust of analytic work which is the interpretation of transference. Others within dynamic theory allow for both transference and other aspects of the therapist-client relationship. These theorists argue that the alliance and transference are distinct constructs. Luborsky has worked on alliance as an independent factor within dynamic psychotherapy to determine its impact on outcome in addition to the transference factor discussed in later sections of this paper (Greenberg & Mitchell, 1983).
In the past two decades, research results indicate that variables common to all forms of psychotherapy may be responsible for a large part of a client's improvement (Luborsky, 1976; Garfield, 1990; Orlinsky & Howard, 1986). This has sparked broad research on the concept of alliance as a basic factor in various forms of therapy. One of the earliest refinements of the concept of alliance was developed by Luborsky (1976). In fact, it was through Luborsky's early work on alliance that he developed the CCRT method. Luborsky suggested that alliance is a dynamic rather than a static entity, and is therefore responsive to the changing demands of different phases of therapy. Luborsky identified two different, sequential aspects of the client-therapist relationship. Type one was described as a therapeutic alliance based on the patient's experiencing the therapist as supportive and helpful. In this type, the patient is the recipient of the therapist's support. Type two alliance is based on a sense of working together in a joint effort toward treatment goals. Luborsky found that the strength of Type one and Type two alliance were associated with the likelihood of improvement in psychodynamic therapy. In a review of eight studies of alliance, Luborsky, Crits-Christoph, Mintz, and Auerbach (1988) reported that all found alliance to significantly predict outcome with a mean correlation of $r=.5$. Orlinsky and Howard (1986) found similar results in their review.

Luborsky, Crits-Christoph, Alexander, Margolis and Cohen (1983) hypothesized that early positive measures of alliance have a strong correlation with outcome. To explore this, he applied the HAc and the HAr measures to 20 patients, the 10 most and the 10 least improved among the 73 in the Penn Project. Improvements were based on rated benefits and residual gains which are two moderately highly correlated composite outcome
measures. Luborsky looked at two early and two late psychotherapy sessions. All patients had at least 25 sessions. Luborsky found using his HAcs that early positive signs of helping alliance correlated .57 (p<.01) with rated benefits, and .59 (p<.01) with change in the first target complaint. A trend among Luborsky's findings suggests that when the helping alliance is mainly positive initially, it significantly predicts positive outcomes. When the helping alliance is mainly negative initially, it does not predict outcomes, meaning the outcomes may be positive or negative. This finding implies that positive helping alliances are predictive while negative ones are not. Luborsky found that in more improved patients positive alliance increased while negative scores remained the same. However, for less improved patients the negative alliance increases and positive alliance changes little (Luborsky, Crits-Christoph, Alexander et al., 1983).

In this study, there may have been some overlap between the early helping alliance measures and some aspects of the outcome measures since in both the patient expressed his or her view about whether he or she is being helped. If so, this would confound the relationship between the two. However, efforts to partial out this overlap did not result in changes in their correlations. Luborsky's early research suggests that the client's initial response to the therapist might well be dominated by a judgment concerning whether the helper seems caring, sensitive, sympathetic, and helpful (i.e., helping alliance type one). The influence of these initial impressions are augmented by the more cognitive evaluative or collaborative components of the alliance and the capacity to form a reciprocal relationship (Luborsky, McLellan et al., 1985).
Current findings support Luborsky's contention that there might be two important alliance phases (Crits-Christoph, Barber & Kurcias, 1993). The first is the initial development of the alliance in the first five sessions. The second occurs as the therapist begins to challenge old neurotic patterns. The client may experience this as a reduction of sympathy which could weaken the alliance. This deterioration must be repaired if therapy is to continue successfully. These recent findings echo Luborsky's early claim that alliance is dynamic and changes with therapy, and these phases correspond with Luborsky's type one and type two alliance factors.

Hovarth and Symonds (1991) used meta-analytic techniques to synthesize the quantitative research that links the relationship between alliance and outcome. On the basis of 24 studies they found an average effect size of $r = .26$. This means that alliance can pick up 26% of the difference in therapy outcome. Across all of Luborsky's instruments, the alliance scales completed by the therapist have provided significantly poorer predictions of all types of outcomes than those completed by the client or by an observer (Hovarth & Luborsky, 1993). For example, in their study of 20 Penn Project patients, Morgan et al. (1982) found that the TFBr was correlated with the helping alliance ratings scale; but not with treatment outcome, treatment stage or treatment outcome by stage interactions. This could be due to the fact that the therapist's scales are direct rewording of client instruments. What would be more useful would be a scale which measures how therapists determine the client's experience of positive alliance. Operationalized measures need to be developed to explore a more specific therapist factor and its impact on alliance and outcome.
It seems likely that both clients' and therapists' personal histories have some influence on the capacity to develop a good therapeutic alliance, and that the fit or blend between these impacts alliance formation. Luborsky found that basic background similarities between patient and therapist, such as in age and religious activity, attained high correlations with the helping alliance measures. A sum of ten similarities correlated r=.60 (p<.01) with early positive helping alliance counting signs (Luborsky,Crits-Christoph,Alexander et al., 1983).

In the Penn project patients whose therapists had chosen to work with them had more favorable outcomes than patients assigned to therapists randomly. Random assignment of patients to therapists was also negatively correlated with helping alliance, probably serving as an impediment to its formation. Alexander, Barber, Luborsky, Crits-Christoph, and Auerbach (1993) studied whether giving the patients choice of their therapist would facilitate the formation of the helping alliance. Patients were seen for two sessions by two different therapists and then given a choice of therapists. The therapists were paired so that the sequence for therapists alternated between pairs of patients. The authors found that of the 44 patients 75% chose their second therapist. Each patient was given the HAQ for both therapists. The helpfulness factor on the HAQ was found to be significant for the selected therapist (F=8.22, df=1,42, p=0.006). No evidence was found that patients choose their therapist on the basis of demographic similarities, or on the basis of sequence. The HAQ was also given to the therapists and a significant correlation was found between the patient and the therapists' perception of helpfulness in the alliance (r=.29 p<0.05).
Diagnostic criteria has also been explored as a variable in the formation of helping alliance and its impact on outcome. Luborsky used data from the VA-Penn project to study alliance indicators with patients seeking treatment for drug abuse (Gerstley et al., 1989). Patients were selected from this population who met the criteria for Antisocial Personality Disorder (DSM-III) to determine if differences in their ability to form a positive alliance with the therapist would provide a possible marker of prognosis. Of the 110, 48 subjects met the criteria for antisocial personality. The subjects, their therapists, and their drug counselors were given the HAQ and the Addiction Severity Index. The baseline ASI measures were partialled out to correct for intersubject differences in pretreatment status. Neither the counselor's nor the patients' assessment of the counseling relationship was significantly related to overall outcome. On the other hand, a positive assessment of the therapeutic alliance by the patient was significantly correlated with improvement in drug usage ($r=.4., p<.05$) and employment status ($r=.5., p<.1$). Patients in this group did show poorer outcomes than patients with other diagnoses. However, this study points to the need to distinguish the role of patient's ability to form a positive relationship from other features of the antisocial diagnosis. One large flaw of this study was that it did not measure or control for differences between therapists and their effect on alliance formation or outcome.

