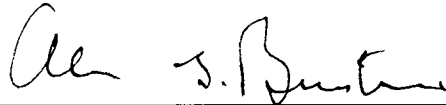


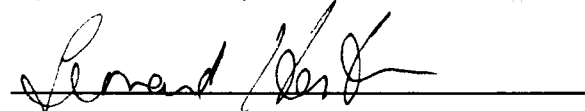
To the Graduate Council:

I am submitting herewith a dissertation written by Robert Joseph Castino entitled "Predicting Patient Perceptions of Psychotherapy Session Impact." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.



Alvin G. Burstein, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Provost
and Dean of the Graduate School

PREDICTING PATIENT PERCEPTIONS OF PSYCHOTHERAPY
SESSION IMPACT

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Robert Joseph Castino
December 1989

DEDICATION

Dedicated to the patients and therapists who
courageously volunteered to share their experiences in
psychotherapy.

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ABSTRACT

Given relative consensus in the empirical literature about the beneficial impact of psychotherapy, researchers have sought to identify the effective ingredients in psychotherapy by relating process to outcome. A review of this literature reveals inconsistent findings. In response, researchers have developed strategies involving micro- or sub-outcomes. One type of micro-outcome strategy is therapy session impact: the immediate effects of session process on the participants perception of the session.

The primary purpose of this study was to apply the therapy session impact strategy with respect to process variables related to patient perceptions of session depth/value, smoothness/ease and goodness. A secondary purpose of this study was to explore these session process variables as a function of differing levels of patient pathology.

Thirty-three patients and their therapists were recruited for the study. Three audiotaped sessions, patient completed Session Evaluation Questionnaires and a Millon Clinical Multiaxial Inventory were obtained from each patient. Sessions were rated on a wide range of

process variables using the Vanderbilt Psychotherapy Process Scale.

Results indicated that process variables were not stable over sessions within patient-therapist dyads. Results also indicated that process variables did not predict patient perceptions of session goodness. Although several process variables predicted patient perceptions of depth/value or smoothness/ease, these findings were not consistent over sessions. Consistent differences in process variables were not found over sessions with patients having different levels of psychological disturbance.

Overall, the present study indicated variability in both the process variables and the usefulness of process variables to predict patient perceptions of impact over sessions. These findings are consistent with prior research which contradicts the assumption of the homogeneity of process variables. The present findings support the development of psychotherapy research strategies that take into consideration the heterogeneity of process variables over sessions.

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CHAPTER I

INTRODUCTION

An overview of the empirical research with respect to psychotherapy outcome indicated that several reviewers have concluded that in general psychotherapy produces positive changes in a substantial portion of patients (Bergin & Lambert, 1978; Lambert, Shapiro & Bergin, 1986; Luborsky, Singer & Luborsky, 1975; Parloff, London & Wolfe, 1986). Since there has been some agreement about the beneficial impact of psychotherapy based on empirical research, researchers have increasingly directed their attention toward exploring the effective ingredients in psychotherapy through the integration of process and outcome in psychotherapy research. Parloff et al. (1986) discussed this integration of psychotherapy process and outcome within single research projects as an important trend in psychotherapy research. This type of research is specifically designed to explore the effective ingredients in beneficial psychotherapeutic change and outcome.

A review of the empirical research in psychotherapy process x outcome involving the most widely investigated

process variables indicated that in general the findings are inconsistent and inconclusive. The psychotherapy process variables reviewed involved dimensions of patient involvement in the therapeutic interaction, therapeutic interventions and qualities of the therapist offered relationship. Only process variables pertaining to patient involvement or participation in the therapeutic relationship have been found to be consistently related to positive psychotherapy outcome.

Several limitations of the research on psychotherapy process x outcome have implications for future study. First, the research is limited in that there is a narrow range of process variables investigated in any one study. The majority of studies have studied process variables in relative isolation from one another. Only a few studies have included process variables from each of the dimensions listed above in order to address the more sophisticated question of how these various process variables might interact to predict positive psychotherapeutic outcome (Gomes-Schwartz, 1978; O'Malley, Suh & Strupp, 1983; Staples, Sloane, Whipple, Cristol & Yorkston, 1976; Suh, O'Malley & Strupp, 1986). Unfortunately, all of these studies are limited in that they investigated short-term psychotherapy in which there may be less of an emphasis on certain therapeutic

processes such as patient and therapist exploration. Strupp and Binder (1984) have underscored the importance of combining numerous process variables in psychotherapy process x outcome research since the dimensions of psychotherapy process discussed above are inextricably interwoven within the therapeutic situation. Hence, future research might be directed toward the utilization of a wide range of process variables and the investigation of psychotherapy which is not time limited.

A second limitation of the psychotherapy process x outcome research involves the limited patient samples studied and the failure of researchers to investigate specifically the relationship of therapeutic process and outcome with respect to patients varying in the severity of psychological disturbance. The failure of studies to investigate systematically this variable of severity of disturbance in relation to psychotherapy process and outcome may in part contribute to the inconsistent findings in the literature. Within the psychodynamic/psychoanalytic orientation to therapy, various clinicians and theoreticians have proposed different psychotherapeutic strategies for more severely disturbed patients (Blanck & Blanck, 1974; 1979; Guntrip, 1971; Winnicott, 1965). In addition, research conducted by Kernberg, Bernstein, Coyne, Appelbaum, Horvitz and

Voth (1972) supports the further study of patient severity of disturbance in relation to psychotherapy process and outcome. These researchers found that patients with low initial ego strength achieved more positive therapeutic gain when they were treated with psychotherapy emphasizing ego building and therapeutic relationship factors as opposed to uncovering or exploratory processes. Thus, future research in psychotherapy process x outcome might be directed toward the incorporation of patient variables such as severity of disturbance and level of ego strength.

Another limitation in the process x outcome research, pertains to the methodological strategy for sampling psychotherapy process variables over the course of treatment. The typical strategy involves sampling process variables of one session or computing an average of the process variables over several therapy sessions and then correlating these measures with some overall outcome criteria assessed at the end of treatment. This methodological strategy is flawed by the highly questionable assumption that psychotherapy sessions are homogeneous with respect to process variables over the course of treatment. Empirical research has indicated that psychotherapy sessions with a specific patient/therapist dyad vary with respect to process

variables (Gurman, 1973; Howard, Orlinsky & Perilstein, 1976; McDaniel, Stiles & McGaughey, 1981; Mintz, Luborsky & Auerback, 1971). These findings strengthen the warning made by Kiesler (1966) concerning the implausibility of assuming that psychotherapy process is homogeneous over the course of treatment. Hence, the traditional approach of sampling process variables from one session or from several sessions cannot be assumed to be representative of the therapeutic processes occurring over the course of treatment. Consequently, researchers have suggested the use of an alternative research strategy or paradigm involving micro-outcomes (Orlinsky & Howard, 1986) or sub-outcomes (Elliot, Barker, Caskey & Pistrang, 1982). This strategy of micro-outcomes or sub-outcomes involves correlating in-session process variables to a more immediate measure of post session outcome rather than to some overall rating of outcome assessed at the end of treatment. Orlinsky and Howard (1986) have proposed that the utilization of micro-outcome strategies might be a more fruitful approach to trace what psychotherapeutic processes predict overall psychotherapeutic outcome, i.e., macro-outcome, by exploring the relationship between psychotherapy process and micro-outcomes and then exploring the relationship between micro-outcomes and macro-outcomes.

The development of the strategy of psychotherapy session impact represents a micro-outcome strategy in exploring psychotherapy process x outcome relationships (Stiles, 1980; Stiles & Snow, 1984a; 1984b; Stiles, Tupler & Carpenter, 1982). Psychotherapy session impact refers to the immediate effects of sessions in terms of the participants post session perceptions of the session as a whole. The development and utilization of psychotherapy session impact for studying therapy process x outcome relationships involves three steps. First, studies must be conducted to investigate if session impact varies on a small number of common dimensions. Second, studies must then be conducted to correlate psychotherapy process variables with these dimensions of session impact. Finally, since it cannot be assumed that these dimensions of session impact are predictive of psychotherapy outcome, studies must be designed to correlate these dimensions with overall psychotherapy outcome. Thus far, research on the development of this strategy has focused only on step one. This prior research has yielded two dimensions of session impact labeled depth/value and smoothness/ease (Stiles, 1980; Stiles & Snow, 1984b).

The primary purpose of the present study is to further the development of the strategy of session impact

by investigating what psychotherapy process variables are associated with patient's ratings of the two dimensions of psychotherapy session impact. Since a limitation of the process x outcome literature involves the use of a limited range of psychotherapy process variables, the present study utilizes a wide range of process variables representing each of the major dimensions of psychotherapy process, i.e., patient involvement, therapeutic interventions and therapist offered relationship. Additionally, the present study investigates psychotherapy that is not conducted on a short-term basis since a limitation of prior research involves the study of only short-term therapy in which there may be less of an emphasis on certain therapeutic processes such as patient and therapist exploration. The present study also investigates what psychotherapy process variables are associated with patient's overall positive evaluation of therapy sessions. The results of this investigation can be compared to the work of Orlinsky and Howard (1967) which also explored the relationship between process variables and patient ratings of session "goodness".

A secondary purpose of this study is to explore what psychotherapy process variables are related to therapy sessions conducted with patient's having severe

psychological disturbance versus those with less severely disturbed patients. As already mentioned, a limitation of the process x outcome literature has been the lack of studies which have investigated patient variables pertaining to severity of psychological disturbance. Research in this area is congruent with the general movement in psychotherapy research toward more conceptual specificity.

CHAPTER II

REVIEW OF THE LITERATURE

1. HISTORICAL CONTEXT OF PSYCHOTHERAPY RESEARCH

One origin of modern psychotherapy is Josef Breuer's and Sigmund Freud's (1957) description of their treatment of hysterical patients by means of a "talking cure" in 1895 (Garfield & Bergin, 1986; Hersen & Barlow, 1976; Strupp, 1982). Since the advent of modern psychotherapy, there appears to have been two major influences on the research literature of that field. The first was Eysenck's (1952) challenge to the field of psychotherapy. Eysenck compared the percentage of success in psychotherapy cases reported in 24 studies to rates of improvement without formal treatment, ("spontaneous remission"), gathered from discharge rates at state hospitals and insurance company records. Eysenck reported that the patients in the state hospitals received "very little if any psychotherapy" and that the patients from insurance company records were "regularly seen and treated by their own physicians with sedatives,

tonics, suggestion and reassurance" but no formal psychotherapy. He argued that if psychotherapy for psychological disorders is effective it should produce improvements in patients that exceed improvements made in its absence. He claimed that 66% of the people with a neurotic disorder improved over a 2 year period whether they received psychotherapy or not. In addition, he concluded that formal psychotherapy produced no greater changes in neurotic patients than its absence and thus, started the controversy over the effectiveness and value of psychotherapy.

Eysenck's findings and conclusions have since been severely criticized. Subsequent reviews of the same literature and additional studies found rates of improvement in the absence of formal therapy much lower than those Eysenck estimated. "Spontaneous remission" is estimated to be 40%, not 66% (Bergin, 1971; Bergin & Lambert, 1978; Lambert, 1976). In addition, re-examining Eysenck's data, Bergin (1966) noted that some patients improved in the studies but others got worse. Due to averaging of results, such effects canceled each other out yielding an overall appearance of no effect. In general, there seems to be some consensus among researchers that Eysenck's methods are flawed and his conclusions unjustified. It has even been argued that

reanalysis of Eysenck's data base could lead to the conclusion that rates of improvement in psychotherapy are higher than those in the absence of formal psychotherapy (Bergin, 1971; Bergin & Lambert, 1978). Nevertheless, Eysenck's article has increased interest in evaluating psychotherapy through the scientific method, which in turn has led to the development of more sophisticated questions, conceptualizations, research designs and methods in the experimental study of psychotherapy.

The second more recent influence on psychotherapy research emanates from institutional third party payers, insurance executives and government officials, who have been increasingly called upon to pay for psychotherapy (Garfield & Bergin, 1986; Parloff, London & Wolfe, 1986; Strupp, 1982). These funding sources ask for demonstrations and evidence addressing the safety, efficacy, efficiency and specific effective ingredients in psychotherapy in order to guide their policy decisions relevant to reimbursement procedures. Some of the specific questions of interest are the following: 1.) what is the relative effectiveness and cost effectiveness in long term vs. short term psychotherapy, 2.) which types of psychotherapy are most effective, 3.) what specialized psychotherapeutic treatments are most effective for specific types of mental disorders,

4.) what are the effective ingredients or mutative processes in effective psychotherapy.

Researchers in the field have viewed this influence from different perspectives. Strupp (1982) cautioned that this new influence could lead to a remedicalization of psychotherapy and a return to the disease model. However, Parloff et al., (1986) have pointed to the increased emphasis on outcome research which has largely resulted from the greater availability of federal funding for such research as a consequence of the government's interest in the efficacy of psychotherapy. Similarly, Garfield and Bergin (1986) have focused on the positive effects of this influence on psychotherapy research in that it has led to more federally funded projects and an increase in collaborative research projects. These authors discussed a collaborative study in progress which compares two forms of psychotherapy and pharmacotherapy for depressed patients which involved specific research questions and more sophisticated research designs and methods in order to avoid limitations of existing research. They further suggested that such research may point the direction toward a new and higher standard for future research projects.

This section has discussed two major influences in the field of experimental psychotherapy research. The

next section will provide an overview of the empirical literature on psychotherapy outcome.

2. PSYCHOTHERAPY OUTCOME RESEARCH

This section presents an overview of the empirical literature on the efficacy of individual psychotherapy with adult outpatients. Major conceptual and methodological issues as well as recent trends in the current literature will also be discussed.

Past research on the overall efficacy of psychotherapy from the 1930's through the mid 1970's has been reviewed by Bergin (1971) and Bergin and Lambert (1978). Bergin (1971) concluded that psychotherapy had an average effect that was modestly positive. However, Bergin and Lambert (1978) concluded that, the growing number of controlled experimental outcome studies provided evidence that psychotherapy attended clearly positive results when compared to no treatment, waiting list or placebo groups. Similarly, after reviewing and analyzing the data from 25 years of research on the efficacy of psychotherapy, Luborsky, Singer and Luborsky (1975) concluded that, in general, psychotherapy produces positive changes in a substantial portion of patients. A

more recent review of the literature by Lambert, Shapiro and Bergin (1986), maintains that there is little doubt that psychotherapy in general is beneficial, based in part on the quantitative analysis of the literature using the technique of meta-analysis.

Meta-analysis is a relatively recent methodological and conceptual advance within the field of psychotherapy research (Parloff, et al., 1986). Meta-analysis represents a technique which applies the methods and principles of empirical research to the process of reviewing a body of literature. This technique is viewed by some as an advance over the traditional narrative and qualitative methods of evaluating a large body of research (Smith, Glass & Miller, 1980). The traditional methods are more likely to be subjective and lead to different and at times opposing conclusions from the same literature. A difficulty with traditional approaches lies in the fact that there are no established rules for evaluating, combining or weighting alternative studies or for drawing conclusions when results are different in various studies. Meta-analysis starts with a systematic search of the literature with an inclusion criterion that is clearly specified. Thus, the rules of including studies are made explicit and this process facilitates replication. If discrepancies are found one can look at

the specific literature and readily determine how it was used. When the studies are gathered together, they are quantified according to some common metric. The one most frequently utilized is effect size which equals the difference between the means of the experimental and control group divided by the standard deviation of the control group or the pooled sample from both groups (Parloff et al., 1986). The effect size is used as a dependent variable and the characteristics of individual studies are used as independent variables. Thus, a broad range of research variables can be studied over many research investigations in terms of their influence on the common metric of effect size. For example, one can study the variable of type of patient or type of treatment over a number of research projects and determine its influence on effect size.

There has been some critical evaluation of meta-analysis as a procedure. One objection is that it tends to collapse across many variables and could potentially confuse important differences and relationships (Kendall, 1984). Another objection is that it could potentially include investigations of inadequate design (Strube & Hartmann, 1983). However, some researchers in the field of psychotherapy have agreed that meta-analysis represents an advance over traditional narrative

summaries of the literature in terms of its objectivity, clear specification of critical decisions and potentiality for yielding more information than traditional reviewing techniques (Kazdin, 1986; Parloff et al., 1986). The technique of meta-analysis does not supplant or render obsolete the more traditional reviewing techniques, since a high quality narrative review can be objective and offer clear specification of its rules and guidelines. Meta-analysis does seem to represent a promising and unique alternative method for reviewing research studies.

As mentioned above, meta-analysis has been applied to the overall question of the efficacy of psychotherapy in the literature. Smith, et al. (1980) found an average effect size of .85 standard deviation units over 475 studies comparing psychotherapy intervention to untreated control groups. They concluded that at the end of treatment the average person treated in psychotherapy was better off than 80% of the untreated control group. Other meta-analytic reviews using the same data base as Smith et al. (1980) have reached comparable findings (Andrews & Harvey, 1981; Landman & Dawes, 1982). A meta-analytic review of a new sample of studies also found similar results (Shapiro & Shapiro, 1982a). In general, meta-analytic reviews of the overall effectiveness of

psychotherapy across a wide range of patients in relation to untreated control groups approach a standard deviation of 1.00 in effect size (Lambert et al., 1986). These authors concluded from this finding that psychotherapy has been shown to have overall positive effects on a wide variety of patients in comparison to no treatment control groups. An independent review of the literature reached a similar conclusion (Parloff et al., 1986). Lambert et al. (1986) further conclude that these average positive effects are statistically as well as clinically significant. For example, the results of meta-analysis suggest that the assignment to treatment as opposed to control conditions accounts for approximately 10% of the variation in outcome. Rosenthal (1983) showed that this proportion of variance accounted for is roughly equivalent to increasing the success rate from 34% to 66%.