In 1985, Luborsky began to study the therapist differences to fill this gap with much needed research. In the VA-Penn project significant differences were found between therapists in terms of patient outcome. One therapist showed an average improvement rate of more than 100% across seven outcome measures in 14 randomly assigned patients. Another
psychotherapist with comparable training and experience showed an average change rate of -4% across the same measures. Luborsky, Crits-Christoph, McLellan et al. (1986) reported the correlations between initial level and outcome for each of the six therapists in the VA-Penn project as follows: -.24, -.70, -.52, .03, .59, .29. One of many different variable leading to therapist differences was found to be the degree to which therapists adhered to the manual for their therapies (either SE or Cognitive behavioral) (Luborsky, McLellan, Woody, et al, 1985) This study also measured HAQ and ASI and found significant correlations between patients' helping alliance scores and their seven month ASI outcome scores. The correlations ranged from .51 to .72 and were all significant at the .01 level. The authors suggest that helping alliance, adherence to the manual, and therapist skill may all be part of a single constellation of therapist personality qualities. The authors pulled out three patients from each of nine therapist caseloads and found the result of chi-squared analyses indicated a significant (p<.001) relation between receiving a high proportion of intended therapist qualities as outlined in the manual and having better posttreatment outcomes.

To explore this further, Luborsky developed the TFBr and the TFBcs described above (Luborsky & Crits-Christoph, 1990). The authors found considerable evidence of correlations between therapist facilitative behaviors and helping alliance. Early HAr correlated .85 (p<.001) with early TFBr, late HAr correlated .76 (p<.001) with late TFBr. However, therapist facilitating behaviors measures were not found to be predictive of outcomes as were the helping alliance measure.

In summary, Luborsky and his colleagues have found significant indications of a relationship between helping alliance and outcome.
Luborsky has suggested that there are two phases of helping alliance which develop as therapy progresses. Further research is needed to sort out the many variables which contribute to therapeutic alliance development. Besides the personal qualities of the patient, the client's perceptions of the therapist and the client's response to his or her perceptions seem to be important variables. This is hinted at by the fact that the client ratings of alliance instead of therapist ratings are the better predictor of alliance and outcome. Luborsky also examined therapist differences and found evidence that certain therapist qualities are instrumental in the formation of helping alliance. Thus the therapist's behavior and interactions with the client as perceived by the client are other possible influences on helping alliance and therapy outcome. Luborsky's work on helping alliance therefore provides evidence of a relationship between alliance and outcome as well as areas for further study.

Central Relationship Theme (Transference)

Luborsky has attempted to provide research support to the theoretical construct of transference (Fried, Crits-Christoph, & Luborsky, 1992). Luborsky has observed that the concept of transference is clearly an essential tenant in clinical wisdom being taught and used confidently in clinical practice. Unfortunately, each clinician's idiosyncratic method of conceptualizing and assessing the transference makes it difficult to study reliably. Luborsky developed his CCRT method as a potentially reliable process measure of transference, and a change process measure of its fluctuation during therapy. From an orthodox psychoanalytic point of view, the CCRT measures character transference.
As noted in the reliability section above, several studies using the CCRT scoring system have shown good interjudge correlations, indicating that the central relationship pattern can be reliably extracted from the transcript, that the main other person, the completeness, and the location of the narratives can also be reliably determined (Crits-Christoph, Cooper, & Luborsky, 1990). However, questions remain: (1) Are these measures tapping into the concept of transference? and (2) Are they valid measures of the theoretical construct which underlies them?

To provide evidence for the theoretical leap from the theoretical construct of transference to the CCRT, Luborsky, Mellon et al. (1985) attempted to show a correlation between nine of Freud's observations about transference and the methods and findings of the CCRT. The authors discussed nine observations taken from Freud's (1912) article on transference and the corresponding evidence in CCRT findings. In this article in particular, Luborsky and the other authors relied largely on anecdotal evidence and intuitive conceptual connections. However, it does appear the CCRT is a starting place with which to begin to quantify the propositions of transference characteristics. The link between Freud's theory of transference and the CCRT found in this and other studies are summarized below:

The first observation was that each patient has one transference pattern, or several such, and the pattern is specific for each patient (Freud, 1912). Several studies using subjects from the Penn project have found evidence of one main central relationship theme with secondary ones occurring much less frequently. Luborsky, Mellon et al. (1985) provided evidence of several case studies in which each verbalized a unique central
relationship pattern as scored by the CCRT even when using standard categories. Luborsky reported that judgments of similarities by paired comparisons of central themes revealed insignificant correlations indicating the relative uniqueness between them.

The second observation was that transference content applies to the conduct of the patient's erotic life, or love relationships, in the broad sense (Freud, 1912). Luborsky, Mellon et al. (1985) reviewed specific RE's for 20 patients from the Penn project. They found that although some of relationship episodes were erotic many subject's REs were clearly not erotic. The authors speculate that these non-erotic REs may have been had unconscious erotic connections, although they offered no evidence for this speculation.