Another question addressed in the psychotherapy outcome research goes beyond the issue of the efficacy of psychotherapy in relation to untreated control groups. This question addresses the issue of the efficacy of psychotherapy in relation to placebo controls (Rosenthal & Frank, 1956). However, the conceptual and methodological application of placebo controls in the field of psychotherapy research has been severely

criticized (Parloff et al., 1986). The notion of placebo controls has been extended to psychotherapy from the study of pharmacology in medicine. In medicine, placebo controls are used to differentiate clinical substances that are clinically active in producing change versus those that produce change through the subject's expectation of change. Some writers have suggested that the use of placebo controls in relation to psychotherapy research is essential in determining the efficacy of psychotherapy (Prioleau, Murdock & Brody, 1983; Wilson & Rachman, 1983). However, the application of placebo controls in psychotherapy is problematic. In psychotherapy, there is no placebo control that would be able to satisfy the requirements of the term placebo as used in medical research. In medical usage, a placebo must not include any therapeutic components of the treatment tested and it must encourage the patient to believe that the placebo intervention is effective for the problem. Since psychotherapy is a psychological intervention involving an interpersonal experience with perceptions, cognitions and affects, then the beliefs and expectancies brought to the treatment by the patient or created in the patient by the treatment cannot be viewed as inactive in the same sense as viewed in pharmacological research. The patient's beliefs and

expectancies about psychological interventions can be an active ingredient in psychotherapy as well as interact with other active ingredients in producing therapeutic gains. Therefore, the use of placebo controls in psychotherapy is not analogous to the use of placebo controls in pharmacology or medicine.

In order to clarify this issue, Shapiro and Morris (1978) have discussed the key concept of specific activity in defining the concept of placebo. In nonpsychological or pharmacological therapies, the specific activity of a treatment is seen as nonpsychological or physiological. Thus, the use of a placebo in this case would involve a substance or treatment that is inert and has no specific activity for the condition being treated. The term inert placebo can be used to describe this situation. However, in psychological treatments the specific activity of the treatment is psychological. Thus, a more general definition of the term specific activity is needed. Specific activity is viewed as the therapeutic influence due only to the contents and processes of the treatment given. An active placebo is defined as involving therapeutic effects of the condition studied but these effects are not considered to be the theoretically relevant active ingredients of the treatment under

investigation. For example, Shapiro and Morris (1978) discussed the use of active placebo control groups by behavior therapists. These active placebo groups have aspects of treatment which can affect behavior such as attention, support and suggestion but these aspects are different from the theoretically relevant ingredients of the treatment such as systematic desensitization.

The controversy about the application of placebo control groups and active placebo control groups in psychotherapy also involves the general concept of control in psychotherapy research. The traditional group comparison model involving experimental and control groups has been applied to psychotherapy research. The rationale for this approach or design is that in order to isolate the effectiveness of a treatment, the treatment group should be compared to a matched control group so that extraneous and confounding variables can be ruled out as leading to improvement. In this way, the researcher can conclude with relative confidence that the treatment caused the therapeutic gains. Various types of control groups have been utilized in psychotherapy research. For example, no treatment control groups have been used. However, some problems with this type of control group include subject drop out and subjects seeking non-professional help, engaging in self-help and

viewing their assessments and interviews as help. Waiting list control groups offer advantages of being practical in most clinic settings and decreased drop out rate since subjects are guaranteed treatment after the waiting period. However, subjects may still become involved in other forms of non-professional or self-help programs. As already mentioned, active placebo groups may be used to control for factors as frequency of contacts, expectation for improvement and receiving attention and support. Ideally, the control group should be identical to the treatment group in all respects except the specific treatment being investigated. However, there is no true therapy control group since this ideal cannot be achieved.

In addition to the difficulties with forming adequate control groups, some researches have discussed general limitations of the traditional group comparison method in applied psychotherapy research. Hersen and Barlow (1976) discussed ethical and practical problems in using this method. In addition, the method has been criticized for obscuring individual clinical outcome in group averages (Bergin, 1966). He found some patients improved and others worsened in treatment groups. All of these criticisms and limitations of the traditional group comparison design have led some researchers to doubt the

adequacy of this model in studying psychotherapy and to argue for the use of single case study experiments (Hersen & Barlow, 1976). As Kiesler (1971) has noted, psychotherapy research is in a pre-paradigmatic phase in which there is no generally accepted paradigm or method since each has its own problems and limitations. Thus, there is a plurality of methods that can be used to study psychotherapy.

There have been meta-analytic reviews of the literature comparing psychological interventions and active placebo control groups which typically emphasize giving attention and support to the patient. Prioleau et al. (1983) suggested that formal psychotherapy was not more effective than active placebo control groups by reanalyzing data from the study conducted by Smith et al. (1980). However, many more meta-analytic reviews have suggested that active placebo control groups typically show greater improvement than waiting list or no treatment controls but that their effects are less than those of formal psychotherapy (Andrews & Harvey, 1981; Landman & Dawes, 1982; Smith et al., 1980). A problem with the investigations finding no differences between formal psychotherapy and active placebo controls is that they have been misinterpreted to suggest that psychotherapy is generally ineffective (Prioleau et al.,

1983; Shephard, 1984). This misinterpretation is based on the lack of recognition that factors such as attention and support which are being isolated in so called active placebo groups are an important aspect of the psychotherapeutic change process and worthy of further investigation in their own right (Strupp & Hadley, 1979). As some authors have argued (Kazdin, 1986; Strupp & Binder, 1984), attempts to isolate active placebo factors from psychological treatment factors in psychotherapy is a simplistic approach to the issue of investigating therapeutic change factors since these two sets of factors most likely interact in an additive or multiplicative manner. In this light, the issue of the utilization of various types of control groups in psychotherapy research must depend on the specific question posed by the researcher and addressed in the research project (Kazdin, 1986). The use of no treatment or waiting list control groups are needed to interpret findings about the effectiveness of psychotherapy and the use of "active placebo" control groups with clearly specified factors such as attention, support, caring etc. can be useful in exploring crucial elements of the therapeutic change process.

The above discussion on placebo groups is related to another conceptual problem within psychotherapy research

namely, that of nonspecific or common factors versus specific factors in psychotherapy research. In fact, some have viewed the placebo control group issue as having been recast in terms of the nonspecific and specific factors in psychotherapy outcome (Kazdin, 1986). Nonspecific or common factors in treatment refer to features of therapy that are common to most forms of psychotherapy such as having the patient come to sessions, providing a statement about the problem, discussing how treatment will alleviate the problem or providing attention, support and caring to the patient. Specific factors refer to features of a specified treatment which are purported by the advocates of that technique to uniquely lead to therapeutic change such as the generation of insight in the patient through well timed and appropriate interpretations by the therapist in psychodynamic psychotherapy.

The issue of nonspecific versus specific factors in psychotherapy has been fueled by the findings in the research literature of little difference in outcome among various psychotherapies and the theorizing of prominent researchers in the field (Frank, 1982). Several past reviews of the literature comparing psychotherapies (Bergin & Suinn, 1975; Beutler, 1979; Lambert & Bergin, 1973; Luborsky et al., 1975; Meltzoff & Kornreich 1970)

have concluded that there was no evidence of differences in outcome with different psychotherapies. These past reviews did not use meta-analytic techniques but recent meta-analytic reviews also find very little evidence for differences between psychotherapies (Miller & Berman, 1983; Shapiro & Shapiro, 1982b; Smith et al., 1980).

An exemplary study addressing this issue was conducted by Sloane, Staples, Cristol, Yorkston and Whipple (1975). In this study, the authors compared ninety neurotic outpatients assigned to either short-term analytically oriented psychotherapy, behavior therapy or a waiting list control group. It was found that the treatment groups had significantly improved relative to the waiting list group but that there were no significant differences between the treatment groups. As mentioned above, this study has been viewed as the most methodologically sophisticated study of its kind (Wolpe, 1975). Its methodological sophistication is illustrated by: 1.) the use of experienced therapists, 2.) the recruitment of a large number of well-motivated clinic patients, 3.) random assignment to treatment or control groups, 4.) low attrition and the inclusion of a waiting list control group. One of the most serious limitations of this study and studies investigating the same question is the limited or total lack of assessment on whether or

not the specific psychotherapies had been practiced in their prescribed manner and whether they are the treatment of choice (Bergin & Lambert, 1978).

The second influence on the issue of nonspecific and specific factors in psychotherapy outcome has been the theorizing on common or nonspecific factors in psychotherapy outcome. For example, Frank (1982) postulated that psychotherapies produce effects because of: 1.) the emotionally charged and confiding relationship, 2.) the setting where patients expect help and their confidence in the therapist as a healer is strengthened, 3.) the rationale or conceptual scheme (myth) that plausibly explains symptoms and prescribes procedures for resolution, 4.) the set of procedures (ritual) where both patient and therapist collaborate to effect change and their belief that it will lead to change. Frank (1982) suggested that the myth and ritual in psychotherapy provide new learning experiences, evoke expectancies for help, provide opportunities for rehearsal and practice as well as strengthen the therapeutic relationship. Strupp and Binder (1984) also discussed the importance of the therapeutic relationship for psychotherapy outcome as evidenced in their research findings. They also discussed the therapeutic relationship as a common factor in the psychotherapeutic

process. However, they maintained that the absence of research evidence indicating the importance of specific techniques or factors in psychotherapy does not mean they do not exist (Strupp & Binder, 1984). They further suggested that research might be more fruitful if it attempted to illuminate how the specific and common factors combine or interact in producing positive psychotherapy outcome rather than setting up investigations with simplistic either/or questions on this issue.

The issue of nonspecific versus specific factors in psychotherapy and the economic influence of third party payments have led to conceptual and methodological advances in the literature which can be viewed as current trends and directions for future psychotherapy research. As already mentioned, the major limitation of studies of the comparative efficacy of psychotherapies is that they did not specify the exact treatment techniques utilized and ensure that these treatments were provided in the prescribed manner. An important trend in psychotherapy has been the development of therapy treatment manuals. Parloff et al. (1986) discussed this trend as a major methodological advance in psychotherapy. Similarly, Luborsky and DeRubeis (1984) discussed this as a promising direction for future research and a "minor

revolution" in the field. In the 1980's there has been an increased interest in standardizing a variety of individual treatment approaches with various patient problems. Waskow (1984) has identified seven different manuals describing behavioral, cognitive and psychodynamic approaches to treating outpatients (Beck, Rush, Shaw & Emery, 1979; Bellack, Hersen & Himmelhoch, 1981; Fuchs & Rehm, 1977; Klerman, Rounsaville, Chevron, Neu & Weissman, 1979; Lewinsohn, Antonuccio, Steinmetz & Teri, 1982; Luborsky, 1984; Strupp & Binder, 1984). The advantages of treatment manuals reflect the interest in increased rigor in controlled psychotherapy research. First, the manuals allow more standardization and clearer specification of the conceptual and procedural aspects of a particular psychotherapeutic approach. Second, the manuals provide a method of training therapists to offer a standard treatment approach to an accepted criterion level of performance. Third, they can facilitate the development of rating scales in order to determine whether a specific therapy has been properly conducted in a research project. This advantage addresses the concept of treatment integrity which has been neglected in the field of psychotherapy research. Treatment integrity simply refers to the extent to which a specific psychotherapeutic intervention has been accurately and

properly conducted. The neglect of this concept in the research literature limits the interpretations and conclusions that can be drawn from most of the studies in psychotherapy. Fourth, the use of treatment manuals with their specification of treatment techniques and procedures provide a method for researchers to explore the interactions of common and unique factors associated with specific treatment approaches in terms of effecting psychotherapeutic gains. A difficulty with the use of treatment manuals is that they cannot teach charismatic characteristics. Thus, some therapists may be superior due to specific charismatic effects which are difficult to identify and measure. However, the use of treatment manuals may provide a way to systematically investigate charismatic effects of superior therapists.

Another recent methodological advance discussed by Parloff et al. (1986) is the increased interest in the application of the randomized clinical trials research design to psychotherapy outcome (Elkin, Parloff, Hadley & Autry, 1985; Gunderson, Frank, Katz, Vannicelli & Frosch, 1984; Murphy, Simons, Wetzel & Lustman, 1984; Weissman, Klerman, Prusoff, Sholomskas & Padian, 1981). Clinical trials refer to psychotherapy outcome studies which are conducted in actual clinical settings and which meet relatively high standards of methodological rigor such as

randomized allocation to groups and clear specification of control groups usually involving waiting list control groups. Some of the characteristics of clinical trials are: 1.) patients who actually seek treatment rather than student volunteers, 2.) professional therapists provide treatment rather than graduate students, 3.) treatment of severe and multifaceted clinical disorders rather than relatively mild or subclinical problems. Thus, these investigations attempt to study treatment outcome under many of the conditions in which the treatment is actually applied. This type of methodology can address the criticism of poor generalizability which can be directed to many psychotherapy outcome studies which are conducted in analogue situations having little resemblance to the ways psychotherapy is actually practiced. There is some agreement among researchers that controlled clinical trials represent an endpoint in the continuum of treatment evaluation strategies (Parloff, 1979). Thus, the findings from case studies, uncontrolled trials and analogue studies can lead to the positive demonstration of efficacy in controlled clinical trials. Such a positive demonstration is considered to attest more closely to the effectiveness of psychotherapy than the other research methodologies. However, since any methodological treatment strategy has limitations as well

as advantages, it has been increasingly recognized by researchers that methodological pluralism must be encouraged within the field of psychotherapy (Kazdin, 1986). All of the various methodologies need to be used in order to advance the understanding of psychotherapy.

The development of treatment manuals and the increased interest in controlled clinical trials has facilitated a return to addressing various portions of the ultimate question of psychotherapy outcome. This ultimate question originally posed by Paul (1967) was: "What treatment by which therapist is most effective for this individual with that specific problem, under which set of circumstances?". This interest in increased conceptual specificity in psychotherapy research has been generated by the influence of several factors. First, the empirical findings that psychotherapy in general appears to be effective but that not everyone improves and in fact some patients become worse (Bergin & Lambert, 1978; Strupp, Hadley & Gomes-Schwartz, 1977). Second, the research findings concerning the relative comparability of alternative psychotherapeutic interventions. Finally, the influence of third party payers, i.e., the federal government and insurance companies, who are asking for more specific research findings.

Another methodological and conceptual advance in psychotherapy research involves the measurement of psychotherapy outcome. It can be seen that this issue further complicates the ultimate question of psychotherapy by adding another variable, i.e., what kind of outcome measurement. Thus, the complexity of studying psychotherapy is increased by the recognition of the importance of taking into consideration the manner in which psychotherapy outcome is measured. The field has moved from the sole use of therapist ratings of outcome and its inherent biases to a wide variety of outcome measures. The increase in the number and types of measures as well as sources of information to evaluate treatment reflects an increased recognition of the complexity of outcome criteria and the understanding that the psychotherapeutic change process is multifaceted and multidimensional. Strupp and Hadley (1977) pointed to the different perspectives from which to evaluate psychotherapy outcome. These various perspectives reflect different interested parties in mental health as well as different standards and values toward outcome criteria. Strupp and Hadley (1977) posed the perspectives of society, i.e., significant persons in the patient's life, of the patient and of mental health professionals. The conclusions drawn from psychotherapy

outcome studies would depend heavily on the particular perspective assessed. For example, Mintz, Luborsky and Christoph (1979) found that there are inconsistencies in outcome measured from different perspectives or sources. The measurement of outcome criteria does not only vary in terms of perspective or source of information but also in terms of the method of collecting the data (judgements, observations) and content of the measurement device (interpersonal, intrapersonal). The diversity of the potential measures raises conceptual and methodological problems for psychotherapy research. Conceptually, it would be necessary for researchers to specify what types of outcome measures are appropriate for specific patients being treated in a specific form of treatment. For example, it would be necessary to specify if the treatment is designed to produce specific symptomatic or specific personality changes with what types of clinical problems. Methodologically, the results from separate outcome studies are not likely to be comparable due to this diversity of measures and this presents a problem for the accumulation of knowledge in the field. Strategies for remedying this situation have been to suggest a core battery of assessment measures for psychotherapy outcome which involves measurement from different sources, modalities and content areas (Waskow &

Parloff, 1975). However, there is some controversy over the use of a specific core battery. Some of the objections involve disagreements over the adequacy of individual instruments, disputes over the relevance of specific instruments to different clinical problems and doubts about whether a single core battery is feasible given different conceptual approaches to treatment and the different types of changes they seek (Lambert, 1979). However, there is agreement in the literature that the measurement of psychotherapy outcome must involve measurements from various perspectives and modalities in order to appreciate the multidimensionality of the change process (Lambert, Christensen & DeJulio, 1983).

Finally, this section will close with a discussion of another recent trend in psychotherapy research. Parloff et al. (1986) described the increasing integration of psychotherapy process and outcome within single research projects. This type of research more directly addresses the issue of common versus specific factors in psychotherapeutic change and outcome. In addition, this trend in research can facilitate the exploration of the more conceptually sophisticated question, posed by Strupp and Binder (1984), of how common and specific psychotherapeutic processes combine to effect positive psychotherapy outcome. This type of

research is more likely to lead to the illumination of the effective ingredients in beneficial psychotherapy. The next section will review the research pertaining to the relationship of process and outcome in psychotherapy.

3. PSYCHOTHERAPY PROCESS X OUTCOME RESEARCH

Since there has been some agreement about the beneficial impact of psychotherapy based on empirical research (Lambert et al., 1986; Parloff et al., 1986; Strupp & Binder, 1984), researchers have increasingly turned toward exploring the effective ingredients in psychotherapy through the integration of process and outcome in psychotherapy research. In this section, a review of some of the major process variables studied in the empirical literature will be presented. In addition, some of the limitations of this research and directions for further research will be discussed. This review will pertain to the empirical literature conducted with actual patients and therapists in clinical settings.

Orlinsky and Howard (1986) have defined psychotherapy process as that which can be observed to occur between and within the patient and the therapist during their work together. These authors suggested a

model for categorizing the various elements of psychotherapy. This model will be used in order to present some of the most researched process variables in an organized manner. Their model included elements called the therapeutic contract, therapeutic interventions and the therapeutic bond.

The therapeutic contract was defined by these authors as consisting of the rules and expectations governing the patient's and therapist's role performance in relation to each other. Conversational behavior of the therapist and patient has been widely researched. It has been studied in terms of the amount of the therapist's and patient's speech. Interest in these variables has been generated by the common notion that conversation is an important aspect of psychotherapy and that without patient and therapist verbal activity relatively little therapeutic work can be accomplished. However, the usefulness of these variables are questionable since they have been studied without respect to content of speech. It is more likely that what patients and therapists talk about is more important than the actual quantity of speech. The interest in these variables may reflect in part the simplicity and relative objectivity with which they can be measured. The empirical findings relating therapist amount of speech to

therapeutic outcome have been very inconsistent. Only a couple of studies have found a significant positive correlation (Friedlander, 1981; Truax, 1970). However, the majority of the studies have found no significant relationship between therapist speech and therapy outcome (Barrington, 1961; Scher, 1975; Staples & Sloane, 1976). The empirical research with respect to patient's amount of speech has been more consistent in yielding positive correlations with therapy outcome as measured from a variety of sources (McDaniel, Stiles & McGaughey, 1981; Staples & Sloane, 1976; Staples, Sloane, Whipple, Cristol & Yorkston, 1976). Thus, it seems that patient's amount of speech may be an important aspect of psychotherapeutic process. Some researchers have suggested this variable may be tapping a dimension of patient involvement in psychotherapy (Staples et al., 1976). As already mentioned, the usefulness of this variable is questionable since it is a crude and unsophisticated measure of psychotherapy process. Another limitation of the research in this area stems from the difficulty in comparing across studies due to the different ways in which patient and therapist speech has been measured. For example, patient/therapist amount of speech has been measured in terms of total speech time (Staples & Sloane, 1976; Staples et al., 1976), length of response (Truax,

1970), number of utterances (McDaniel et al., 1981) and number of words per response (Barrington, 1961). There seems to be no accepted standard measurement in the literature.

Another process variable in the empirical literature relates to the manner in which the therapist enacts his role performance with the patient. This has been studied with respect to therapist collaboration with the patient as opposed to the therapist adopting an authoritative or directive approach. Interest in this variable has stemmed from theories of non-directive versus directive approaches to psychotherapy. The empirical findings with respect to this variable have been inconsistent and thus preclude any firm statement about its relationship to psychotherapy outcome. One study has found a positive relationship between therapist directiveness and therapy outcome (Alexander, Barton, Schiavo & Parsons, 1976). Some studies have found a positive relationship between therapist collaboration and psychotherapy outcome (Cooley & Lajoy, 1980; Jacobs & Warner, 1981; Lorr, 1965; Morrison, Libow, Smith & Becker, 1978). However, several studies have found no significant relationship between therapist collaboration or therapist directiveness with psychotherapy outcome (Baer, Dunbar, Hamilton & Beutler, 1980; Mintz, Luborsky & Auerbach, 1971; Staples et al.,

1976). Several major difficulties with all of these studies exist. First, these studies failed to consider the content and appropriateness of therapist directiveness as an important variable. Instead, they just utilized frequency counts of therapist directiveness as their measure. Second, only one of the studies directly compared therapist collaboration and therapist directiveness (Morrison et al., 1978). Third, the studies investigated different therapy modalities, i.e., individual, group and family therapy, which severely limits their comparability. For example, Alexander et al. (1976) studied family therapy with adolescents and Morrison et al. (1978) investigated adult group therapy. Fourth, the majority of the studies either did not adequately specify the patient population or utilized a heterogeneous group of patients without investigating patient diagnosis as a variable in the study. Finally, many of the studies utilized therapists without adequately specifying their orientation to psychotherapy which further limits the comparability of these studies.

The process variable of patient collaboration with the therapist has received a great deal of investigation in the empirical literature. Interest in this variable has been generated in part from the theoretical importance of the working alliance as a therapeutic agent

of change (Greenson, 1967). The empirical literature has demonstrated a relatively consistent pattern of significant positive correlations between patient collaboration with the therapist and favorable psychotherapy outcome (Conrad, 1952; Crowder, 1972; Grigg & Goodstein, 1957; Lorr & McNair, 1964; Rosenbaum, Friedlander & Kaplan, 1956; Saltzman, Leutgert, Roth, Creaser & Howard, 1976; Schauble & Pierce, 1974). A limitation with these studies is that many of the studies involved university students as patients with relatively mild psychological difficulties so that the generalizability of these results to other patient populations is limited (Crowder, 1972; Grigg & Goodstein, 1957; Saltzman et al., 1976; Schauble & Pierce, 1974). In addition, all the studies used different rating scales of patient collaboration which somewhat limits comparability among the studies. However, all of the rating scales seem to converge on various aspects of patient collaboration such as "patient actively involved in treatment in a non-demanding, non-dependent manner", "patient seeking help and support in a cooperative manner", "patient actively participated in the resolution of his problems", "patient actively participates and accepts responsibility for his difficulties" and "patient actively cooperates with the therapist and is committed

to change". In general, these research findings suggest the importance of this variable in psychotherapy and its inclusion in future research studies. Another aspect of this body of empirical literature is that collectively these studies represent measures of process and outcome from various perspectives. For example, process ratings were taken from patient, observer and therapist ratings. Similarly, outcome measures reflected patient, therapist, and observer perspectives as well as outcome measured from psychological test scores. Since there is no agreement about the relative importance of one perspective over another, researchers have argued for the use of multiple perspectives of process and outcome (Orlinsky & Howard, 1986). Thus, the consistency of the findings on patient collaboration across these various measurement perspectives strengthens the view that it is an important variable in effective psychotherapy.

Another useful category for organizing the psychotherapy process x outcome literature refers to therapeutic interventions. This category is comprised of specific techniques conducted by therapists. It would also be practical for organizational purposes to include in this category the patient's participation in these therapeutic interventions. Therapist exploration is the process variable that has received a large amount of

research interest. This variable refers to the therapist's use of questions, responses and comments to gather information and aid patients in exploring various aspects of their experience. Interest in this variable has been generated by the emphasis of psychodynamic therapists on the importance of this variable in facilitating psychotherapeutic change (Bibring, 1954; Glover, 1955). Although the theoretical importance of this variable is clear, the body of empirical research presents an equivocal picture. Studies have found no significant correlations between therapist exploration and psychotherapy outcome across a wide range of process and outcome perspectives (Elliot, Barker, Caskey & Pistrang, 1982; Staples et al., 1976). The studies that have found positive significant correlations demonstrate an inconsistent picture in that therapist exploration was related to therapy outcome in only two process x outcome perspective categories. For example, some positive correlations have been found only when therapist exploration was rated by observers and outcome was rated by therapists and when therapists rated their amount of exploration and outcome was assessed by psychological tests (Gomes-Schwartz, 1978; O'Malley, Suh & Strupp, 1983; Rounsaville, Weissman & Prusoff, 1981). The other

process x outcome perspective categories yielded mostly non-significant findings.

There are major flaws with this body of research which may explain in part these inconsistent findings. First, many of the studies investigated short-term therapy in which it might be argued that less therapist exploration would be involved due to the brevity of treatment (Gomes-Schwartz, 1978; O'Malley et al., 1983; Rounsaville et al., 1981; Staples et al., 1976). Second, several of the studies investigated the relationship of psychotherapy process in early therapy sessions with overall therapy outcome which may have mitigated positive significant findings since it could be argued that early sessions would be characterized by fewer in-depth therapist exploratory comments (Gomes-Schwartz, 1978; O'Malley et al., 1983; Staples et al., 1976). Third, the study by Elliot et al. (1982) related in their discussion that there was a flaw in the method they used in measuring therapist exploratory comments. Their measurement of therapist exploratory comments included helpful exploratory comments such as open-ended questions focusing on helping the patient explore his experiences as well as unhelpful questions involving tangential topics and inappropriately timed probes. Thus, their measurement was confounded with inappropriate

exploratory comments by the therapist. In light of these methodological and conceptual flaws, it is believed that this variable remains an important one for future psychotherapy research.

The process variable of therapist support is another therapeutic intervention that has received attention in psychotherapy process x outcome research. The empirical studies investigating this variable have predominantly indicated no significant relationship between the therapist's provision of support and positive therapeutic outcome (Elliot et al., 1982; Kaschak, 1978; Rosenbaum et al., 1956; Staples et al., 1976; Werman, Agle, McDaniel & Schoof, 1976). One study by Ryan and Gizynski (1971) found a positive relationship between therapist support and positive therapeutic outcome. In this study, therapist support was defined in terms of the therapist fostering positive expectations in the patient. However, this study is problematic in that it utilized retrospective reports of therapy from both patients and therapists. Another study conducted by Dreiblatt and Weatherley (1965) found a significant positive relationship between therapist support and positive outcome. However, this study is flawed in that it provided poor specification of the definition of therapist support and it utilized a highly limited and

specific form of therapy called brief contact therapy which involved "friendly" contacts with newly hospitalized patients. Thus, the results of this study are quite limited and cannot be generalized to other forms of therapy. In general, the empirical findings relative to therapist support seem to suggest that it has little beneficial therapeutic impact in terms of psychotherapy outcome. However, the limitations of these studies are marked. There is either poor specification of this variable or the use of different definitions by the various studies. The studies also failed to account for the content and appropriateness of therapist supportive interventions as important variables. Another limitation of research in this area is the lack of studies which explore the differential impact of therapist support on various patient populations. The majority of the studies involve high level neurotic patients. It might be that more severely disturbed patients would benefit more from therapist support and encouragement. This issue will be elaborated more fully at the end of this section.

Patient exploration is another process variable that has been widely investigated in relation to psychotherapeutic outcome. Patient self exploration can be viewed as an aspect of the patient's participation in

the therapeutic process and with the therapist's interventions. Most psychotherapies concur on the importance for the patient to explore the various aspects of his personal and private experience. However, the empirical studies relating patient self exploration to positive therapeutic outcome have yielded highly inconsistent findings. Some studies have found a positive relationship between patient self exploration measured by observers and positive therapeutic outcome as measured by therapist evaluations and psychological test scores (Braaten, 1961; Gomes-Schwartz, 1978; Kirtner & Cartwright, 1958; O'Malley et al., 1983; Schauble & Pierce, 1974). However, a couple of these studies have found only relatively weak evidence for a positive relationship. For example, Gomes-Schwartz (1978) and O'Malley et al. (1983) found no significant relationship between patient self exploration and outcome when patient self exploration was measured by observers and positive outcome was assessed from both patient and rater perspectives. In addition, a majority of studies have found no significant relationship between patient self exploration and positive psychotherapy outcome as measured from perspectives of the patient, therapist and observer (Kurtz & Grummon, 1972; McDaniel et al., 1981;

Prager, 1971; Staples et al., 1976; Truax, Wargo & Volksdorf, 1970; van der Veen & Stoler, 1965).

One of the major problems with this body of research pertains to the measurement of patient self exploration. These various studies tend to measure patient self exploration in terms of the amount of self exploratory comments or amount of self disclosures or spontaneity of self exploratory comments. Such studies fail to explore the meaningfulness of the patient's self exploration which may be a more important aspect of patient exploration for predicting positive therapeutic change. Other methodological difficulties are evidenced in this body of research. For example, a majority of the studies investigated short-term therapy (Gomes-Schwartz, 1978; Kurtz & Grummon, 1972; McDaniel et al., 1981; O'Malley et al., 1983; Staples et al., 1976; Truax et al., 1970). One might argue that in short-term therapy there is less emphasis on exploratory processes relative to long-term psychotherapy. Therefore, this confound might account in part for the inconsistent findings with respect to this process variable. Another methodological flaw was evidenced in the studies by Kurtz and Grummon (1972) and McDaniel et al. (1981). Both of these studies found a very narrow range of patient self exploration in their data which may have contributed to their non-significant

findings between patient self exploration and psychotherapy outcome. Finally, the study conducted by van der Veen and Stoler (1965) was based on a very small sample size of 15 subjects and as a consequence its findings are limited.

Another heuristic category for organizing the process x outcome empirical literature refers to the therapeutic bond or relationship. This category can be thought of as comprised of characteristics of the therapist offered relationship as well as the patient's involvement or engagement within the therapeutic relationship. Interest in this general category has been generated from various theoretical sources. Carl Rogers (1957) asserted the importance of three therapist offered relationship characteristics, i.e., therapist genuineness, empathic understanding and unconditional positive regard, in facilitating therapeutic gains. More recently within the psychoanalytic orientation, Kohut (1984) has emphasized the therapist's provision of empathy and empathic interpretations in effective psychotherapy especially for patients suffering from narcissistic pathology. Other theorists within the psychoanalytic tradition have identified the therapeutic relationship as a major factor in therapeutic change (Greenson, 1967; Langs, 1973; Menninger & Holtzman,

1973). Additionally, object relations theorists within the psychoanalytic orientation have stressed the therapist's provision of a "good" relationship as essential for affecting significant psychotherapeutic change (Fairbairn, 1952; Guntrip, 1971; Winnicott, 1965).

The process variable of therapist offered genuineness has received a great deal of attention in the empirical literature. Therapist genuineness refers to the therapist's ability to be aware of his own inner experiences and to present himself to the patient in a manner which reflects openness and sincerity. This therapist quality precludes the presentation of a specific role or facade. However, the research findings with respect to therapist genuineness and psychotherapy outcome have been highly inconsistent and no firm conclusions can be drawn from the empirical literature. Several studies have found significant positive correlations between therapist offered genuineness and positive psychotherapeutic outcome as measured from psychological test scores (Gross & DeRidder, 1966; Melnick & Pierce, 1971; Schauble & Pierce, 1974; Truax, 1963; Truax, 1966; Truax et al., 1966). Other studies have found inconsistencies in the relationship between therapist genuineness and psychotherapeutic outcome. For example, Barrett-Lennard (1962) found significant

positive relationships between therapist genuineness as measured from the patient's perspective and outcome as measured from test measures and the therapist's perspective. However, this study found no significant relationship between therapist measured genuineness and outcome measured by psychological tests. Hansen, Moore & Carkhuff (1968) failed to find a significant relationship between patient measured therapist genuineness and outcome assessed from personality tests. However, this same study found a significant relationship between observer measured therapist genuineness and personality test measured outcome. Saltzman et al. (1976) found no significant relationship between therapist measured genuineness and patient measured outcome but it did find a positive significant relationship between therapist measured genuineness and therapist measured outcome. In addition, several studies have demonstrated no significant relationship between therapist offered genuineness and psychotherapy outcome across a wide variety of process and outcome perspectives (Abramowitz & Abramowitz, 1974; Garfield & Bergin, 1971; Staples & Sloane, 1976; Staples et al., 1976; Truax, Wittmer & Wargo, 1971; van der veen, 1967). It is noteworthy that many of the studies finding significant positive relationships between therapist genuineness and

psychotherapy outcome were conducted by Truax and his colleagues. Since the positive findings of Truax and his colleagues have not been replicated by others, the generalizability or external validity of their findings can be questioned.

One of the major difficulties with the studies finding no significant relationship between therapist offered genuineness and psychotherapy outcome is that a majority of them utilized limited patient samples in terms of high level neurotic patients (Abramowitz & Abramowitz, 1974, Garfield & Bergin, 1971; Staples and Sloane, 1976; Staples et al., 1976). As will be discussed more fully at the end of this section, it can be argued that therapist offered relationship characteristics may be a more prominent and important aspect of effective psychotherapy with patients suffering from more severe personality disorders. The inconclusive and inconsistent findings of these studies also may reflect in part the methodological inconsistencies among these studies. These studies have employed various instruments to measure therapist genuineness such as the Barret-Lennard Scale, the Truax-Carkhuff Scale, the Halkides Scale and one study by Saltzman et al. (1976) developed their own measure of genuineness or openness. Another methodological

inconsistency involves the sampling of therapy sessions for measurement of psychotherapy process. Some studies sampled only one session from early phases in therapy (Barrett-Lennard, 1962; Staples & Sloane, 1976; Staples et al., 1976). Other studies sampled sessions at different points in therapy and computed an average across these sessions usually without noting differences between the sessions (Garfield & Bergin, 1971; Gross & DeRidder, 1966; Truax et al., 1971; van der Veen, 1967). Another problem with the literature is that several of the studies have used small sample sizes which limit the generalizability of their findings (Barrett-Lennard, 1962; Gross & DeRidder, 1966; Melnick & Pierce, 1971, Staples & Sloane, 1976; van der Veen, 1967).

Therapist affirmation has probably been the most extensively investigated process variable in the process x outcome literature. Therapist affirmation refers to therapist relationship characteristics involving a sense of caring, warmth and acceptance toward the patient. Unfortunately, as was the case with the therapist offered characteristic of genuineness, the empirical findings with respect to therapist affirmation are highly inconsistent and no firm conclusions can be drawn from the literature. Numerous studies have found significant positive relationships between therapist affirmation and

psychotherapy outcome across various process and outcome perspectives (Alexander, Barton, Schiavo & Parsons, 1976; Bent, Putnam, Kiesler & Nowicki, 1976; Brown, 1970; Gross & DeRidder, 1966; Melnick & Pierce, 1971; Ryan & Gyzinski, 1971; Schauble & Pierce, 1974; Truax, Carkhuff & Kodman, 1965). However, several studies have found inconsistencies with respect to the relationship between therapist affirmation and psychotherapy outcome across various process and outcome perspectives. For example, Bottari & Rappaport (1983) found a significant positive relationship between therapist affirmation measured from the patient's perspective and psychotherapy outcome based on psychological test scores, however, they found no relationship between affirmation measured by the therapist and outcome measured by a psychological test. In addition, Saltzman et al. (1976) found no relationship between therapist affirmation assessed from the patient's and therapist's perspectives and outcome assessed from the patient's perspective. However, these same authors found a positive relationship between therapist affirmation measured from the patient's and therapist's perspectives and outcome measured from the therapist's perspective. Gomes-Schwartz (1978) measured therapist affirmation from the observer perspective and found a positive relationship to outcome as measured by the

therapist and psychological tests, however, she found no relationship to outcome as assessed by independent clinicians. There appears to be no discernible pattern to the various inconsistencies found in these and other similar studies. There have also been numerous studies which have found no significant relationship between therapist affirmation and psychotherapy outcome from a wide range of process and outcome perspectives (Abramowitz & Abramowitz, 1974; Garfield & Bergin, 1971; Martin & Sterne, 1976; Staples & Sloane, 1976; Staples et al., 1976; Truax, Wargo, Frank, Imber, Battle, Hoehn-Saric, Nash & Stone, 1966; van der Veen, 1967).