Freud's next observation was that a portion of the libidinal impulses in the transference are in awareness and a portion are kept out of awareness (Freud, 1912). Luborsky holds that this is also seen in his CCRT method in that patients are often unaware of the links between their relationship episodes or their central relationship pattern. They may see some of the connections but often are not fully aware of their central theme or how they repeat it. Luborsky, Crits-Christoph, Friedman, Mark, and Schaffler (1991) studied two subjects in long term therapy to explore three key observations of Freud's therapy using the CCRT method. They found the patterns were distinctly different, and they found that portions of the CCRT were out of awareness. The portions that are out of awareness were not easily made conscious during therapy. Specifically, they found that the lower the pervasiveness of a component the more resistant it was to being brought into consciousness.
Another of Freud's observations was that the pattern is constantly repeated, constantly reprinted afresh in the course of the person's life (Freud, 1912). Several studies have found that the CCRT is fairly constant from early to late sessions. Luborsky, Mellon et al. (1985) compared CCRTs scored from sessions early in treatment with the same patient's CCRT scored from sessions late in treatment, approximately one year later. The average similarity on a likert scale from one to seven (1=not similar, 7= completely identical) of early and late CCRTs for each patient was 5.7. This is in comparison to a mean similarity of 4.0 for early CCRT of each patient paired with late CCRT of different patients.

Freud claimed that transference is not entirely insusceptible to change, although the pattern has consistency, it still can change (Freud, 1912). Luborsky, Mellon et al. (1985) found that the more improved patients in the Penn project exhibited change in their CCRTs from early to late sessions. They also found that there was a deepening involvement in the relationship with the therapist. It is interesting to note that they found that the wish component changed less than responses for self and others, the responses tended to changed from negative to positive, and they showed a greater sense of mastery of the relationship problems in the CCRT. These authors cite examples from transcripts of more and less improved patients but do not provide quantitative evidence. The authors speculate that it is not necessary for wishes (or basic drives) to change in order for patient to improve. Luborsky, Crits-Christoph, Friedman et al. (1991) studied two subjects in long term therapy. Their finding about changes in the CCRT furthers those found by Crits-Christoph and Luborsky (1990) in that wishes changed relatively less than the responses of others and the responses of self.
They also found that the amount of change in the CCRT was also related to the degree of the patient's benefit from therapy.

Freud also observed that the therapist becomes attached to one of the stereotype plates so that the relationship with the therapist begins to reflect a similar pattern (Freud, 1912). This observation has been difficult to substantiate given the typically low number of REs that deal directly with the patient's relationship with the therapist. Fried et al. (1992) found that 35 subjects from the Penn Project talked about experiences with others much more often than with their therapist. They found that five or more relationship episodes were necessary to begin to see the characteristics of transference towards the therapist. As noted previously, at least 10 episodes are necessary to show any significant effect size. Yet, the authors found that there was a moderate match between RE's with others and with the therapists. The authors concluded that this provided support for Freud's (1912) "stereotype plate". However, it could have been with insufficient RE's and therefore insufficient statistical power to show any real difference. Therefore, although the REs were identified with reliability coefficients ranging from .55 to .75, they needed more REs to draw any conclusions. This study did point out the need for the CCRT to include unspoken behaviors, and therapist countertransference reactions to get a more complete picture of transference.

Freud also observed that the transference pattern is derived from the combined operation of the client's innate disposition and the influences brought to bear on him or her during early years of development. Luborsky, Mellon et al. (1985) compared CCRTs scored from REs involving a memory of an interaction with early parental figures versus the overall CCRT scored
from all other REs. A high degree of similarity was evident with mean rating of similarity on a seven point scale of 6.4 for early memory of parent CCRTs paired with the same patient's overall CCRT. When the CCRT for early memory was matched with the overall CCRTs from other patients, less similarity was evident in a mean similarity of only 3.6. This proposition is especially difficult to study because it is impossible at this point in time to observe actual early parental relationships. However, Luborsky's work on transference does not focus on proving the origins of transference (i.e., early childhood experiences). Rather, his main goal has been to provide evidence that the client's relationship pattern towards the therapist is similar to his relational pattern towards others and himself.

Finally, Freud observed that transference is not only active in psychotherapy. It is active in relationships outside of psychotherapy as well. Luborsky developed the Relationship Anecdotes Paradigms (RAP) tests to interview patients about incidents with people in situations apart from therapy. Luborsky, Mellon et al. (1985) found that the CCRT formation based on the sessions was usually much like the CCRT formulation based on the RAP narratives. Luborsky, Crits-Christoph, Friedman et al. (1991) studied two subjects in long term therapy. With both subjects they found that the CCRT pattern was pervasive across many types of relationships both within and outside of therapy.

One potential problem with research on transference using the CCRT is that patients may more readily enact than discuss the transference. Since the CCRT is based on transcripts rather than video tapes, a wealth of non-verbal and behavioral information is not available to be scored into the CCRT. Therefore, the CCRT may pick up only a certain form of transference which is
likely to be verbalized. Thus the underlying construct of transference is limited by this method of measurement.

A modification of the CCRT called the Quantitative Assessment of Interpersonal Themes (QUAINT) was developed as a methodological experiment to find a better method to quantify transference patterns (Crits-Christoph, Demorest, & Connolly, 1990). In the Quaint, REs are presented to judges in random order to prevent biases in an entire transcript. Every judge rates each component on a five point scale for each episode on the extent to which that component is present in an episode. Whether the randomization of episodes leads to a loss of information or validity is not yet known. Using the Quaint method, Crits-Christoph, Demorest, and Connolly (1990) studied 31 session transcripts from one male patient. Employing Pearson Product Moment correlation, they examined the themes of REs for different people and compared these with themes towards the therapist. The authors hypothesized that the profile of themes with the therapist might have the same shape as a profile with another person, but that these ratings might be lower. Each possible pairwise comparison of profiles were performed creating a matrix of correlations. A principal components analysis with a varimax rotation was employed. This method was not used to interpret the meaning of factors but to pull out the main patterns or shape of these correlations. This is an experimental use of this methodology and there is little scientific support for its use in this manner. Nevertheless, the authors report that they found that the pattern for the first half of therapy accurately fit the therapist behaviors and correlated with another helping person in the patient's life. Yet, during the second half of treatment the responses to the therapist took on correlations with other significant people
in the patient's life, much of which did not match the therapists actual behaviors. The authors concluded that this may be the beginning of quantifying transference. From these results the authors speculated that clients begin to relate to their therapist in latter stages of therapy using a relational pattern which approximated other key people—both positive and negative in the patient's life.