In these studies which have found no significant relationship between therapist affirmation and psychotherapy outcome, a similar pattern emerges as it did with therapist genuineness. The pattern is that a majority of these studies involved neurotic level patients (Abramowitz & Abramowitz, 1974; Garfield & Bergin, 1971; Staples & Sloane, 1976; Staples et al., 1976; Truax et al., 1966). It can be suggested that therapist offered relationship characteristics or conditions are a more salient aspect of psychotherapy for more severely disturbed patients. A study by Suh, O'Malley & Strupp (1986) lends some support to this notion. In a post hoc analysis of their data, they found

that therapist affirmation or warmth was positively related to favorable outcome especially for those patients who were judged to have a poor initial prognosis but achieved positive therapeutic gains.

As discussed in relation to therapist genuineness, a possible explanation for the inconclusive findings with respect to therapist affirmation may be the methodological inconsistencies that pervade the literature. Two of the most prominent inconsistencies across these studies involve the use of many different instruments to measure therapist affirmation and the use of multiple methods to sample process dimensions from the course of psychotherapy. Among the many instruments for measuring therapist affirmation across these studies are: 1.) the Truax and Carkhuff scale for unconditional positive regard used by Melnick and Pierce (1971), Schauble and Pierce (1974) and Staples et al. (1976); 2.) the Barrett-Lennard scale for unconditional positive regard used by Abramowitz and Abramowitz (1974) and Gross and DeRidder (1966); 3.) the Truax scale for unconditional positive regard used by Truax et al. (1965) and Truax et al. (1966); 4.) the Vanderbilt Psychotherapy Process scale for measuring warmth and friendliness used by Gomes-Schwartz (1978); and 5.) the Therapy Rating scale for therapist acceptance used by Martin and Sterne

(1976). In addition, some studies have developed their own measurement instruments (Alexander et al., 1976; Bent et al., 1976; Saltzman et al., 1976). The use of multiple methods to sample process variables has also been widespread among these studies. For example, some studies exclusively sampled the first therapy session (Brown, 1970; Staples & Sloane, 1976). Other studies sampled process variables by averaging across two to four therapy sessions (Gomes-Schwartz, 1978; Melnick & Pierce, 1971; Truax et al., 1965). Other studies sampled process variables after the whole course of therapy was completed (Bent et al., 1976; Ryan & Gizynski, 1971).

Another therapist offered relationship characteristic which has received wide attention in the empirical studies relating psychotherapy process to outcome is therapist empathy. In general, therapist empathy refers to a process in which the therapist attempts to understand and experience the explicit and implicit facets of the patient's experience and then attempts to communicate his understanding to the patient in a manner which further clarifies or enriches the patient's awareness and understanding of his own experiences. In an early article, Kohut (1959) described empathy as a unique and indispensable tool or mode of observation for gathering psychological data. He

discussed introspection as involving the analysis of one's own inner experiences. He labeled the extension of introspection as vicarious introspection or empathy which is the method of understanding the inner experiences of another person. This mode of observation involves placing oneself into another's position and through vicarious introspection one can attempt to discover what the other is experiencing. It is important to note that Kohut viewed empathy as neutral in that it could be used in a beneficial or harmful manner. According to Kohut, the capacity for prolonged empathic observation by the therapist was believed to be crucial for the practice of psychoanalysis or intensive psychoanalytic psychotherapy. In a later book, Kohut (1984) expanded his conceptualization of empathy. In addition to viewing empathy as an indispensable mode of observation, he viewed empathy as a means of expanding the self to include the other thereby establishing an important psychological bond between individuals. He also viewed empathy as functioning as a psychological nutriment without which human life could not be sustained. In addition, Kohut (1984) stated that empathy or empathic understanding when communicated properly has a curative effect with narcissistic character disorders through the patient's experience of being understood by the

therapist. However, he did underscore that this curative effect is "ephemeral". Goldberg (1983) discussed the division in psychoanalysis pertaining to the role of empathy. He concluded that empathy appears to have a therapeutic effect when it can be sustained by the therapist. However, Gedo (1980) criticized this tendency to view empathy as a "quality of behavior that should characterize the conduct of the analyst" and as an agent of healing. He preferred to define empathy solely as a tool or mode of observation.

As with the other therapist relationship characteristics reviewed, the empirical findings are inconsistent. Many studies have found a significant positive relationship between therapist empathy as measured from various sources and psychotherapy outcome as measured from various sources (Gross & DeRidder, 1966; Martin & Sterne, 1976; Melnick & Pierce, 1971; Schauble & Pierce, 1974; Truax, 1966; Truax et al., 1966; Truax et al., 1971). However, several studies have found inconsistent findings with respect to therapist empathy and psychotherapy outcome over various sources of measurement (Barrett-Lennard, 1962; Cooley & Lajoy, 1980; Hansen et al, 1968; Kurtz & Grummon, 1972). For example, Kurtz and Grummon (1972) conducted an extensive study in which therapist empathy was measured from patient,

therapist and observer perspectives and psychotherapy outcome was measured from the perspectives of the patient, the therapist and psychological test scores. They found only three significant findings out of the nine different relationships they investigated. They found that the patient's perspective of therapist empathy was positively and significantly related to psychotherapy outcome measured from the therapist's perspective and psychological test scores. Additionally, they found that therapist empathy as measured by observers or raters was significantly related to therapy outcome measured by psychological tests. Further inconsistency is demonstrated by other studies which have found no significant relationship between therapist empathy and psychotherapy outcome as measured from various process and outcome perspectives (Abramowitz & Abramowitz, 1974; Bergin & Jasper, 1969; Garfield & Bergin, 1971; Magnelli, 1976; Staples & Sloane, 1976; Staples et al., 1976).

In general, no firm conclusions can be drawn from this research concerning the relationship of therapist empathy to psychotherapy outcome. However, there is one fairly consistent pattern in the literature. A majority of studies have found significant positive relationships between patient measured therapist empathy and psychotherapy outcome as measured from various

perspectives (Barrett-Lennard, 1964; Cooley & Lajoy, 1980; Gross & DeRidder, 1966; Kurtz & Grummon, 1972; Martin & Sterne, 1976; Truax, 1966). Although other studies have found no significant relationships with respect to these variables (Abramowitz & Abramowitz, 1974; Hansen et al., 1968; Staples et al., 1976), the findings tend to suggest that a patient's perception of being understood by the therapist is positively related to therapeutic gains. These results underscore the importance of studying psychotherapy process from various vantage points or perspectives.

As discussed with the other therapist offered relationship characteristics, the majority of the studies finding no significant relationship between therapist empathy and psychotherapy outcome were conducted on patients described as neurotics (Abramowitz & Abramowitz, 1974; Bergin & Jasper, 1969; Garfield & Bergin, 1971; Staples & Sloane, 1976; Staples et al., 1976). This limitation in patient sampling is problematic since it can be suggested that therapist offered relationship characteristics may be a more salient aspect of the psychotherapeutic process with more severely disturbed patients.

Methodological inconsistencies among these studies may contribute in part to the mixed findings with respect

to therapist empathy and psychotherapy outcome. As discussed with other process variables, two of the major inconsistencies involve the multiple instruments used to measure empathy and the multiple methods used to sample process variables from the course of psychotherapy. In support of the former criticism of the literature, Kurtz & Grummon (1972) have found weak and non significant relationships between various measures of therapist empathy.

A final process variable that has been widely investigated in the process x outcome literature and that can be included in the general category of the therapeutic relationship involves the patient's engagement in the relationship. Numerous studies have found significant positive relationships between patient engagement and positive therapeutic outcome across various measurement perspectives of process and outcome (Gendlin, Jenny & Shlien, 1960; Grigg & Goodstein, 1957; Jones & Zoppel, 1982; Kapp, Gleser, Bessenden, Emerson, Winget & Kashdan, 1964; Lorr & McNair, 1964; Suh et al., 1986). A study conducted by Saltzman et al. (1976) found some inconsistent findings with respect to this variable. For example, they found that patient's ratings of their own engagement in the therapy relationship was positively related to therapist's ratings but not patient's ratings

of positive outcome. Additionally, a study conducted by Ryle and Lipshitz (1976) also found inconsistencies when using various perspective measures of process and outcome. However, the findings of this latter study are highly questionable since they are based on an inadequate sample size of eight subjects. The general trend of this research indicates a highly consistent positive relationship between patient engagement and psychotherapy outcome. Although there are some difficulties with the comparability of these studies due to the various definitions of patient engagement, the high level of consistency in these studies strongly suggest the importance of patient engagement in the therapeutic relationship as a predictor of positive therapeutic outcome. A careful evaluation of these research articles yields converging dimensions of the definition of this process variable. For example, patient engagement appears to involve the patients active participation and involvement in treatment through the ability to openly and spontaneously express thoughts and feelings to the therapist, to express emotional reactions focused on the therapist, to develop a good rapport with the therapist and to explore problems in a collaborative manner with the therapist.

In summary, the empirical research with respect to the most widely investigated psychotherapy process variables, has generally yielded inconsistent and inconclusive findings. Only the process variables of patient collaboration and patient engagement in the therapeutic relationship have been found to be consistently related to positive psychotherapy outcome. Thus, the current empirical literature points to these process variables as effective ingredients in beneficial psychotherapy. These positive findings are consonant with various theorists who emphasize the importance of the therapeutic alliance and the therapeutic relationship in effecting positive change (Greenson, 1967; Langs, 1973; Menninger & Holtzman, 1973). However, the inconsistent findings with respect to the other process variables is disappointing.

The quality of the process x outcome studies reviewed can be critiqued along several dimensions. These studies are fraught with difficulties which threaten the internal and external validity of their results. These weaknesses also may contribute in part to the inconsistent findings in this area of research. First, all of the studies reviewed which investigate the relationship between process and outcome variables are correlational in nature. As a consequence, these studies

cannot address the issue of causal relations between sets of process variables and outcome variables. The research is limited to conclusions that certain process variables are associated with certain outcome variables but this does not provide information concerning causality or an explanation of the manner in which the variables are related. In those studies where process variables are measured at the same time as outcome ratings, one can only make statements that certain aspects of process are indicative of favorable or unfavorable outcome. In studies where a period of time has elapsed between assessment of process variables and measurement of outcome, one can only comment that certain features of process are predictive of favorable or unfavorable outcome. Conclusions cannot be made that process variables are productive or causative of favorable or unfavorable outcomes. Due to their correlational design, these studies cannot rule out alternative explanations for changes in therapeutic outcome. For example, changes in therapeutic outcome could be attributed to changes in a person's life circumstances such as obtaining a new job as opposed to the process variables measured in the study. In addition, correlations found between process and outcome variables can be attributed to bi-directional influences. For example, the finding of a positive

correlation between patient exploration of emotional experiences and therapeutic outcome can have various explanations. It might be that patient exploration leads to therapeutic change but an equally plausible explanation could be that patients who change in therapy tend to engage in more exploration of their feelings. Studies with correlational designs cannot discount these and other plausible alternate explanations and thus cannot address the issue of causal links.

Another general weakness in the quality of the studies reviewed pertains to their lack of clear specification of the patients, therapists and therapeutic interventions involved. In the studies reviewed, the patients are inadequately described in terms of broad diagnostic categories such as neuroses, personality disorders and psychoses which represent heterogeneous sets or groupings of patients. In addition, many studies reported utilizing patients from these different diagnostic categories without investigating differential process/outcome effects with different patient populations. Thus, these heterogeneous samples are inappropriately studied as homogeneous samples of patients. Even in the better designed studies where there is an attempt to specify a homogeneous patient sample their efforts are not successful. For example,

O'Malley et al. (1983) attempted to study a relatively homogeneous sample of male patients achieving clinical scale elevations on the depression, anxiety and social withdrawal scales of the Minnesota Multiphasic Personality Inventory. However, a careful reading of their study indicated that only one third of their sample achieved this criteria and that many of the other patients were simply and inadequately described as having "borderline traits". Similarly, therapists are inadequately described in these studies in terms of general orientation to therapy and perhaps some mention of experience level. Many of the studies utilized heterogeneous groups of therapists without investigating these therapist variables. Types of interventions are also inadequately described in these studies by merely using broad labels such as behavioral, Rogerian, eclectic or psychoanalytic. In addition, none of the studies reviewed attempted to determine if treatment interventions were appropriately carried out by the therapists. It was just assumed that therapists were conducting their respective treatments properly. Even the studies considered to be well designed by experts in the field failed to address this issue (O'Malley et al., 1983; Staples et al., 1976).

Another difficulty with these studies involves the manner in which process variables are measured and operationalized. The process variables tended to be vaguely described using a few phrases or sentences. In addition, they are operationalized in simplistic terms which neglect important theoretical concepts. For example, patient and therapist speech were studied as process variables in several studies and were measured by some sort of frequency count but the important issues concerning the content and meaningfulness of the speech were disregarded. Similarly, process variables of therapist exploration and therapist direction were operationalized without respect to the important concepts of the appropriateness of these therapeutic interventions.

Another weakness with these studies involves the generalizability or external validity of their findings. The samples of patients, therapists and settings studied are unrepresentative of the full range of patients, therapists and settings involved in psychotherapy. The patients most likely to be studied are young, educated and middle class with neurotic problems. The therapists are usually student therapists such as graduate students, psychology interns or psychiatric residents. The settings are typically university affiliated counseling

centers, psychology clinics and psychiatric clinics or veterans administration clinics.

Several pervading limitations of the research on psychotherapy process and outcome have implications for directions in future research. One of the limitations of the psychotherapy process research pertains to the narrow range of process variables investigated in any one study. The majority of studies have researched process variables in relative isolation from one another. The major process variables reviewed above can generally be organized into three dimensions: 1.) the patient's involvement or participation in the therapeutic interaction, 2.) therapeutic interventions, 3.) the quality of the relationship offered by the therapist. The patient's participation or involvement in the therapeutic interaction can include the process variables of patient collaboration and patient engagement. Therapeutic interventions can include process variables of therapist exploration, therapist support and patient exploration. Finally, therapist offered relationship qualities can include therapist genuineness, affirmation and empathy. Only a few studies have included process variables from each of these dimensions in order to address the more sophisticated question of how these various process variables combine to predict positive

psychotherapeutic outcome (Gomes-Schwartz, 1978; O'Malley et al., 1983, Staples et al., 1976; Suh et al., 1986). In addition, all of these studies are limited in that they were conducted with short-term psychotherapy in which therapist and patient exploration may not be as salient an aspect in the psychotherapeutic process. Strupp and Binder (1984) have underscored the importance of combining numerous process variables in psychotherapy process x outcome research. They argued that research attempts to isolate process variables such as therapist techniques or therapist offered relationship characteristics are simplistic and inadequate since the psychotherapeutic process always involves both aspects simultaneously. They further argued that therapist techniques, therapist offered relationship characteristics and patient's involvement in the relationship are inextricably interwoven since a therapeutic intervention is always made within the context of a therapeutic relationship which involves therapist offered characteristics and patient participation or involvement. Therefore, it is suggested that future research should employ a wide range of process variables from each of the dimensions discussed above. In addition, future research might be directed

toward investigating psychotherapy which is not time limited.

Another limitation mentioned in the above review, pertains to the limited patient samples studied and the failure of researchers to specifically investigate the relationship of therapeutic process and outcome with respect to patients varying in the severity of psychological disturbance. The majority of studies have been conducted with neurotic level patients who can be characterized by high motivation for therapy, psychological mindedness, good capacity to form collaborative therapeutic relationships and good ego strength reflected in relatively stable relationships, circumscribed life difficulties and focused symptoms. In contrast, there is a dearth of studies that have been conducted with more severely disturbed patients with serious character disorders who can be described by low levels of motivation for therapy, limited psychological mindedness, limited ability to form a collaborative therapeutic relationship and poor ego strength in terms of a poor history of stable relationships, social adjustment problems in many areas of life and pervasive symptomatology. These patients are also more likely to be seen as mistrustful, hostile and inflexible in relation to others. The failure of studies to

systematically investigate this variable of severity of disturbance in relation to psychotherapy process and outcome may contribute in part to the highly inconsistent findings in the literature.

Within the psychodynamic/psychoanalytic orientation to therapy, various clinicians and theoreticians have proposed different psychotherapeutic strategies for these more severely disturbed patients. Blanck and Blanck (1974, 1979) have stressed the importance of supportive, ego covering and ego building therapeutic strategies rather than ego uncovering strategies for patients with low ego strength and serious characterological disturbance. Object relations theorists have emphasized the importance of the therapist's provision of a good therapeutic relationship for severely disturbed patients (Fairbairn, 1952; Guntrip, 1971). Similarly, Winnicott (1965) underscored the importance of the therapist's provision of a good relationship in his concept of the holding environment for such patients. Kohut (1984) has also accentuated the importance of the therapist offered relationship characteristic of empathy in the treatment of severely disturbed patients especially those suffering from serious narcissistic pathology. Consonant with these theoretical perspectives, it could be predicted that psychotherapy process with patients having poor ego

strength and more severe psychological disturbance would more likely be characterized by more emphasis on therapist offered relationship characteristics such as empathy, affirmation and genuineness, less exploratory therapist interventions, more patient hostility or negativism toward the therapist and more patient psychological distress. Whereas psychotherapy process with patients having good ego strength and less severe psychological disturbance would be characterized by less emphasis on therapist offered relationship characteristics such as empathy, affirmation and genuineness, more exploratory therapist interventions, less patient hostility or negativism toward the therapist and less patient psychological distress. An important investigation conducted at the Menninger Foundation by Kernberg, Bernstein, Coyne, Appelbaum, Horvitz and Voth (1972) supports the further study of patient severity of disturbance in relation to psychotherapy process and outcome. These researchers found that patient high initial ego strength was positively correlated with psychotherapeutic gain. Even more important with respect to this present discussion, they found that patients with low initial ego strength achieved more positive therapeutic gain when they were treated in supportive-expressive psychotherapy which emphasized ego building

and therapeutic relationship factors as opposed to psychoanalysis which focused on traditional uncovering or exploratory processes. Thus, it is strongly suggested that future research in psychotherapy process and outcome include patient variables of severity of disturbance and level of ego strength in order to more effectively unravel the complexities of the relationship between process and outcome.

As alluded to in the review of psychotherapy process variables, another limitation in the research integrating process and outcome pertains to the methodological strategy for sampling psychotherapy process over the course of treatment. The typical strategy involves sampling the psychotherapy processes of one session or computing an average of psychotherapy process ratings over several therapy sessions and then correlating these measures with overall outcome measures taken at the end of treatment or at some follow-up period. As already noted, a serious limitation of this strategy or paradigm involves the highly inconsistent manner in which specific therapy sessions are sampled across research studies in the literature. For example, some studies have sampled the first therapeutic hour whereas others have investigated process variables in various other therapy sessions, i.e., second, third, fourth, etc., and still

others have calculated a sum of specific therapy process measures over several psychotherapy sessions in the course of treatment. All of these studies have attempted to investigate the question of what psychotherapy process variables predict favorable positive therapeutic outcome, however, the inconsistency in the method of sampling process variables most likely contributes to the highly inconsistent findings in the research literature. Another flaw in this methodological strategy entails the highly questionable assumption that psychotherapy sessions are homogeneous with respect to psychotherapy process variables over the course of treatment.

Clinical experience would certainly challenge the assumption of homogeneity of psychotherapy sessions and suggest that psychotherapy sessions vary a great deal over the course of treatment with a specific patient and therapist. Consistent with this notion, empirical research has indicated that psychotherapy sessions with a specific patient/therapist dyad vary a great deal with respect to psychotherapy process variables (Gurman, 1973; Howard, Orlinsky & Perilstein, 1976; McDaniel et al., 1981; Mintz, Luborsky & Auerbach, 1971). For example, Mintz et al. (1971) found evidence of session to session variability in psychotherapy process variables even in adjacent psychotherapy sessions, i.e., the third and

fourth session. They also discussed that sampling psychotherapy sessions at more distal points in the course of treatment would increase variability in process ratings from session to session. Similarly, McDaniel et al. (1981) found that individual patient's percentage of utterances in various speech modes such as personal self disclosure and statements conveying objective information were variable from session to session. Correlations of individual patient's percentage of utterances in these speech modes averaged .41 for the second versus the middle session of therapy, .40 for the middle session versus the next to last session of therapy and .39 for the second session versus the next to last session of therapy. Thus, both clinical experience and empirical research have indicated that psychotherapeutic process varies from session to session with the same patient/therapist dyads.

As a consequence of these findings of session to session psychotherapy process variability and the inconsistent findings relating psychotherapy process to overall therapy outcome, researchers have suggested the use of an alternative research strategy or paradigm involving micro-outcomes (Orlinsky & Howard, 1986) or sub-outcomes (Elliot et al., 1982). This strategy of micro-outcomes or sub-outcomes involves correlating in-

session process variables to a more immediate measure of post session outcome rather than to some overall rating of psychotherapy outcome measured at the end of the whole course of treatment. For example, Elliot et al. (1982) utilized the procedure of correlating various in-session psychotherapy process variables, such as therapist response, to patient's and therapist's post session ratings of helpfulness. Orlinsky and Howard (1986) have proposed that the utilization of micro-outcome strategies might be a more fruitful approach to trace what psychotherapeutic processes predict overall psychotherapeutic outcome, i.e., macro-outcome, by exploring the relationship between psychotherapy process and micro-outcomes and then exploring the relationship between micro-outcomes and macro-outcomes. Consonant with this emphasis on an alternative strategy for integrating process and outcome in psychotherapy research, the next section will discuss the development of a micro-outcome or sub-outcome strategy involving psychotherapy session impact.

4. PSYCHOTHERAPY SESSION IMPACT

The development of psychotherapy session impact as an alternative strategy to investigate the relationship between psychotherapy process and overall psychotherapy outcome was initiated and pursued by William B. Stiles and his colleagues (Stiles, 1980; Stiles & Snow, 1984a; Stiles & Snow, 1984b; Stiles, Tupler & Carpenter, 1982). Their interest in the development of this alternate strategy was in part prompted by their failure to discover positive significant correlations between psychotherapy process variables and psychotherapy outcome. This failure occurred when they utilized the traditional methodology of correlating therapy process variables sampled in several sessions over the course of treatment with psychotherapy outcome measured at the end of the course of treatment (McDaniel et al., 1981). In addition, McDaniel et al. (1981) found that psychotherapy process variables such as patient personal disclosures and non-personal statements were highly variable from session to session. This session to session variability in process variables is consistent with the research conducted by Gurman (1973) in which it was found that therapist offered relationship conditions were highly

unstable across sessions with the same patient. In combination, these findings by McDaniel et al. (1982) and Gurman (1973) strongly contradict the assumption of homogeneity of psychotherapy sessions which underlies the traditional methodology of exploring the association of psychotherapy process variables and psychotherapy outcome. These findings strengthen the warning made by Kiesler (1966) in the early phases of psychotherapy research concerning the implausibility of assuming that psychotherapy process was homogeneous over the course of treatment. Thus, the traditional approach of sampling process variables from one session or from several sessions cannot be assumed to be representative of the therapeutic processes occurring over the course of treatment. As a consequence, Stiles and his colleagues have set forth to develop an alternative strategy to take full advantage of the session to session variability in psychotherapy process in order to ultimately investigate the effective ingredients in beneficial psychotherapy.

Psychotherapy session impact as defined by Stiles (1980) refers to psychotherapy sessions immediate effects in terms of the participants, i.e., patient and therapist, post session perceptions or evaluations of the session as a whole. Thus, therapy session impact can be seen as distinct from psychotherapy process, which

involves the measurement of in-therapy behaviors, attitudes and interactions, and psychotherapy outcome, which involves the measurement of the beneficial effects of psychotherapy on some standard criteria after the completion of treatment. According to Stiles (1980) and Stiles and Snow (1984a, 1984b), psychotherapy session impact can be viewed as a bridge or mediator between psychotherapy process and outcome. They argued that any durable beneficial effects of psychotherapy in terms of outcome are most likely the result of residual effects of psychotherapy sessions. These residual effects of therapy sessions most probably accumulate over many sessions in order to generate positive psychotherapy outcome. It is assumed in this approach that the residual effects of a therapy session are potentially discriminable by the participants' post session perceptions or evaluations of a therapy session.

The utilization of psychotherapy session impact as a strategy for studying psychotherapy process and outcome relationships involves three steps. First, studies must be conducted which attempt to investigate if session impact consistently varies on a small number of common dimensions which are easily measurable. Second, studies must then be conducted which attempt to correlate psychotherapy process variables with these dimensions of

psychotherapy session impact. Finally, since it cannot be assumed that therapist or patient evaluative dimensions of session impact are predictive of psychotherapy outcome, studies must be designed to correlate these dimensions of psychotherapy session impact with overall psychotherapy outcome. Thus, by the use of inference, this strategy would make possible the delineation of what psychotherapeutic processes mediated by psychotherapy session impact facilitate positive therapeutic outcome. This strategy is not flawed by the untenable assumption of homogeneity of psychotherapy sessions. In addition, Stiles (1980) has argued this strategy is a more feasible and practical approach to the study of process x outcome relationships in psychotherapy since it basically involves the psychotherapy session as the unit of analysis and not the whole course of psychotherapy.

Thus far, research on the development of this strategy has solely focused on step one involving the delineation of a small number of common dimensions which underlie patients' and therapists' ratings of session impact in terms of their perceptions and evaluations of the session as a whole. Stiles (1980) conducted a research project in which he factor analyzed patients' and therapists' ratings of their individual psychotherapy

sessions. These ratings were assessed immediately after each session using a short post session questionnaire composed of various bipolar adjective pairs in a seven point semantic differential format (Osgood, Suci & Tannenbaum, 1957). This sample was composed of 113 sessions of individual psychotherapy with adults taken from various phases of psychotherapy. The majority of the therapists were in private practice and had from 5 to 15 years of professional experience. The majority of the patients were white, middle or upper class and college educated. The results of the factor analysis yielded two distinct and independent dimensions as underlying both patients' and therapists' ratings of their therapy sessions. In combination, these two dimensions accounted for the majority of the variance in the patients' and therapists' ratings of their sessions. The first dimension of depth/value described a sense of potency, valuableness or productiveness of the session. This dimension was characterized by adjectives such as deep, valuable, full and special versus adjectives of shallow, worthless, empty and ordinary. The second dimension of smoothness/ease described feelings of relaxation and comfort within a session. This dimension was characterized by adjectives such as smooth, easy and pleasant versus adjectives of rough, difficult and

unpleasant. These same two dimensions were also found to underlie self analytic group members' evaluations and perceptions of their sessions (Stiles et al., 1982).

Stiles and Snow (1984b) conducted another study to replicate the findings of the two dimensions of session impact on a different sample of patients and therapists. This sample was composed of 942 sessions of adult individual psychotherapy taken from various phases in treatment. All of the therapists were in the process of their clinical psychology training at a university psychology department clinic. The patients included undergraduate and graduate students as well as community residents in the area. Stiles and Snow (1984b) replicated Stiles' (1980) previous findings in this new sample. Factor analyses yielded the same evaluative dimensions of depth/value and smoothness/ease as underlying both patients' and therapists' ratings of psychotherapy sessions. The findings of this same dimensional structure of session impact in all of these studies can be seen as evidence for their stability across different types of patients, therapists and situations. This stability is a necessary condition for the development of this strategy if it is to ultimately explore psychotherapy process x outcome relationships. In addition, other studies using a different post session

questionnaire have found two major independent evaluative dimensions of comfort and effectiveness of the session which seem analogous to those found by Stiles and his colleagues (Mintz, Auerbach, Luborsky & Johnson, 1973; Orlinsky & Howard, 1977). The advantage of the questionnaire developed by Stiles and his colleagues is that it is a much shorter and more easily scored instrument. It is noteworthy that the consistent findings of these two independent dimensions of depth/value and smoothness/ease tend to support the common notion in psychotherapy that productive or valuable sessions are not necessarily comfortable for the participants (Malan, 1979; Orlinsky & Howard, 1967).

Since the empirical research on session impact has indicated thus far the stability of the two evaluative dimensions of depth/value and smoothness/ease, the next step in the development of this strategy is to ascertain what psychotherapy process variables are consistently associated with these two dimensions of session impact. Thus, future research should be directed toward this endeavor especially with respect to what combination of psychotherapeutic process variables are related to these two dimensions of session impact. Although there has been no research conducted to address this question, predictions can be made concerning the associations

between the major categories of psychotherapy process variables gleaned from the above literature review and patients' ratings of these two dimensions of session impact. These predictions can be based upon the empirical research conducted on the relationship between psychotherapy process and outcome as well as theoretical perspectives on the importance of certain psychotherapy process variables in the therapeutic experience.

The session impact dimension of depth/value varies along a continuum of patients' ratings of sessions as deep and valuable to shallow and worthless. The empirical research regarding psychotherapy process x outcome relationships has consistently found that patient collaboration with the therapist and patient engagement in the therapeutic relationship are positively related to psychotherapy outcome as measured from various perspectives. Thus, it can be predicted that process variables tapping patient involvement and participation in therapy would be positively associated with patients' ratings reflecting depth and valuableness of the session. This prediction can be viewed as consistent with the theoretical emphasis on the importance of the therapeutic alliance in beneficial psychotherapy (Greenson, 1967; Zetzel, 1956). From the patient's vantage point, the therapeutic alliance refers to the patient's active

collaboration and cooperation with the therapist such as actively bringing up personal material for therapeutic work, listening to the therapist's interventions and reflecting upon experiences within therapy. It also involves the patient's realistic sense of trust and respect toward the therapist as a professional who seeks to provide help.

In the psychodynamic/psychoanalytically informed orientation to psychotherapy, writers have emphasized the generation and facilitation of emotional and cognitive insight through uncovering and exploratory processes such as therapist interpretations and clarifications as a crucial element in effecting change in psychotherapy (Bibring, 1954; Glover, 1955; Langs, 1973). Consistent with these theories, it can be predicted that both therapist exploration of the patient's experience and patient self exploration within psychotherapy are likely to be positively associated with patient's ratings of psychotherapy sessions as high in depth and valuableness.

Clinicians and theorists from various theoretical orientations have stressed the importance of therapist offered relationship characteristics as salient in effective psychotherapy. For example, Carl Rogers (1957) discussed therapist empathy, unconditional positive regard and genuineness as necessary and sufficient

conditions for productive psychotherapeutic movement. Object relations theorists in the psychoanalytic tradition have underscored the importance of the therapist providing a "good" therapeutic relationship in which the patient feels secure and understood (Fairbairn, 1952; Guntrip, 1971; Winnicott, 1965). Additionally, Kohut (1984) has described therapist empathy as a crucial therapist offered relationship characteristic for curative psychotherapy with narcissistic character disorders. Thus, it can be predicted from these theoretical perspectives that therapist offered relationship characteristics such as warmth, empathy and affirmation would be positively related to patients' ratings of depth and value of their psychotherapy sessions. Congruent with this prediction, it can also be expected that negative therapist attitudes toward the patient such as attitudes reflecting a lack of acceptance, respect and empathy would be more associated with patients' psychotherapy session ratings of shallowness and low valuableness.

The session impact dimension of smoothness/ease varies along a continuum of patients' ratings of sessions as smooth and easy to rough and difficult. Since many authors, as discussed above, have stressed the importance of therapist offered relationship characteristics in

psychotherapy, it can be predicted that high therapist warmth, empathy and affirmation would be associated with patients' ratings of sessions as smooth and easy. This prediction is especially congruent with Winnicott's (1965) conception of the therapist's provision of a "holding" environment as a salient aspect of psychotherapy. This "holding" environment would ideally involve an ambiance or atmosphere in therapy in which the patient feels safe, secure, supported and understood within the therapeutic relationship. Thus, it would be expected that sessions with this atmosphere or type of therapeutic relationship would tend to be rated as smooth and easy versus rough and difficult. Consistent with this prediction, negative therapist attitudes reflecting an intimidating or threatening style toward the patient are most likely to be associated with patients' ratings of psychotherapy sessions as rough and difficult.

Predictions can also be made with respect to exploratory psychotherapy process variables and the smoothness/ease dimension of session impact. Clinicians have described the uncovering or exploratory processes of psychotherapy as anxiety provoking since they involve the exploration of unconscious conflict and urges (Malan, 1979; Orlinsky & Howard, 1967). Thus, it can be predicted that patient self exploration and therapist

exploration of the patient's experience are most likely to be associated with patients' ratings of psychotherapy sessions as rough and difficult. In addition, patients' ratings of rough and difficult sessions can be expected to be related to high levels of patient hostility involving the patient's expression of negativism and mistrust toward the therapist and high levels of patient emotional distress expressed in the session.

The session impact questionnaire by Stiles (1980) and Stiles and Snow (1984a, 1984b), utilizes the adjective pair "good/bad" which measured the patient's overall positive evaluation or "goodness" rating of the therapy session. However, the patients' ratings of the "goodness" or "badness" of the session did not consistently load on either of the session impact dimensions, i.e., depth/value and smoothness/ease, which were factorially derived from their data. Instead, patients' good/bad ratings of therapy sessions tended to load modestly and equivalently on both depth/value and smoothness/ease (Stiles & Snow, 1984b). Research exploring psychotherapy process variables that correlate with patient's ratings of session "goodness" could be compared to previous work conducted by Orlinsky and Howard (1967) correlating patient reports of psychotherapy process in therapy sessions with patient

post session ratings of session "goodness". These authors were interested in describing the conceptions patients implicitly formed in making judgements about session "goodness". Because patient ratings of session "goodness" may not be related to positive therapeutic outcome, further study would be required to investigate this relationship.

Predictions concerning the relationship between psychotherapy process variables and patients' ratings of session "goodness" can be based on the previous research by Orlinsky and Howard (1967) investigating the correlates of the "good" therapy hour as well as theoretical perspectives of beneficial psychotherapy and the process x outcome psychotherapy research.

In regards to the patient's style of relating in the therapy hour, Orlinsky and Howard (1967) found that patients' ratings of "good" sessions were significantly correlated with patients adopting an active and involved stance in their therapy. Patient's who viewed themselves as actively initiating interaction, being emotionally involved and adopting a mutually collaborative style with their therapist tended to rate their session as "good". These findings are consistent with the empirical literature which has found significant positive relationships between psychotherapy process variables

such as patient collaboration and patient engagement in therapy and positive psychotherapy outcome. In addition, these findings by Orlinsky and Howard (1967) are supported by the theoretical emphasis on the therapeutic working alliance as a crucial factor in effective psychotherapy. Thus, it might be predicted that patient participation and involvement in the therapy session would be related to patients' "good" session ratings and that patient hostility or negativism toward the therapist might be related to "bad" session ratings.

Orlinsky and Howard (1967) also found that patients' "good" session ratings were significantly correlated with patients' descriptions of their sessions as involving discussions of their experiences in significant interpersonal relationships in both the past and the present. These findings are congruent with theoretical perspectives of psychotherapy which stress the generation of cognitive and emotional insight in therapy through uncovering and exploratory processes. Thus, it might be predicted that patient self exploration and therapist exploration of the patient's experiences in psychotherapy sessions would be related to patients' "good" session ratings.

Patients' ratings of "good" sessions were also found to be significantly related to patients' descriptions of

their therapists as warm, friendly and affectively involved in the therapy sessions (Orlinsky & Howard, 1967). Similarly, patients rated sessions as "good" when they felt accepted, secure and understood in their therapy sessions. These findings are consonant with the various theoretical perspectives which have underscored the importance of therapist offered relationship characteristics such as warmth, empathy and affirmation as facilitating positive gains in psychotherapy. Thus, it can be predicted that these therapist offered relationship characteristics are likely to be associated with "good" session ratings by patients. In addition, it can be predicted that negative therapist attitudes reflecting a lack of these characteristics through an intimidating or threatening therapist style are likely to be associated with "bad" session ratings by patients.