In summary, Luborsky has attempted to link his CCRT method to Freud's theory of transference in order to provide evidence that the CCRT is a valid measure of the construct of transference. It is necessary to first demonstrate quantifiably that the measure captures the construct behind it before one can use it with confidence. Luborsky's work in this area remains weak although recent developments of the QUAINT method hold out hope for more specific quantification. In general, patient REs do seem to be unique to the individual, and patterns do develop in their responses to others and to their therapists. It does seem possible to correctly match REs from a certain individual over the course of their therapy. This suggests that Freud's concept of a stereotype plate may exists in patients verbalizations. However, it is a major weakness of the CCRT that transference is measured solely on verbalizations without the benefit of non-verbal expressions. When dealing with a concept coming from the unconscious the exclusion of non-verbal or behavioral components does not make sense. However, given the ease and relative reliability of measuring verbalization it alone has been used in the CCRT. Luborsky has not, therefore, provided sufficient evidence that the CCRT measures the complete construct of transference. With this weakness in mind, this paper will now review Luborsky's application of the CCRT as a measure of accuracy.
of interpretations, the change in psychiatric severity and self-understanding.

Transference Interpretations

A major tenant of dynamic clinical wisdom is that accurate interpretations of the relationship pattern with the therapist, or transference interpretations, will result in beneficial outcomes (Crits-Christoph, Cooper, & Luborsky, 1988). Because transference interpretations have been regarded as a hallmark of the technique of dynamic therapy, both the term transference and interpretation have received considerable attention in the literature. These terms have assumed a variety of meanings (Piper et al. 1993). The variety seems to reflect the evolution of psychoanalytic theory. For example, from the topographical point of view, an interpretation makes the unconscious conscious. From the dynamic point of view, an interpretation makes reference to the components of intrapsychic conflict. It is very difficult for research to include both of these concepts despite the fact that they are routinely combined in clinical practice.

Throughout Luborsky's work, he employed a dynamic definition of an interpretation (Crits-Christoph, Cooper, & Luborsky, 1988). In the articles reviewed in this paper, a response was considered an interpretation if it met at least one of the following two criteria: the therapist explained possible reasons for a patient's thoughts, feelings, or behavior, and/or the therapist alluded to similarities between the patient's present circumstances and other life experiences. From this, Luborsky defined accuracy of interpretations as the degree of convergence between the therapist's interpretations and the essence of the patient's main core conflictual relationship theme.
Early on, Auerbach and Luborsky (1968) found that the degree of convergence between the patient's main communications and the interpretation could be judged reliably. This study found a mean correlation between client's main communications and therapists' interpretations of about .6. This study was flawed in that the patient's main communication was left to an impressionistic assessment rather than a systematic formulation. Luborsky improved his effort by operationally defining the essence of the patient's main communications, using his CCRT formulations. In Luborsky and Crits-Christoph (1989), Luborsky examined the immediate context of transference interpretations with three psychoanalytic patients. Results indicated that each patient responded in his or her own consistent way to transference interpretations. One patient showed increased resistance, while the other two showed a positive response; however, this study did not explore the relative accuracy of the transference interpretations which may have accounted for patient differences.

Luborsky's CCRT formulation was used in the study by Crits-Christoph, Cooper, and Luborsky (1988) on 43 subjects drawn from the Penn Project in a study designed to measure the impact of accuracy. Two composite outcome variables were constructed in this study. One was a residual gain score derived from adjustment ratings provided by the patient and a clinical observer, and the other was a rater-benefits score based on ratings by the patient and the therapist. These two outcome scores were found to be highly correlated. Additionally, Luborsky's Helping Alliance counting signs method was used to measure positive or negative therapeutic alliance and its impact on accuracy and outcome. The authors found a significant direct correlation of .44, p<.01 between accuracy on the wish plus response from other scales.
which included responses of therapist) and treatment outcome. In this study, the authors combined wish and response from others because they found these two to have significant overlap. This study extended the finding of Bush and Gassner (1986) who studied the immediate impact of accuracy using the PD method with three patients. It should be noted that Luborsky's study used a much larger sample and a more diverse patient group.

One other finding of interest in this study was that accuracy on the response of self component of the CCRT was not related to outcome (Crits-Christoph, Cooper, & Luborsky, 1988). One possible implication of this would be that limiting the focus of therapy to responses of the self, such as feeling states, may offer limited benefits in terms of therapeutic outcome. In general, Luborsky did find that the components differ in the degree to which they change and the degree to which they are present within a narrative. Luborsky, Barber, and Diguer (1992) noted that in the Penn Project sample the most commonly expressed component was the wish component and these included wishes to be close and accepted, to be loved and understood, to assert self, and to be independent. The most frequent responses from others were rejecting and opposing, and controlling. The most frequent responses of self were disappointment, depression, rejection, and helplessness. Not surprisingly, most of the responses from others and from self were negative. Yet, it was indicated by Crits-Christoph, Cooper, and Luborsky (1988) above that limiting the focus of therapy to the negative responses of self, which are typically affective responses, may not be correlated with improved outcome. The authors suggest that it may be that responses of the self are closer to awareness than the wishes and expected responses from others. Or it may be that these response components capture the main aspects of relationship
conflicts which lead to symptoms which are seen in responses of self. Yet, it could also be that the CCRT does not accurately formulate responses of self to allow for accurate interpretations.

This study also examined whether accurate interpretations had greater impact in the context of a positive therapeutic alliance, but no evidence for this appealing proposition was found (Crits-Christoph, Cooper & Luborsky, 1988). It should be noted that the subjects from the Penn Project had relatively positive alliance scores. Furthermore, as previously noted early drop outs were not counted in these results. Early drop-outs may have provided more negative alliance scores. Their exclusion has lead to a restricted range of alliance scores and may have prevented a truly meaningful interaction between alliance and interpretive accuracy from being detected.

Schuller, Crits-Christoph, and Connolly (1991) studied patient responses to accuracy as determined by convergence with the CCRT. These authors also developed a 19 item scale to measure resistance to interpretations. In their study of twenty patients, these authors found that interpretations accurate on the wish component were followed by increases in a vague-doubting form of resistance, whereas interpretations accurate on the response of self component led to decreases in the vague doubting subscale. The authors speculate that this type of resistance may in fact represent a form of working through in that interpretation of the wish component may be felt as more ego-dystonic than interpretations of affective states or responses from self. This interpretation would seem to confirm the conclusion stated above that wishes and responses of others may be antecedent to responses of self, and more out
of the client's awareness. These components, therefore, seems to require working-through for positive therapy outcome.

One should note that in almost all the studies reported, the overall accuracy of interpretation ratings were very low indicating that most therapists do not respond to patients main communications as measured by the CCRT. On a scale ranging from one to four, the mean ratings of accuracy ranged from 1.49 to 1.81 with one indicating no congruence and four indicating high congruence. Although the authors state that these ratings allow enough variability for relationships to emerge, the range of accuracy appears very low in terms of providing a meaningful criterion of accuracy. Additionally, these low accuracy ratings indicate that most therapists in the study may need assistance in making accurate interpretations. This is significant in light of the fact that Crits-Christoph, Barber, and Kurcias (1993) found in a study with 33 patients that the extent to which therapists accurately addressed the CCRT in their interpretations predicted the development of therapeutic alliance. The study found that accurate CCRT interpretations were correlated the maintenance of good alliances or improvements in bad alliances.

In summary, Luborsky's work on accuracy of interpretations indicates that in general most therapists do not interpret accurately even with a formalized treatment plan. Despite this fact, most patients in the studies seem to improve to varying degrees and therapeutic alliance was aided by accurate interpretations. Therefore, it appears that accurate interpretations facilitate the maintenance of good alliance, but good alliance does not necessarily insure accurate interpretations. Another possible implication of these findings could be that the client's perception of interpretations may be more
crucial than whether or not they converge with a theory. It may be that interpretations that are perceived as accurate by the patient are perceived as helpful, and therefore contribute to the formation of the helping alliance and positive therapy outcome. Therefore, the interpretation that is accepted by the patient is more likely to have some positive therapeutic impact, not necessarily the one that is dictated by the CCRT. The factors that go into patient perceptions of CCRT interpretations require definition and analysis. Another finding of interest is that interpretations on responses of self are not as correlated with beneficial outcomes as the wish and responses of others. More research is needed in this arena; yet, it may point to a needed change in training of dynamic therapy to focus more on wishes than feelings about self.

Change in Transference and Psychiatric Severity

Clinical wisdom holds that improved patients will show a greater change in their transference patterns than unimproved patients. In other words, it is thought that patients who are able to work through their transference will improve. A variety of definitions exist in the literature for changes in psychiatric severity; however, beginning with Freud (1912) the exploration of the patient's transferential reaction to the therapist has been valued as unique opportunity for insight and psychic change. Recognition of the importance of transference was originally made by Freud (1912) and later elaborated by Strachey (1934) who outlined a process in which transference interpretations are capable of reversing the patient's neurotic vicious circle. Because transference has been regarded as a particularly powerful technique many who have investigated have assumed that it would be possible to detect a direct relationship between changes in transference and changes in psychiatric severity (Orlinsky & Howard, 1986).
In their process and outcome model of psychotherapy, Orlinksy and Howard (1986) put forth several intervening variables which could confound the relationship between therapist interventions and changes in psychiatric severity. The variables included other events during the session, events after each session, events in the patient's life between sessions, time and maturation. Their review of the literature suggested that given these confounding variables, the detection of a strong direct relationship between transference interpretations and treatment outcome would be difficult.

With this in mind, Crits-Christoph and Luborsky (1990) postulated that a change in transference from early to late session would be correlated with a reduction in psychiatric severity, and therefore therapy outcome. Given that the focus of dynamic therapy is on maladaptive, repetitive, inappropriately applied relational patterns, Crits-Christoph and Luborsky (1990) propose that one index of change is the extent to which the maladaptive theme becomes less pervasive. Once again, the CCRT method provided an operationalized measure to begin to test this postulation scientifically.

In a study of eight patients, Luborsky, Mellon et al. (1985) hypothesized that changes in the CCRT from early to late in treatment should be related to independent measures of the outcome of treatment if changes in the CCRT signified a working through of transference. The study used the difference score between the early treatment pervasiveness of each CCRT component (i.e. the percentage of relationship episodes that contained the main wish, or negative or positive responses of self, or negative or positive responses of others) and the late treatment pervasiveness of the same CCRT components. Two independent outcome measures were selected as criteria, one from the patient's perspective-the Hopkins Symptom Checklist total score, and one
from the external clinical judge's perspective- the Health-Sickness-Rating Scale. Both measures were obtained at the beginning of treatment and at termination in the Penn Project. Change in pervasiveness of the main negative response to self was significantly correlated with change in HSRS $r = -.81$, $p < .05$, as was change on the main wish, $r = -.73$, $p < .05$. Change in the main positive response of other was significantly correlated with change on the Hopkins Symptom Checklist $r = -.79$, $p < .05$. The direction of all of these correlations was as expected-that is increases in the frequency of positive components and decreases in negative components of the CCRT were found to be associated with more favorable outcomes.

Crits-Christoph & Luborsky (1990) defined pervasiveness as the number of REs which contain the CCRT components divided by the total REs in the session. The authors obtained at least ten REs in both early and late therapy sessions. They then correlated any changes in the pervasiveness of the CCRT with the post treatment symptom checklist scores, partialling out the effects of pretreatment symptoms. They used Luborsky's Health-Sickness Rating Scale as a pretest and as an outcome measure. The authors computed several Pearson Product Moment correlations to find the degree of intercorrelation among the components (wish, negative and positive responses from other, negative and positive responses of self). They found that gains corrected for initial levels on the wish component were moderately correlated with corrected gains on the negative response of self scores ($r = .45$, $p < .01$). They also found that changes in positive responses from other were related to changes in positive responses of self ($r = .41$, $p < .05$). The authors found that changes from early to late were not uniform across all five components. Overall they found the most pervasiveness CCRT component was
the wish component. However, it did not change significantly. Wishes were in 66% in REs of early sessions and the same wishes were in 61% of the late session REs. The negative response from other decreased 12.2%, negative response of self decreased 18.9%, and positive response from other increased 10.1%.