CHAPTER III

THE PRESENT STUDY

The primary purpose of this present study is to further the development of the strategy of psychotherapy session impact which was generated to provide an alternative method to investigate the relationship between psychotherapy process and outcome. This study is designed to investigate what combination of psychotherapy process variables as measured from the observer's perspective are associated with patient's ratings of the two dimensions of psychotherapy session impact. Thus, more specifically, this study seeks to address the questions of what combination of psychotherapy process variables are predictive of patient's ratings of psychotherapy session depth/value and what combination of psychotherapy process variables are predictive of patient's ratings of psychotherapy session smoothness/ease. Although the strategy of psychotherapy session impact was developed as involving both patients' and therapists' ratings of session impact along the dimensions of depth/value and smoothness/ease, the present study will utilize only patients' ratings of

session impact due to ethical considerations. In the sample of patients investigated in this study, it was believed that it would be too intrusive and potentially disruptive to treatment if patients were aware of their therapists rating psychotherapy sessions.

As already discussed in the literature review of psychotherapy process, a limitation of this body of research has been the relative lack of studies that have employed a wide range of psychotherapy process variables. In the review, it was delineated that the major process variables investigated in the literature tend to fall into the three major categories of patient involvement or participation in the therapeutic process, therapeutic interventions and therapist offered relationship characteristics. Thus, the present study involves the use of a wide range of psychotherapy process variables representing each of these major categories. This approach is consistent with the argument posed by Strupp and Binder (1984) in which they underscore the importance of combining numerous process variables in research projects in order to address the more sophisticated question of what combination of psychotherapy process variables are effective ingredients in beneficial psychotherapy. Since the process of psychotherapy can be seen as multifaceted, these authors viewed this approach

as a conceptual and methodological advance over studies which attempt to isolate certain psychotherapy process variables. Strupp and Binder (1984) argued that this approach to research would be more fruitful in addressing the question of the effective ingredients in psychotherapy.

Another limitation discussed in the review of the process literature was that all of the studies using a wide range of psychotherapy process variables investigated short-term psychotherapy. Gomes-Schwartz (1978) argued that exploratory processes such as patient self exploration and therapist exploration may not be as salient an aspect of the psychotherapeutic process in short-term therapy. As a consequence, the study of short-term therapy may mitigate findings concerning the importance of exploratory processes in psychotherapy. Thus, this present study investigates psychotherapy that is not conducted on a short-term or time limited basis.

In summary, the previous review of the process x outcome literature revealed two limitations which have implications for future study. First, there was a dearth of studies utilizing a wide range of psychotherapy process variables. Second, the studies that utilized a wide range of process variables were all conducted on short-term psychotherapy. Consequently, the present

study will utilize a wide range of process variables in investigating the relationship between process variables and patient ratings of psychotherapy sessions. Second, the present study will examine psychotherapy which is not conducted on a short-term basis.

The hypotheses concerning the relationship between psychotherapy process variables and patient's ratings of session depth/value are based on the clinical theories and empirical studies of psychotherapy process x outcome discussed in the previous review. It is hypothesized that the following psychotherapy process variables will be associated with patient's ratings of psychotherapy session depth/value. High depth/value patient ratings will be predicted by high patient participation or involvement, high patient exploration, high therapist exploration, high therapist relationship characteristics such as warmth and empathy and low negative therapist attitude. In contrast, low depth/value ratings will be predicted by low patient participation or involvement, low patient exploration, low therapist exploration, low therapist relationship characteristics such as warmth and empathy and high negative therapist attitude.

The hypotheses concerning the relationship between psychotherapy process variables and patient's ratings of session smoothness/ease are based on the clinical

theories of psychotherapy discussed in the previous review. It is further hypothesized that the following psychotherapy process variables will be associated with patient's ratings of psychotherapy session smoothness/ease. High smoothness/ease patient ratings will be predicted by high therapist relationship characteristics such as warmth and empathy, low negative therapist attitude, low patient exploration, low therapist exploration, low patient hostility or negativism toward the therapist and low patient psychological distress. In contrast, low smoothness/ease ratings will be predicted by low therapist relationship characteristics such as warmth and empathy, high negative therapist attitude, high patient exploration, high therapist exploration, high patient hostility or negativism toward the therapist and high patient psychological distress.

Since Stiles and Snow (1984b) found that patient's overall ratings of session "goodness" did not consistently load on the dimensions of session depth/value or smoothness/ease, this present study seeks to investigate what combination of psychotherapy process variables are predictive of patient's session ratings of overall "goodness". The results of this investigation can be compared to the work of Orlinsky and Howard (1967)

which also explored the relationship between psychotherapy process variables and patient's ratings of session "goodness".

The hypotheses concerning the relationship between psychotherapy process variables and patient's ratings of session goodness are based on the empirical studies and clinical theories of psychotherapy process x outcome as well as the work of Orlinsky and Howard (1967) discussed in the previous review. It is hypothesized that the following psychotherapy process variables will be associated with patient's ratings of psychotherapy session "goodness". "Good" patient ratings will be predicted by high patient participation or involvement, low patient hostility or negativism toward the therapist, high patient exploration, high therapist exploration, high therapist relationship characteristics such as warmth and empathy and low negative therapist attitude. In contrast, "bad" ratings will be predicted by low patient participation or involvement, high patient hostility or negativism toward the therapist, low patient exploration, low therapist exploration, low therapist relationship characteristics such as warmth and empathy and high therapist negative attitude.

A secondary purpose of this study is to investigate what combination of psychotherapy process variables are

related to psychotherapy sessions conducted with patient's suffering from severe psychological disturbance and low ego strength versus therapy session conducted with patient's having less severe psychological disturbance and higher ego strength. As already mentioned in the review of the psychotherapy process literature, there has been a lack of studies which have investigated the variables of severity of psychological disturbance and ego strength in relation to psychotherapy process. Research in this area would be congruent with the direction or movement in psychotherapy research toward more conceptual specificity in terms of addressing complex questions about psychotherapy such as what treatments are effective with what types of patients and what kinds of psychotherapeutic processes occur with different types of patients.

The hypotheses concerning the relationship between psychotherapy process variables and severity of patient psychological disturbance are based on the clinical theories and the work of Kernberg et al. (1972) discussed in the previous review. It is hypothesized that the following psychotherapy process variables will predict psychotherapy sessions conducted with patients having different levels of psychological disturbance and ego strength. Sessions with patients having severe

psychological disturbance and low ego strength will be predicted by high therapist relationship characteristics such as empathy and warmth, low therapist exploration, high patient hostility or negativism toward the therapist and high patient psychological distress. In contrast, sessions with patients having mild psychological disturbance and high ego strength will be predicted by low therapist relationship characteristics such as warmth and empathy, high therapist exploration, low patient hostility or negativism toward the therapist and low patient psychological distress.

Tables 1 through 4 present summaries of the study hypotheses. Table 1 presents a summary of the hypotheses pertaining to the relationship of psychotherapy process variables with patient's perceptions of psychotherapy session depth/value. Table 2 presents a summary of the hypotheses pertaining to the relationship of psychotherapy process variables with patient's perceptions of psychotherapy session smoothness/ease. Table 3 presents a summary of the hypotheses pertaining to the relationship of psychotherapy process variables with patient's perceptions of psychotherapy session goodness. Table 4 presents a summary of the hypotheses involving the relationship of psychotherapy process

Table 1. Summary of hypotheses concerning the relationship of psychotherapy process variables with patient's perceptions of therapy session depth/value.

<u>Depth/Value</u>	
HIGH	LOW
High patient participation	Low patient participation
High patient exploration	Low patient exploration
High therapist exploration	Low therapist exploration
High therapist relationship characteristics	Low therapist relationship characteristics
Low negative therapist attitude	High negative therapist attitude

Table 2. Summary of hypotheses concerning the relationship of psychotherapy process variables with patient's perceptions of therapy session smoothness/ease.

<u>Smoothness/Ease</u>	
HIGH	LOW
High therapist relationship characteristics	Low therapist relationship characteristics
Low negative therapist attitude	High negative therapist attitude
Low patient exploration	High patient exploration
Low therapist exploration	High therapist exploration
Low patient hostility	High patient hostility
Low patient psychological distress	High patient psychological distress

Table 3. Summary of hypotheses concerning the relationship of psychotherapy process variables with patient's perceptions of therapy session goodness.

<u>Goodness</u>	
HIGH	LOW
High patient participation	Low patient participation
Low patient hostility	High patient hostility
High patient exploration	Low patient exploration
High therapist exploration	Low therapist exploration
High therapist relationship characteristics	Low therapist relationship characteristics
Low therapist negative attitude	High therapist negative attitude

Table 4. Summary of hypotheses concerning the relationship of psychotherapy process variables with patient's severity of psychological disturbance.

<u>Psychological Disturbance of Patients</u>	
Patient's with Mild Psychological Disturbance	Patient's with Severe Psychological Disturbance
Low therapist relationship characteristics	High therapist relationship characteristics
High therapist exploration	Low therapist exploration
Low patient hostility	High patient hostility
Low patient psychological distress	High patient psychological distress

variables with patient's severity of psychological disturbance.

CHAPTER IV

METHOD

1. SUBJECTS

The patients were recruited from three sources: 1.) the Psychological Clinic at the University of Tennessee at Knoxville, which is a training clinic for graduate students in the clinical psychology program, 2.) a Community Mental Health Center in the Knoxville area, and 3.) a Psychiatric Outpatient Clinic at a medical school in Norfolk, Virginia. To be eligible for participation three criteria had to be met: 1.) the patient had to be 18 years of age or older, 2.) the patient had to currently be in outpatient individual psychotherapy, and 3.) the patient had to have been in individual psychotherapy for at least seven weeks prior to participation in this project. Thirty eight patients and their therapists originally agreed to participate in this study. Out of the original thirty eight patients, five dropped out of the study before data collection was started. Four of these patients discontinued

psychotherapy and one patient decided not to participate. These five patients were recruited from the Psychological Clinic at the University of Tennessee. Data analyses were conducted on the remaining thirty three patients. Of the remaining thirty three patients, twenty five were recruited from the Psychological Clinic, four from the Community Mental Health Center in the Knoxville area and four from the Psychiatric Outpatient Clinic in Norfolk, Virginia.

Basic demographic information was collected from an interview with patients' therapists and a review of patients' intake forms. A summary of this information is presented in Table 5. The mean age of sample patients was 29.4 years (S.D. = 7.5, Range = 20 to 47). A slightly larger proportion of the sample patients was female, with 42% being male. The majority of the patients were single (58%) with 15% married and 27% separated or divorced. The mean education level of the patients in terms of number of years completed was 14.3 (S.D. = 2.4, Range = 9 to 20). Thirty percent of the patient sample were undergraduate students at the University of Tennessee and 70% were non-students. The mean yearly income of the patients was \$14,659.9 (S.D. = 14,970.5, Range = 1,080 to 50,000). Twenty one percent of the patients were unemployed and seventy nine percent

Table 5. Means, standard deviations and ranges of several patient sample characteristics.

Patient Sample Characteristics	Mean	Standard Deviation	Range
Age (years)	29.4	7.5	20 - 47
Income (annual)	14,659.9	14,970.5	1,080 - 50,000
Education (years completed)	14.3	2.4	9 - 20
Time in therapy before the study (weeks)	34.8	32.9	7 - 136

were employed at either a full time or part-time basis. The mean length of time in therapy before participation in this study was 34.8 weeks (S.D. = 32.9, Range = 7 to 136). Eighty eight percent of the patients were seen in individual psychotherapy on a once a week basis and twelve percent were seen on a twice a week basis. Patients in this sample were seen for at least five sessions of individual psychotherapy prior to participating in this project. The primary presenting complaints upon entering psychotherapy for this sample of patients were as follows: feelings of depression (49 percent), interpersonal difficulties (24 percent), feelings of anxiety (21 percent) and other (6 percent) involving somatic complaints and bulimia.

There were a total of thirty therapists who participated in this study. Three therapists each treated two patients who participated in this project. Twenty two therapists were clinical psychology graduate students working at the University of Tennessee, Psychological Clinic. All of these students were supervised by licensed clinical psychologists on an hour for hour basis. Four therapists were affiliated with the Community Mental Health Center in the Knoxville, Tennessee area. The remaining four therapists were staff members of the Psychiatric Outpatient Clinic at a medical

school in Norfolk, Virginia. The mean age of the therapist sample was 33.3 years (S.D. = 6.0, Range = 25 to 56). A larger proportion of the therapists was female, with thirty seven percent being male. Fifty three percent of the therapists were second or third year clinical psychology students at the University of Tennessee. Thirty percent of the therapists were either fourth year or above clinical psychology graduate students at the University of Tennessee or clinical psychology residents at the medical school in Norfolk, Virginia. Seventeen percent of the therapists had either a Ph.D. in clinical psychology or a D.S.W. All therapists characterized themselves as adopting a psychodynamic psychoanalytically informed orientation to psychotherapy.

In addition to these basic descriptive measures, intercorrelations among the descriptive variables were conducted in order to further investigate qualities of the sample. Table 6 presents intercorrelations among the descriptive variables of the sample. Several significant correlations were evidenced among patient characteristics. Age of the patient was associated with marital status of the patient such that younger patients tended to be single ($r = .68, p \leq .001$). Sex and education level of the patient varied together with

Table 6. Intercorrelations Among the Descriptive Characteristics of the Sample.

	Age of Patient	Income of Patient	Educa- tion of Patient	Employ- ment of Patient	Marital Status of Patient	Student Status of Patient	Fre- quency of Sessions	Time in Therapy	Sex of Ther- apist	Age of Ther- apist	Professional Level of Therapist
Sex of Patient	-.22	-.17	-.48**	-.30	.01	.01	-.43**	.02	-.19	-.35*	.04
Age of Patient		.47**	.36*	-.07	.68***	.33	.01	.21	-.05	.15	.24
Income of Patient			.50**	-.04	.32	.27	-.23	-.06	-.14	.23	.37*
Education of Patient				.10	.19	-.03	-.01	-.05	.13	.16	-.17
Employment of Patient					.20	-.02	.19	-.38*	-.11	.30	-.18
Marital Status of Patient						.24	-.04	.05	-.13	-.05	.25
Student vs. Non-student Status of Patient							-.36*	-.12	-.26	.14	.10
Frequency of Sessions								.22	.30	.17	-.18

Table 6 (Continued)

	Income	Educa- tion	Employ- ment	Marital Status	Student Status	Fre- quency	Time in	Sex of Ther-	Age of Ther-	Professional Level of Therapist
Age of Patient	of Patient	of Patient	of Patient	of Patient	of Patient	of Sessions	Therapy	apist	apist	Therapist
Time in Therapy								-.07	-.07	.45**
Sex of Therapist									-.09	-.43**
Age of Therapist										.22

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

females tending to have a lower education level than males ($r = -.48$, $p \leq .01$). Patient age was associated with income and education level of the patient. Older patients tended to have higher yearly income ($r = .47$, $p \leq .01$) and a higher education level ($r = .36$, $p \leq .05$). Not surprisingly, yearly income and education level of the patient were correlated such that the higher the education level the higher the yearly income ($r = .50$, $p \leq .01$). Several significant correlations between patient and therapy characteristics were found. Sex of the patient and frequency of therapy sessions per week varied together such that males tended to be seen twice a week in therapy more often than females ($r = -.43$, $p \leq .01$). Also, student versus non-student status of the patient and frequency of sessions per week were associated ($r = -.36$, $p \leq .05$). Students tended to be seen twice a week more often than non-students. It was found that length of time in therapy before participation in this study and employment status of the patient were related ($r = -.38$, $p \leq .05$). Patients who were unemployed were in therapy for a longer time prior to the study. A couple of significant correlations were found between patient and therapist characteristics. Sex of the patient and age of the therapist were associated with male patients being treated by older therapists than females ($r = -.35$, $p \leq$

.05). Yearly income of the patient and professional level of the therapist were associated such that the higher the income of the patient the higher the professional level of the therapist ($r = .37, p \leq .05$). This correlation may reflect in part a tendency for patients with higher income to afford treatment by higher professional level psychotherapists such as doctoral level clinical psychologists and social workers. One significant correlation was found between a therapist characteristic and a therapy characteristic. Professional level of the therapist was associated with length of time in therapy such that the higher the professional level of the therapist the longer the time in therapy for the patient ($r = .45, p \leq .01$). Finally, one significant correlation was found between therapist characteristics. Sex and professional level of the therapist were related with males having a higher professional level than females ($r = -.43, p \leq .01$).

2. MEASURES

The primary objective of this study was to explore what combination of psychotherapy process variables as measured by observers predict patient's perceptions of

therapy session depth/value, smoothness/ease and goodness. In this way, the development of psychotherapy session impact as an alternative method for psychotherapy research could be advanced. A secondary objective of this study was to investigate what combination of psychotherapy process variables predicted therapy sessions with patients of high psychological disturbance and low ego strength versus low psychological disturbance and high ego strength. In this way, the importance of investigating patient severity of disturbance in psychotherapy research could be underscored. Thus, this study involved three basic measures: 1.) measures of various patient's perceptions of psychotherapy sessions, 2.) measures of various psychotherapy process variables, and 3.) a measure of patient's severity of psychological disturbance.

Patient's Perceptions of Psychotherapy Sessions

The Session Evaluation Questionnaire (SEQ) developed by Stiles and his colleagues (Stiles, 1980; Stiles & Snow, 1984a; Stiles & Snow, 1984b; Stiles et al., 1982) was utilized to assess patients' perceptions of their psychotherapy sessions in terms of depth/valuableness,

smoothness/ease and goodness. The SEQ is a post session questionnaire that can be completed by the patient in a short time (Appendix A). It includes twelve adjective pairs in a seven point semantic differential format (Osgood et al., 1957). The bipolar adjectives are: good-bad, safe-dangerous, easy-difficult, valuable-worthless, deep-shallow, relaxed-tense, pleasant-unpleasant, full-empty, powerful-weak, special-ordinary, smooth-rough and comfortable-uncomfortable. The questionnaire is presented in such a manner that higher numbers indicate the more "positive" side of the adjective pair. The patient is asked to rate his experiences of the session on each adjective pair.