It is important to note that only changes in negative responses from self were significantly correlated with change in the HSRS r= -.53, p<.01. Yet, as previously noted, accurate interpretations of responses from self component were not found to be correlated with outcome. The current results would indicate that responses from self must change in order for health sickness ratings to improve; but this change is not correlated with accuracy of interpretations on this component. The authors speculate, given that 65% of the patients in this study had improved overall outcome measures, the dynamic therapy may be curative in that it alters some patterns or components; but this may be inconsistent across components. The techniques required to facilitate these various changes remain unclear at this point. In conclusion, the combined studies seem to suggest that interpretations focused on wishes and responses from others may result in changes in responses of the self which is correlated with therapeutic gains. Additionally, the point is made that although wishes may need to be a frequent aim of interpretations, therapists should not expect wishes to change too much over the course of therapy. This study suggests that they may not need to change, although they do need to be interpreted.

Luborsky also studies the impact of pretreatment psychiatric severity on outcome with dynamic therapy. Luborsky, Crits-Christoph, Mintz, et al. (1988) reviewed 71 studies in which psychological health and sickness
measures were used as predictors of psychotherapy outcome. Almost all of studies reported that the more severely disturbed patients improved less than those who were comparatively less disturbed. For example, Luborsky, Mintz et al. (1980) found that pretreatment HSRS correlated $r = .30$ p < .01 with residual gain, and $r = .25$ p < .05 with improvement ratings. This is even more significant in light of the fact that several other pretreatment measures used in the Penn Project did not correlate with outcome including Minnesota Multiphasic Personality Inventory, Symptom Checklist, tests of intelligence, field dependence-independence measures and demographic information (Crits-Christoph & Connolly, 1993).

Using the VA-Penn subject, Luborsky collaborated with Beck and others to focused on initial psychiatric severity as measured by the ASI (Woody et al., 1984). Luborsky classified the 110 patients into low severity (34), mid severity (44), and high severity (32) groups. These groups were randomly assigned to drug counseling alone or drug counseling combined with either Cognitive behavioral or Supportive expressive therapy. Low severity patients made considerable progress with added psychotherapy or with counseling alone. Mid severity patients at seven month follow-up had better outcomes with additional psychotherapy than with counseling alone. However, counseling did effect numerous significant improvements. High severity patients made little progress with counseling alone, but with added psychotherapy made considerable progress and used both prescribed and illicit drugs less often, although the overall progress of this group was less than the other two groups. In this study, significant differences between CB or SE psychotherapies were not found. This may suggest that other variables such as increased number of sessions, or seeing a Doctor in addition to a
counselor may have had an impact rather than the specific treatment of the psychotherapies.

McLellan, Luborsky, O'Brien, Barr, and Evans (1986) reviewed the finding of three populations including the VA-Penn project who received varying treatments for drug abuse issues. In all groups the severity of the psychiatric symptoms, pretreatment employment, and legal problems were all significantly related to outcome. The during treatment measures of treatment length and type of discharge were also significantly related to the patient's status at 12 month follow-up.

Taking a slightly different angle, Luborsky looked specifically at the impact of psychiatric severity with personality disorders on outcome of psychotherapy in Diguer, Barber, and Luborsky (1993). The authors studied 25 patients with Major depression, twelve of whom also met the criteria for a diagnosis of a personality disorder. Using the HSRS and the Beck Depression Inventory, the authors found that at intake, at termination of therapy, and at follow up patients with a personality disorder had worse psychological health and were more depressed than patients without a personality disorder. Using a repeated measures analysis of variance, the HSRS revealed significant main effects for personality disorders \( F=12.17, \ df=1,23,p<0.01 \). Both groups, however, made gains in therapy and maintained them at six month follow up. Nevertheless, the presence of a personality disorder was found to effect therapy outcome.

One final note, Luborsky (1993) has paid special attention the concept of internalization of gains which he believes is a component of the broader concept of psychological health-sickness. This is likely to be consistent with the lack of ego distortion that Freud (1912) considered to be a positive
predictor of outcome of psychotherapy. The concept implies a special
capacity to maintain a sense of aliveness and of meaningful presence of
relationships especially when the object of the relationship is not physically
present. Luborsky has suggested that some methods need to be developed to
study four aspects of internalization. First, a rating scales for measuring
internalization capacities in entire sessions needs to be constructed. Secondly
these internalization capacities need to be evaluated based specifically on a
sample of the patient relationship narratives. Then these ratings need to be
compared with ratings of psychological health-sickness to see how much the
two concepts overlap, and to examine the patients responses to interruptions
in the treatment and to the termination.

In summary, Luborsky's research suggests the pre-treatment
psychiatric severity impact overall therapy outcome. Thus supporting the
age-old adage that the rich get richer; but the poor get poorer. Luborsky
studies severity combined with personality disorders and addictive disorders.
Although high severity individual showed poorer outcomes, increased
treatment and combinations of drug counseling and therapy were found to be
of significant benefit. In regard to psychiatric severity and changes in the
CCRT, Luborsky found that, in general, increases in the frequency of positive
components and decreases in negative components of the CCRT were
associated with more favorable outcome. Specifically, he found that changes
in the pervasiveness of negative response of self component were correlated
with changes in psychiatric severity.

Self-understanding

A basic tenant of dynamic psychotherapy is that patients gain
understanding about themselves and their relationships with others during
psychodynamic treatment, and that this understanding leads to better outcome (Crits-Christoph, Barber, Miller et al., 1993). However, this has remained largely unstudied. A noted exception to this has been the work of the Mount Zion Psychotherapy Research group which is currently known as the San Francisco Psychotherapy Research Group. As noted earlier in this paper, insight was included as one of the principle components of their Plan Diagnosis model (Weiss et al., 1986). In looking back, Luborsky stated that he feels that self understanding should have been given an even more central position among his list of curative factors when he began, in order that he may have given it more research attention (Luborsky, Crits-Christoph, Mintz et al., 1988).

Few quantitative studies exist on the association of self-understanding with therapy outcome. Luborsky, Crits-Christoph, Mintz et al. (1988) reviewed studies that measured pretreatment insight. Two of these showed insight to be significantly correlated with outcome but when these studies measured insight during psychotherapy neither had significant predictive correlations with outcome. Several investigators have relied on single-item ratings of insight and have not presented reliability data. Only two of the studies they reviewed were based on psychodynamic psychotherapy and all of the measures of self-understanding were unguided clinical ratings.

The development of the CCRT does provide a guide for clinical judgment in assessing insight. The Central Relationship Theme can be used to guide judgments about how much the patient understands about the central conflict (Crits-Christoph, Barber, Miller et al. 1993). Crits-Christoph has expanded on the CCRT by developing a self-understanding scale which consists of items designed to measure patient's insight about core conflicts in
different object-related domains. Self-understanding is assessed regarding
the CCRT in general, the CCRT in relation to the therapist, the CCRT in relation
to parents, and the CCRT in relation to each of two significant others. Crits-
Christoph, Barber, Miller et al. (1993), using a subset of 43 from the original
73 patients of the Penn project, evaluated the relationship of self-
understanding of CCRT scale to the outcome of brief psychodynamic
psychotherapy. Interjudge reliability using the intraclass correlation
coefficient, emerged as follows: .77 for the general scale, .87 for the therapist
scale, .89 for the parents scale, .87 for the significant others scale, and .89 and
.85 for the total score. The results revealed that the level of self-
understanding about the therapist was associated with a composite outcome
measure r=.31, and self-understanding about significant others was correlated
with a residual gain score on a global adjustment measure r=.34.

It is likely however, that the level of self-understanding relates to
patients' level of general psychological mindedness. A more precise measure
of the change in self-understanding would be a more useful variable to
determine, and it should be assessed over a longer term therapy. Using the
CCRT measure, Crits-Christoph, Cooper, and Luborsky (1990) found that the
change in self-understanding was not significantly correlated with outcome.
In this study, correlations were adjusted for pretreatment health-sickness
levels using the HSRS. Additionally, the change in self-understanding was
measured from session 3 to session 5 correcting for the initial level of self-
understanding via regression analysis. This change was correlated with
outcome. This seems like a very short period in which to measure change in
insight. However, the subjects were the same 43 used by Crits-Christoph,
Cooper and Luborsky (1988) in their accuracy of interpretations study.
Accurate interpretations during this period were shown to have an impact on outcome in the study on accuracy indicating that the content of these sessions was important enough to add weight to the current insight findings.

In summary, Luborsky's CCRT has not been adequately studied for its use in measuring insight and the impact on therapy outcome. Crits-Christoph has developed a method which warrants further study; however, caution should be exerted to determine if this measure is quantifying psychological mindedness or insight. The studies to date have not found significant correlations between insight and outcome; yet, it remains a cornerstone of dynamic theory. As such Luborsky has expressed regret for not placing more emphasis on this potential curative factor.

Implications and Conclusions

Luborsky (1992) found that most dynamic psychotherapists do not use research in their clinical practice. He found that psychotherapists generally adopt their treatment principles during training mainly from their supervisors. Dynamic psychotherapists apply these general principles to each of their patients but these principles come generally from clinical wisdom, not from research findings. A major reason for this is that dynamic psychotherapy research often seems trapped between the unresearchable clinical intuition and the empiricized or overly simplified dynamic hypothesis. Luborsky however, has spent his life's work trying to develop measures which closely approximate the clinical process and which are not overly simplified.

Luborsky began his work by specifying his theory of dynamic supportive-expressive psychotherapy. From this theory, he identified five
key theoretical propositions which he believes are central to the change processes of therapy: helping alliance, transference, transference interpretations, self-understanding, and psychiatric severity. To quantify these five propositions, Luborsky developed several process instruments: the CCRT, Helping Alliance scales, the Health-Sickness Rating Scales, and the Addition Severity Index. The CCRT represents Luborsky's most significant contribution to the field of dynamic research in that it begins the task of quantification of a major tenant of dynamic theory. Using the CCRT and the other measures described herein, Luborsky explored the correlations between his theoretical constructs of therapy change and therapy outcome.

This paper has focused first on the elaboration of Luborsky's theory and instrumentation and secondly on the application of this in dynamic research with special emphasis on the CCRT. Some potential problems in Luborsky's methodologies in studies using the CCRT have been noted in judge biases, uncertain validity of the standard categories, insufficient quantitative data on transference resulting in reliance on common sense or intuition, and questions regarding the measure's ability to capture the underlying theoretical constructs. In order to substantiate the validity of the CCRT method more work needs to be done to explain the theoretical leap from Luborsky's theory of Supportive-Expressive therapy and the methods used in the CCRT. As noted it is not yet clear if the CCRT measures transference or some other verbalized phenomenon. Furthermore, despite the fact that defenses and coping mechanisms are a part of Luborsky's theory they are not included in his CCRT method. Additionally, he does not provide a link between his wish component and his theoretical rational. One would expect some discussion of drives and need states which develop within the psyche and how
these correspond with the wishes verbalized in therapy. Although his research is theory based, his methods are not always clearly linked to their theoretical origins. Thus, given the weak evidence of construct validity of the CCRT, Luborsky's research findings at present can only suggest areas of future study rather than support firm conclusions about his model of dynamic therapy.

His research on the curative factors can be summarized broadly. First, the strongest findings were in the area of therapeutic alliance. Luborsky has shown that the therapeutic alliance is an important factor in influencing the outcome of psychotherapy. Especially the early sessions tend to show that an early positive alliance is related to outcome. His research reinforces the clinical belief that therapists must establish rapport and continue to monitor it for psychotherapy to be effective. However, the research indicates that it may be the client's perception of the therapist being helpful combined with specific therapist qualities which contribute to the formation of a helping alliance. Therapist countertransference, and client perceptions of accuracy issues and their potentially confounding effect on CCRT formation and helping alliance need to be explored further.