Factor analytic research with the SEQ has consistently yielded two independent evaluative dimensions of depth/value and smoothness/ease (Stiles, 1980; Stiles & Snow, 1984b; Stiles et al., 1982). In addition, this research provides evidence for the utility of this dimensional structure across different patient populations, therapists and situations. The investigation conducted by Stiles and Snow (1984b) further indicated that this factorial structure is robust and not significantly affected by variance due to different patients and different therapy sessions. In an exploratory analysis, this study also demonstrated that

this dimensional structure tended to be unaffected by variance due to different therapists.

Stiles and Snow (1984a) constructed indexes for the dimensions of depth/value and smoothness/ease based on the results of their factor analytic investigation (Stiles & Snow, 1984b). These indexes were constructed from a sample of 942 individual therapy sessions with 72 different patients. These patients were students or community residents treated in a university psychology department clinic. The therapists were all graduate students in the clinical psychology program at the university. They were all supervised by faculty members. The indexes were generated by using the scales or adjective pairs that had the highest and most consistent factor loadings on the two dimensions. The Depth/Value index involved the following adjective pairs: deep-shallow, valuable-worthless, full-empty, powerful-weak and special-ordinary. The Smoothness/Ease index involved the following adjective pairs: smooth-rough, comfortable-uncomfortable, easy-difficult, pleasant-unpleasant and relaxed-tense. Following the method utilized by Stiles and Snow (1984b), these indexes were computed for the present study by calculating the mean rating of the adjective pairs that comprised them. This study also utilized the scale ratings of 1 to 7 on

the good-bad adjective pair as an overall measure of session "goodness". Note that higher numbers indicated increasing depth/value, smoothness/ease and goodness.

Psychotherapy Process Variables

The Vanderbilt Psychotherapy Process Scale (VPPS) has been developed and extensively researched by Hans Strupp and his colleagues (Gomes-Schwartz, 1978; Gomes-Schwartz & Schwartz, 1978; O'Malley et al., 1983; Suh et al., 1986). The VPPS was selected for use in this study for several reasons. First, the VPPS has undergone extensive field testing, statistical analysis and general refinement in its development. Second, it involves the use of clinical observers as raters of psychotherapy process. Third, the instrument has a well developed rating manual (Strupp, Hartley & Blackwood, 1974) and it can be used with acceptable levels of reliability. Fourth, the VPPS is a general purpose instrument designed to assess a broad range of psychotherapy process variables in terms of both positive and negative aspects of the patient's and therapist's behaviors and attitudes. Fifth, the VPPS has been found useful in predicting

positive therapeutic outcome in two studies (Gomes-Schwartz, 1978; O'Malley et al., 1983).

The most recent version of the VPPS is comprised of 80 likert-type items which are rated on an ordinal scale from 1 ("not at all") to 5 ("a great deal"). The VPPS is divided into three sections. The first section includes the first three items of the scale which are designed to assess global impressions of the quality of the therapeutic relationship, overall productivity of the session and patient's current level of functioning. The next section includes 40 items designed to measure characteristics of the patient's behavior and demeanor during the session. Similarly, the final section consists of 37 items constructed to assess characteristics of the therapist's behavior and demeanor (Appendix B). The overall reliability of the VPPS was found to be $r = .89$ (O'Malley et al., 1983).

The VPPS includes seven subscales which were generated by factor analysis with varimax rotation (O'Malley et al., 1983). This factor analysis was based on a sample of 110 psychotherapy sessions involving 38 university students recruited from a university psychological and counseling center. These patients sought treatment for depression, anxiety and interpersonal difficulties. Appendix C presents the

seven subscales and the specific items which comprise them. The score for each subscale was calculated by taking the sum of the ratings (1 to 5) of each item on that subscale. This procedure for calculating subscale scores was followed in the present study. All of these subscales were utilized in the present study. O'Malley et al. (1983) found adequate interrater reliability for these subscales ranging from $r = .79$ to $.94$ and adequate measures of internal consistency ranging from $r = .82$ to $.96$. In addition, these authors found that these subscales were useful in predicting psychotherapy outcome.

A brief description of each subscale follows. Patient participation is comprised of 8 items and measures the extent to which the patient is positively engaged in the therapeutic interaction. Low scores on this subscale characterize patients whose behavior is restrained and tentative whereas high scores reflect patients who are actively involved and relate freely with their therapists. Patient hostility consists of 6 items and reflects the more blatantly negative aspects of the patient's behavior and attitudes in terms of negativism, hostility or distrust. Patient psychic distress consists of 9 items and measures the patient's level of emotional distress and feelings of discouragement. Patient

exploration consists of 7 items and gauges the patient's level of self-examination and exploration of feelings and experiences. Therapist exploration is composed of 13 items and measures the therapist's attempts to examine the patient's feelings and behaviors and the reasons behind them. Therapist warmth and friendliness includes 9 items and assesses the therapist's display of warmth, caring and emotional involvement with the patient. This subscale represents the quality of the relationship offered to patients. Negative therapist attitude is composed of 6 items reflecting therapist attitudes which might intimidate or threaten the patient.

Following the recommendations of Tinsley and Weiss (1975), this present study employed measures of both interrater reliability and interrater agreement for the VPPS data. Interrater reliability and agreement was assessed for all the psychotherapy sessions used in this study. The Pearson product moment correlation coefficient was used to assess interrater reliability. The mean reliability coefficient over all the psychotherapy sessions was $r = .78$ ranging from $r = .54$ to $.92$. The Lawlis Lu statistic was used to assess interrater agreement (Lawlis & Lu, 1972). This measure was recommended as the statistic of choice for use with ordinal data by Tinsley and Weiss (1975). This statistic

subtracts agreement due to chance and is thus a stringent estimate of the degree of agreement between observers. It varies as a Kappa with values between .40 and .75 representing fair to good agreement beyond chance and values above .75 representing excellent agreement beyond chance (Fleiss, 1981). The mean Lawlis Lu statistic over all the psychotherapy sessions was $\bar{t} = .54$ ranging from $\bar{t} = .28$ to .76. Two percent of the values were above .75 and 90% of the values fell in the .40 to .75 range with only 8% falling below .40.

The raters independently rated each therapy session at the same time. This method allowed them to resolve any differences in their ratings after they were made independently. The independent ratings were used to assess interrater reliability and agreement. The raters' resolved differences were used in the data analysis.

Severity of Patient Psychological Disturbance

The Millon Clinical Multiaxial Inventory (MCMI) was utilized to assess patients' level of psychological disturbance. The MCMI is a 175 true/false item inventory for specific use with patients in psychotherapy who are 18 years or older and have reading skills at an 8th grade

level (Appendix D). The MCMI yields 20 clinical scales which correspond to categories of clinical symptom syndromes and personality patterns described in the Diagnostic and Statistical Manual of Mental Disorders-III (American Psychiatric Association, 1980). The scales are organized into three broad categories (Millon, 1983). The first category, clinical symptom syndromes, includes nine scales which represent symptom states such as anxiety, somatoform and dysthymia. The category of basic personality patterns includes eight scales which reflect relatively enduring and pervasive traits that describe patient styles of behaving, perceiving, thinking, feeling and relating to others. The nine scales are: schizoid, avoidant, dependent, histrionic, narcissistic, antisocial, compulsive and passive-aggressive. The category of pathological personality disorders includes three scales: schizotypal, borderline and paranoid. These scales characterize patients who clearly demonstrate chronic or episodically severe pathology. Millon (1983) described these patients as most likely to evidence "a checkered history of disruptions, predicaments and disappointments in personal relationships and in school and work performance". He further described these patients as achieving "modest levels of social competence because of an apparent

inability to learn from previous difficulties, a tendency to precipitate self-defeating vicious cycles, digressions and setbacks, and a failure to achieve a niche in life that is consonant with natural aptitudes and potentials". These patients were also described as most likely to evidence "transient but repetitive psychotic episodes involving extreme or bizarre behaviors".

For purposes of this present study, patients achieving a significant clinical scale elevation on any of the pathological personality disorder scales were grouped as patients with severe psychological disturbance and low ego strength. Whereas patients who did not achieve a significant clinical scale elevation on any of the pathological personality disorder scales were grouped as patients with less severe psychological disturbance and relatively higher ego strength. Significant scale elevations indicate the presence of the traits and characteristics described by that scale in the patient's clinical presentation.

The construction of the 20 clinical scales including transformation of raw data to base rate scores and the establishment of cutting lines which maximized correct diagnostic classification was based on an normative population of 297 non-patients and 1591 patients. In 1981, MCMI data on 43,218 patients were used to revise

and update base rate scores (Millon, 1983). Millon (1983) also reported data on individual scale reliability and internal consistency. Measures of reliability for the personality pattern scales and the pathological personality scales ranged from $r = .81$ to $.91$. Measures of internal consistency for these same scales ranged from $r = .73$ to $.95$. Millon (1983) also reported a cross validation study based on a sample of 256 patients. This study compared patient's performance on the MCMI scales to their therapist's report of the presence of the traits measured by each of the clinical scales. The therapist's reports were based on detailed descriptions of the traits and characteristics measured by each of the scales. The percentages of correct classifications for the MCMI basic personality pattern scales and pathological personality disorder scales ranged from 77 to 93%.

3. PROCEDURES

Data were collected on thirty three patients and their therapists. Patients and therapists were recruited from three different sources: 1.) Psychological Clinic at the University of Tennessee, 2.) community mental health center in the Knoxville area, and 3.) psychiatric

outpatient clinic in a medical school in Norfolk, Virginia. The recruitment procedures were somewhat different for the facilities due to the different requirements of the agencies.

At the Psychological Clinic, the investigator met with the therapists at a staff meeting to inform them about the project and what participation entailed. The therapists were informed that all patients at the clinic would receive an announcement letter describing the project and inviting them to participate (Appendix E). If for any reason therapists did not wish their patients to receive an announcement letter, these patients were exempt from receiving it. When patients indicated on the announcement letter that they were interested in the project, the investigator contacted them and arranged a meeting to discuss the project in depth. If at this meeting patients agreed to participate in the project, the investigator obtained their signatures on a patient informed consent form and release of information forms (Appendix F). The investigator also arranged a time to administer the personality questionnaire, Millon Clinical Multiaxial Inventory (MCMI). The personality inventory was administered on an individual basis. Next, the investigator met with the patient's therapist to further describe the project, obtain a therapist informed consent

form (Appendix G), gain basic demographic information describing the patient and the therapist and to provide the therapist with the materials necessary for the project. The therapist was provided with an audio-recorder, three audio cassettes and three manila envelopes each containing the Session Evaluation Questionnaire (SEQ). Therapists were asked to record three psychotherapy sessions. They were asked not to record three consecutive therapy sessions. Instead, they were requested to skip at least one session between each recording. For all the project data, the mean length of time between recordings was 18 days. Immediately after each tape recorded session, therapists were instructed to give their patients a manila envelope containing the SEQ. Patients filled out the questionnaire and returned the sealed envelope to the receptionist at the clinic. This procedure was used to insure privacy of the patients' ratings.

The procedure at the community mental health center and psychiatric outpatient clinic was different in that announcement letters were not given to patients. Instead, the investigator met with therapists as a group at a staff meeting or individually. At these meetings, the investigator described the project in detail, obtained an informed consent form and gave out the

materials for the study if therapists wanted to participate and believed they had patients who were appropriate and willing to participate. Thus, in these two settings, the investigator did not have direct contact with the patient. The therapist approached the patient about the project, obtained informed consent and release of information forms and administered the MCMI. The procedure for taping therapy sessions and administering the SEQ was identical to the one used at the Psychological Clinic.

The data collected on each patient-therapist dyad included demographic information, an MCMI questionnaire, three audio-taped psychotherapy sessions and the three corresponding SEQ's. However, for two patients the data for the third audio-taped session were not obtained. Thus, a total of 97 psychotherapy sessions were audio-taped from the thirty three patients.

There were three raters involved in listening to the audio-taped psychotherapy sessions. All raters were advanced clinical psychology graduate students at the University of Tennessee (fourth year or above). Raters A and B were trained to use the Vanderbilt Psychotherapy Process Scale (VPPS). The training procedure involved two steps: 1.) raters familiarized themselves with the VPPS rating manual and discussed the operational

definitions used by the manual so that they were in agreement concerning their understanding of the definitions; and 2.) the raters were trained on audio tapings of 13 different psychotherapy sessions which were not part of the experimental data. The raters listened to the first, middle and last five minutes of each therapy session. This procedure was recommended for use with the VPPS by Suh et al. (1986) as a way to obtain an adequate overview of the session. During the training, the raters listened to the tapes simultaneously and made their ratings independently. After they rated all 80 items on the scale independently, they discussed any differences in their ratings and resolved them using the VPPS manual.

As recommended by Tinsley and Weiss (1975), measures of both interrater reliability and interrater agreement were calculated on the ratings from the training sessions. These authors recommended utilizing measures of interrater reliability and agreement with subjective ratings of psychotherapy, since they each measure different aspects of subjective ratings. Interrater reliability measures the degree to which raters' judgements are proportional or covary whereas interrater agreement measures the degree to which raters' judgements are in agreement. The Pearson product moment correlation

coefficient was used to assess interrater reliability and the Lawlis Lu statistic was used to assess interrater agreement (Lawlis & Lu, 1972). The Lawlis Lu measure of interrater agreement was recommended by Tinsley and Weiss (1975) as the statistic of choice for use with ordinal data. This statistic subtracts the proportion of agreement due to chance from the total proportion of agreement and is thus a stringent estimate of the degree of agreement between observers. The Lawlis Lu statistic varies as a Kappa statistic and can be interpreted similarly with values between .40 and .75 representing fair to good agreement beyond chance and values above .75 representing excellent agreement beyond chance (Fliess, 1981).

For raters A and B, the mean psychotherapy session interrater reliability on the training tapes was $\bar{r} = .71$ ranging from $\bar{r} = .47$ to .91. Their mean psychotherapy session interrater agreement using the Lawlis Lu statistic was $\bar{t} = .40$ ranging from .26 to .59. In the first training psychotherapy session, raters A and B achieved interrater reliability of $\bar{r} = .47$ and interrater agreement of $\bar{t} = .26$. However, in the final training session, they achieved interrater reliability of $\bar{r} = .74$ and interrater agreement of $\bar{t} = .42$. A time series trend between number of training sessions and interrater

reliability was suggested by a positive correlation of $r = .43$, $p \leq .07$. In addition, a significant time series trend between number of training sessions and interrater agreement was indicated by a positive correlation of $r = .45$, $p \leq .05$. Raters A and B rated a total of 23 psychotherapy sessions of the experimental data. They used the same procedure as in the training period in order to avoid "rater drift" and maintain adequate levels of interrater reliability and agreement. Rater B was unable to continue in the project due to time constraints. Therefore, he was replaced by rater C. Raters A and C were trained in exactly the same manner using the identical 13 psychotherapy session training tapes. For raters A and C, the mean psychotherapy session reliability on the training tapes was $r = .79$ ranging from $r = .62$ to $.94$. Their mean psychotherapy session interrater agreement using the Lawlis Lu statistic was $t = .50$ ranging from $t = .25$ to $.66$. In the first training psychotherapy session, raters A and C achieved interrater reliability of $r = .64$ and interrater agreement of $t = .25$. However, in the final training session, they achieved interrater reliability of $r = .93$ and interrater agreement of $t = .58$. A significant time series trend between number of training sessions and interrater reliability was indicated by a positive

correlation of $r = .51$, $p \leq .05$. Similarly, a significant time series trend between number of training sessions and interrater agreement was indicated by a positive correlation of $r = .49$, $p \leq .05$. Raters A and C rated a total of 74 psychotherapy sessions of the experimental data. They utilized the same procedure as in the training period in order to avoid "rater drift" and maintain adequate levels of interrater reliability and agreement.

CHAPTER V

RESULTS

Before examining the hypotheses of the present study, the stability of patient perceptions of psychotherapy from session to session was assessed. Table 7 presents the means, standard deviations and ranges for patient perceptions of session depth/value, smoothness/ease and goodness for each session. Table 8 presents the correlations of patient perceptions of session depth/value, smoothness/ease and goodness over session one and two, session two and three and session one and three. As shown in Table 8, patient perceptions of sessions tend to be positively correlated over time. However, only four of the total nine correlations are significant at or beyond the $p = .05$ level. In addition, all correlation coefficients have values of $r < .55$ indicating that the variance accounted for by these individual correlations is less than thirty percent. This low level of accounted variance indicates that patient perceptions of psychotherapy sessions in terms of depth/value, smoothness/ease and goodness were not stable

Table 7. Means, standard deviations and ranges for patient perceptions of session depth/value, smoothness/ease and goodness for each session number.^a

Variables	Mean	Standard Deviation	Range
Depth/Value			
Session 1	5.0	.9	3.4 - 7.0
Session 2	5.4	.9	3.2 - 7.0
Session 3	5.6	1.0	3.4 - 7.0
Smoothness/Ease			
Session 1	3.8	1.3	1.4 - 6.4
Session 2	4.0	1.5	1.6 - 6.0
Session 3	3.7	1.7	1.0 - 7.0
Goodness			
Session 1	5.7	1.1	3.0 - 7.0
Session 2	5.8	1.1	2.0 - 7.0
Session 3	5.7	1.4	1.0 - 7.0

^a N = 33 for session 1, N = 33 for session 2 and N = 31 for session 3.

Table 8. Correlations of patient perceptions of psychotherapy sessions over session number.

Variables	<u>Session Number</u>		
	1	2	3
Depth/Value			
Session 1		.24	.25
Session 2			.38*
Smoothness/Ease			
Session 1		.47**	.20
Session 2			.25
Goodness			
Session 1		.38*	.13
Session 2			.54**

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$

** $p \leq .01$

over sessions within a particular patient - therapist dyad.