Secondly, in regard to transference and transference interpretations, the CCRT provides a good starting place for the quantification of theory; but limitations inherent in the CCRT cloud a picture of transference. Luborsky found some evidence that guidance by the CCRT system can help the therapist to make interpretations that focus on the central relationship pattern, and that this focus was beneficial to therapy (Luborsky, 1993). Nevertheless, clear statistical evidence for the therapeutic value of interpretation has yet to be demonstrated. Results of studies using the CCRT indicate that dynamic
Supportive-Expressive therapy may be curative due to improvements in negative responses of self; but changes in responses of others (which includes feelings about the therapist) were not found to be correlated with outcome. Accurate interpretations of this component along with the wish component do seem to be correlated with improved therapeutic alliance. Specifically, it seems that changes in responses of self are correlated with positive outcome, but it may be necessary to interpret wishes and responses from others in order to bring about change in this component. This is an interesting finding; but given that therapeutic change is multidetermined it will be necessary to control for other factors in order to obtain a clear picture of how the CCRT components are related to change processes. For instance, therapists' timing of interpretations was not studied and could be one of many confounding variables. At present it can't be ruled out that the CCRT may miss certain aspects of transference or that factors other than interpretations may lead to change in therapy.

In regard to the psychiatric severity factor, Luborsky's research has provided evidence of a negative relationship between psychiatric severity and outcome. In general, research found that pre-treatment psychiatric severity limits the extent of overall improvement of therapy outcome. This principle needs to be considered in adapting the therapists' techniques to the specific requirements of the particular patient. Luborsky incorporated this principle into his manual on Supportive-Expressive therapy; however, to date there has been little research on the application of the balance of supportive and expressive techniques and its impact on outcome.

Looking at the overall perspective of Luborsky's work, several important contributions emerge. His contributions to field of dynamic
psychotherapy research have already been noted. His work has provided a model for further research to push toward clear evidence of the tenants of dynamic therapy. Beyond dynamic theory, Luborsky and his colleagues have striven to assist clinicians in making reliable and valid case formulations and to enlarge the stream of research findings which will move toward the validation of general principles of psychotherapy. Luborsky's research suggests that psychotherapists may have difficulties in making reliable case formulations. His work on accuracy of interpretations as well as his work on therapy purity found very low ratings of actual implementation of case formulation and therapy technique. This implies that psychotherapists need guidance in making and implementing these formulations. This seems to be a vital aspect to be addressed in research on the validity and reliability of the theories from which case formulations arise.

Binder et al. 1993 suggest that research with manuals has pointed out that psychotherapy teachers are more successful at teaching the form than the substance of therapeutic competence. In other words, they teach types of interventions rather than teaching skill within specific contexts. These authors suggest that more effort should be devoted to empirical investigations of the nature of therapeutic skill rather than therapeutic interventions. The research evidence shows that with guided systems, psychotherapists can make reliable formulations, and interventions which correspond with a reliable formulation have been shown to be correlated with positive outcome.

Luborsky's work, therefore, is a wake-up call to the need for clear and consistent research and consistent clinical practice. Even with the weaknesses of Luborsky's research, he points out that what therapists actually do in therapy needs to be brought into alignment with both theory
and research results. His work represents the first crucial step in the quantification of theoretical principles. His findings suggest many areas for further study. As of December, 1994, there are 110 known studies in progress on Luborsky's CCRT method. Some of the studies in process are on the differences in CCRT with different diagnoses. Others are focused on the development of a questionnaire version of the CCRT, the development of scales to determine mastery of the CCRT, and measures to explore the CCRT and defenses (L. Luborsky, personal communication, December 19, 1994).

Luborsky's goal has been to move the field of process research toward providing research wisdom that parallels clinical wisdom in aiding clinicians in their work with clients. This study has attempted to look critically at how successful Luborsky's research findings have been in accomplishing his stated goal. In considering Luborsky major findings, it should be noted that the best correlation reported by Luborsky and his colleagues between an operationalized measure of theoretical constructs was found in the work on helping alliance. This research reported an intracorrelation of only .26 which means that alliance can pick up 26% of the difference in therapy outcome. This might be a helpful hint to clinicians but not a reliable guide. Because the change process in dynamic psychotherapy is part of a complex interactional system, we may not advance much beyond this level of explained variance by correlating single predictors with outcomes. However, Luborsky's system of replication by segmentation opens the door for change process variables to be studied over the entire course of therapy.

Additionally, the main trend of comparative studies among all forms of psychotherapy continue to show nonsignificant differences in patient benefits among treatments (with the exception of differences found in drug
treatment versus therapy treatments) (Orlinsky & Howard, 1986). Luborsky suggests that in addition to the common variables explanation further improvements in research techniques are warranted to sort out individual differences. In order to find the main effect for (treatment X patient) much more specificity of measures and theoretically determined designs will be needed (Luborsky, Diguer et al., 1993).

Given the many potential patient, therapist, treatment, and environmental variables present in any therapeutic interaction, Luborsky's research remains far from providing conclusive evidence on the main effect of his curative factors. Further effort needs to be made to find consensual meaning for the theoretical constructs reviewed in this paper. For instance, further analysis should be done between the Plan Diagnosis method in Weiss et al. (1986) and the CCRT to reduce redundancy and provide a more specificity in quantification of transference.

In the area of specificity, Luborsky's manual and his scoring systems have provided a start to study the change processes of dynamic psychotherapy. However, to date no effort has been made to differentiate two manual guided dynamic therapists from each other. Furthermore, instrumentation and design needs to continue to improve to allow research in dynamic therapy to move toward multifactor interactive research with multiple predictors as can be examined in path analysis strategies in order to determine how much of the variance in therapy outcome can be accounted for by each curative factor and with which patients and therapists.

In conclusion, Luborsky has made several important contributions to process and outcome research on dynamic psychotherapy. He has helped define the questions, and has clarified the weakness in both clinical
application and empirical research. This paper has reviewed his findings and has presented the wake-up call for further quantification and clarification of theoretical constructs. Perhaps the most important aspect of Luborsky's work has been that he has challenged the myth that dynamic theory is inherently unresearchable, and is doomed to forever yield confusing and contradictory results. With this, researchers can take courage and strive towards increased reliance on clinical-quantitative research and decreased reliance on theory alone.
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