The stability of the psychotherapy process variables from session to session also was assessed prior to examining the hypotheses of the present study. Table 9 presents the means, standard deviations and ranges of the psychotherapy process variables for each session. Table 10 presents the correlations of psychotherapy process variables over session one and two, session two and three and session one and three. In general, these correlation coefficients demonstrate that the process variables are positively and significantly correlated over time. All of the correlation coefficients are positive and seventeen of the total twenty one correlation coefficients are significant at or beyond the $p = .05$ level. Sixteen of the total twenty one correlation coefficients have values of $r < .70$ indicating that the variance accounted for by these individual correlations is less than fifty percent. This low level of accounted variance indicates that the individual psychotherapy process variables were not stable over sessions within a particular patient - therapist dyad.

Since patient perceptions of psychotherapy sessions and psychotherapy process variables were not stable over sessions, the data were not collapsed over sessions.

Table 9. Means, standard deviations and ranges of the psychotherapy process variables for each session number.

Variables	Mean	Standard Deviation	Range
Patient Participation			
Session 1	30.2	3.3	23 - 36
Session 2	29.5	4.1	23 - 37
Session 3	30.4	3.9	23 - 38
Patient Hostility			
Session 1	10.0	3.5	6 - 20
Session 2	10.0	3.0	6 - 18
Session 3	9.7	3.3	6 - 23
Patient Exploration			
Session 1	20.2	5.0	9 - 29
Session 2	20.4	4.2	11 - 29.5
Session 3	20.8	4.9	10 - 28.5
Therapist Exploration			
Session 1	31.6	5.4	22.0 - 42.5
Session 2	30.6	5.7	20.5 - 43
Session 3	31.6	5.6	22.0 - 45

Table 9 (Continued)

Variables	Mean	Standard Deviation	Range
Therapist Warmth and Friendliness			
Session 1	24.2	4.4	14 - 33
Session 2	22.7	4.9	11 - 32
Session 3	24.2	5.9	14 - 39
Negative Therapist Attitude			
Session 1	6.7	1.0	6 - 10
Session 2	6.8	1.4	6 - 11
Session 3	7.2	2.0	6 - 14
Patient Psychic Distress			
Session 1	19.7	4.6	13 - 34
Session 2	19.7	3.7	14 - 27
Session 3	19.0	3.9	12 - 31

Table 10. Correlations of psychotherapy process variables over session number.

Variables	<u>Session Number</u>		
	1	2	3
Patient Participation			
Session 1		.71***	.83***
Session 2			.75***
Patient Hostility			
Session 1		.69***	.83***
Session 2			.74***
Patient Exploration			
Session 1		.67***	.59***
Session 2			.49**
Therapist Exploration			
Session 1		.59***	.37*
Session 2			.36*

Table 10 (Continued)

Variables	<u>Session Number</u>		
	1	2	3
Therapist Warmth and Friendliness			
Session 1		.55***	.33
Session 2			.58***
Negative Therapist Attitude			
Session 1		.46**	.50**
Session 2			.22
Patient Psychic Distress			
Session 1		.24	.49**
Session 2			.30

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$
 ** $p \leq .01$
 *** $p \leq .001$

Separate statistical analyses addressing the study hypotheses were conducted for each psychotherapy session.

1. HYPOTHESES CONCERNING SESSION DEPTH/VALUE

These hypotheses concerned the relationship between patient perception of the depth/value of psychotherapy sessions and the psychotherapy process variables. It was hypothesized that perceptions of high depth/value would be predicted by high patient participation, high patient exploration, high therapist exploration, high therapist warmth and friendliness and low negative therapist attitude. Similarly, perceptions of low depth/value would be predicted by low patient participation, low patient exploration, low therapist exploration, low therapist warmth and friendliness and high negative therapist attitude.

Prior to investigating these study hypotheses, correlations between patient perception of session depth/value and the sample descriptive characteristics were examined for possible sample specific relationships. Table 11 presents the correlations between sample characteristics and patient perception of session depth/value for each session. For session one, the

Table 11. Correlations between sample characteristics and patient perception of psychotherapy session depth/value for each session number.

Sample Characteristics	Depth/Value		
	<u>Session Number</u>		
	1	2	3
Sex of Patient	.16	.18	.29
Age of Patient	-.14	-.01	-.11
Income of Patient	.02	.22	.11
Education of Patient	-.06	-.01	.17
Employment of Patient	.15	-.21	-.03
Marital Status of Patient	-.35*	.05	.08
Student Status of Patient	-.01	.31	.04
Frequency of Sessions	-.19	-.05	-.07
Time in Therapy	-.24	-.15	-.54**
Sex of Therapist	-.06	-.06	.10
Age of Therapist	.27	-.03	-.12
Professional Level of Therapist	.12	.02	-.40*

(All correlations bases on two-tailed tests of significance)

*p ≤ .05

**p ≤ .01

marital status of the patient was negatively correlated with session depth/value ($r = -.35$, $p \leq .05$) such that single patients tended to rate their sessions higher in depth/value. For session two, no significant correlations were found between sample characteristics and session depth/value. For session three, two correlations coefficients were significant at or beyond the $p = .05$ level. The length of time in therapy before participating in the study was negatively correlated with session depth/value ($r = -.54$, $p \leq .01$) such that the longer the time in therapy before participating in the study the lower the ratings of session depth/value. Also, professional level of the therapist was negatively correlated with session depth/value ($r = -.40$, $p \leq .05$) such that the higher the professional level of the therapist the lower the ratings of session depth/value.

Following the investigation of sample specific relations to the perception of depth/value, correlations were conducted to examine the relationships between psychotherapy process variables and patient perception of depth/value. Table 12 presents the correlations between the process variables and session depth/value for each session. For session one, two correlation coefficients were significant at the $p \leq .05$ level. Patient exploration was positively correlated with session

Table 12. Correlations between psychotherapy process variables and patient perception of psychotherapy session depth/value for each session number.

Variables	Depth/Value		
	<u>Session Number</u>		
	1	2	3
Patient Participation	.01	.12	.14
Patient Hostility	-.27	-.29	-.24
Patient Exploration	.34*	.23	.09
Therapist Exploration	.38*	.28	.07
Therapist Warmth and Friendliness	.19	.26	.13
Negative Therapist Attitude	-.30	-.02	-.10
Patient Psychic Distress	.23	-.13	.17

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$

depth/value ($r = .34$, $p \leq .05$) such that higher patient exploration was associated with higher patient ratings of session depth/value. Also, therapist exploration was positively correlated with session depth/value ($r = .38$, $p \leq .05$) such that higher therapist exploration was associated with higher patient ratings of session depth/value. For sessions two and three, no significant correlations were found between the psychotherapy process variables and session depth/value.

In order to examine for the influence of multiple process variables in relation to session depth/value, stepwise multiple regressions with session depth/value as the criterion and the process variables as predictors were conducted for each session. Due to the previously noted relationships between patient perception of depth/value and marital status of the patient, length of time in therapy and therapist professional level, these sample characteristics were entered first in the multiple regressions in order to partial out the effects of sample characteristics prior to examining the influence of psychotherapy process variables. Table 13 presents the results of the multiple regressions predicting patient perception of session depth/value from the psychotherapy process variables for each session. For session one, the sample characteristic of patient marital status was

Table 13. Multiple regressions predicting patient perception of session depth/value from the psychotherapy process variables for each session number.

Criterion	R	P	r	r ²	p
Depth/Value (Session 1)					
Step 1:	.35	.05			
Marital Status of Patient			-.35	.12	.05
Step 2:	.51	.01			
Marital Status of Patient			-.34	.11	.04
Therapist Exploration			.38	.14	.02
Depth/Value (Session 2)					
(no variables significant)					
Depth/Value (Session 3)					
Step 1:	.56	.005			
Time in Therapy			-.40	.16	.02
Professional Level of Therapist			-.18	.03	.26
Step 2:	.54	.002			
Time in Therapy			-.54	.29	.002
Professional Level of Therapist			(removed from equation)		

Table 13 (Continued)

Criterion	R	P	r	r ²	p
Step 3:	.63	.001			
Time in Therapy			-.61	.37	.001
Patient Psychic Distress			.33	.11	.032

- R - Multiple correlation coefficient.
P - Significance level of R.
r - Unique correlation between predictor and criterion.
r² - Unique variance accounted for by the predictor.
p - Significance level of r.

entered first and accounted for twelve percent of the variance in depth/value. The variance remaining after this procedure was significantly related to therapist exploration ($r = .38$, $p = .02$) such that high therapist exploration predicted high patient ratings of session depth/value. For session two, no psychotherapy process variables were found to significantly predict patient ratings of session depth/value. For session three, the sample characteristics of length of time in therapy and professional level of the therapist were entered first in order to partial out the effects of these sample characteristics. In so doing, only time in therapy was retained in the multiple regression. Closer examination of time in therapy and therapist professional level indicated an intercorrelation ($r = .45$, $p \leq .01$) such that the longer the time in therapy the higher the therapist professional level. As a consequence of the shared variance between these two variables, only one of the variables could be retained by the multiple regression (Cohen & Cohen, 1983). In the present analysis, the variable retained was length of time in therapy. The remaining variance was predicted significantly by patient psychic distress ($r = .33$, $p = .03$) such that high patient distress predicted high patient ratings of session depth/value. It is noteworthy

that for session three patient psychic distress was not significantly correlated with patient ratings of session depth/value in the zero order or unpartialled correlations presented in Table 12. Since time in therapy was found to be correlated with patient psychic distress in session three ($r = .28$, $p = .13$), time in therapy acted as a suppressor variable which hid or suppressed the real relationship between patient psychic distress and patient ratings of depth/value (Cohen & Cohen, 1983). By partialling out the variance attributable to time in therapy, the relationship between psychic distress and depth/value was revealed, i.e., no longer suppressed.

Summarizing the results of the multiple regressions, none of the psychotherapy process variables consistently predicted session depth/value over all three sessions. For session one, after partialling out the effects of sample characteristics therapist exploration predicted significantly session depth/value such that high therapist exploration predicted high depth/value. This finding was consistent with the study hypotheses. It is noteworthy that in the zero order correlations for session one both patient exploration and therapist exploration were significantly and positively correlated with session depth/value (see Table 12). Closer

examination of patient and therapist exploration indicated an intercorrelation ($r = .50$, $p \leq .01$) such that high patient exploration was associated with high therapist exploration. As a consequence of the shared variance between these two variables, only one of the variables was entered in the multiple regression (Cohen & Cohen, 1983). For session two, none of the psychotherapy process variables predicted significantly session depth/value. For session three, after partialling out the effects of sample characteristics patient psychic distress predicted significantly session depth/value such that high patient distress predicted high depth/value. This finding was not hypothesized in the study.

2. HYPOTHESES CONCERNING SESSION SMOOTHNESS/EASE

These hypotheses concerned the relationship between patient perception of the smoothness/ease of psychotherapy sessions and the psychotherapy process variables. It was hypothesized that perceptions of high smoothness/ease would be predicted by high therapist warmth and friendliness, low negative therapist attitude, low patient exploration, low therapist exploration, low patient hostility and low patient psychic distress.

Similarly, perceptions of low smoothness/ease would be predicted by low therapist warmth and friendliness, high negative therapist attitude, high patient exploration, high therapist exploration, high patient hostility and high patient psychic distress.

Prior to investigating these study hypotheses, correlations between patient perception of session smoothness/ease and the sample descriptive characteristics were examined for possible sample specific relationships. Table 14 presents the correlations between sample characteristics and patient perception of session smoothness/ease for each session. For session one, no significant correlations were found between sample characteristics and session smoothness/ease. For session two, two correlation coefficients were significant at or beyond the $p = .05$ level. The length of time in therapy before participating in the study was negatively correlated with session smoothness/ease ($r = -.45, p \leq .01$) such that the longer the time in therapy before participating in the study the lower the ratings of session smoothness/ease. Also, professional level of the therapist was negatively correlated with session smoothness/ease ($r = -.40, p \leq .05$) such that the higher the professional level of the therapist the lower the ratings of session

Table 14. Correlations between sample characteristics and patient perception of psychotherapy session smoothness/ease for each session number.

Sample Characteristics	Smoothness/Ease		
	<u>Session Number</u>		
	1	2	3
Sex of Patient	-.29	-.20	-.33
Age of Patient	.09	.10	.33
Income of Patient	-.17	-.16	.09
Education of Patient	.06	-.01	.04
Employment of Patient	.08	.24	.26
Marital Status of Patient	.02	-.06	.19
Student Status of Patient	.27	.16	.07
Frequency of Sessions	-.03	.06	.11
Time in Therapy	-.10	-.45**	.18
Sex of Therapist	-.14	.09	-.27
Age of Therapist	.12	.14	.43*
Professional Level of Therapist	.12	-.40*	.39*

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$

** $p \leq .01$

smoothness/ease. For session three, two correlation coefficients were significant at or beyond the $p = .05$ level. The age of the therapist was positively correlated with session smoothness/ease ($r = .43$, $p \leq .05$) such that the older the therapist the higher the ratings of session smoothness/ease. Also, professional level of the therapist was positively correlated with session smoothness/ease ($r = .39$, $p \leq .05$) such that the higher the professional level of the therapist the higher the ratings of session smoothness/ease.

Following the investigation of sample specific relations to the perception of smoothness/ease, correlations were conducted to examine the relationships between psychotherapy process variables and patient perception of smoothness/ease. Table 15 presents the correlations between the process variables and session smoothness/ease for each session. For session one, three correlation coefficients were significant at or beyond the $p = .05$ level. Therapist exploration was negatively correlated with session smoothness/ease ($r = -.45$, $p \leq .01$) such that higher therapist exploration was associated with lower patient ratings of session smoothness/ease. Also, therapist warmth and friendliness was negatively correlated with session smoothness/ease ($r = -.38$, $p \leq .05$) such that higher therapist warmth and

Table 15. Correlations between psychotherapy process variables and patient perception of psychotherapy session smoothness/ease for each session number.

Variables	Smoothness/Ease <u>Session Number</u>		
	1	2	3
Patient Participation	-.17	.16	-.07
Patient Hostility	.08	-.06	.05
Patient Exploration	-.32	-.30	-.22
Therapist Exploration	-.45**	-.45**	-.28
Therapist Warmth and Friendliness	-.38*	-.31	-.26
Negative Therapist Attitude	.09	-.10	.17
Patient Psychic Distress	-.44**	-.50**	-.53**

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$

** $p \leq .01$

friendliness was associated with lower patient ratings of session smoothness/ease. Finally, patient psychic distress was negatively correlated with session smoothness/ease ($r = -.44$, $p \leq .01$) such that higher patient psychic distress was associated with lower patient ratings of session smoothness/ease. For session two, two correlation coefficients were significant at the $p \leq .01$ level. Therapist exploration was negatively correlated with session smoothness/ease ($r = -.45$, $p \leq .01$) such that higher therapist exploration was associated with lower patient ratings of session smoothness/ease. Also, patient psychic distress was negatively correlated with session smoothness/ease ($r = -.50$, $p \leq .01$) such that higher patient psychic distress was associated with lower patient ratings of session smoothness/ease. For session three, one correlation coefficient was significant at the $p \leq .01$ level. Patient psychic distress was negatively correlated with session smoothness/ease ($r = -.53$, $p \leq .01$) such that higher patient psychic distress was associated with lower patient ratings of session smoothness/ease.

In order to examine for the influence of multiple process variables in relation to session smoothness/ease, stepwise multiple regressions with session smoothness/ease as the criterion and the process

variables as predictors were conducted for each session. Due to the previously noted relationships between patient perception of smoothness/ease and length of time in therapy, therapist professional level and therapist age, these sample characteristics were entered first in the multiple regressions in order to partial out the effects of sample characteristics prior to examining the influence of psychotherapy process variables. Table 16 presents the results of the multiple regressions predicting patient perception of session smoothness/ease from the psychotherapy process variables for each session. For session one, no sample characteristics were entered into the multiple regression since none were correlated with session smoothness/ease. The variance in session smoothness/ease however was significantly related to therapist exploration ($r = -.46$, $p = .01$) such that high therapist exploration predicted low patient ratings of session smoothness/ease. For session two, the sample characteristics of length of time in therapy and professional level of the therapist were entered first in order to partial out the effects of these sample characteristics. In so doing, only time in therapy was retained in the multiple regression. Closer examination of time in therapy and therapist professional level indicated an intercorrelation ($r = .45$, $p \leq .01$) such

Table 16. Multiple regressions predicting patient perception of session smoothness/ease from the psychotherapy process variables for each session number.

Criterion	R	P	r	r ²	p
Smoothness/Ease (Session 1)					
Step 1:	.46	.01			
Therapist Exploration			-.46	.21	.01
Smoothness/Ease (Session 2)					
Step 1:	.50	.01			
Time in Therapy			-.30	.09	.06
Professional Level of Therapist			-.22	.05	.18
Step 2:	.45	.01			
Time in Therapy			-.45	.20	.01
Professional Level of Therapist			(removed from equation)		
Step 3:	.64	.001			
Time in Therapy			-.46	.21	.003
Therapist Exploration			-.45	.21	.003
Smoothness/Ease (Session 3)					
Step 1:	.52	.01			
Professional Level of Therapist			.29	.08	.09
Age of Therapist			.34	.12	.04

Table 16 (Continued)

Criterion	R	P	r	r ²	p
Step 2:	.71	.001			
Professional Level of Therapist			.35	.12	.02
Age of Therapist			.20	.04	.15
Patient Psychic Distress			-.48	.23	.001
Step 3:	.68	.001			
Professional Level of Therapist			.42	.18	.005
Patient Psychic Distress			-.56	.31	.001
Age of Therapist			(removed from equation)		

R - Multiple correlation coefficient.
 P - Significance Level of R.
 r - Unique correlation between predictor and
 criterion.
 r² - Unique variance accounted for by the predictor.
 p - Significance level of r.

that the longer the time in therapy the higher the therapist professional level. As a consequence of the shared variance between these two variables, only one of the variables could be retained by the multiple regression (Cohen & Cohen, 1983). In the present analysis, the variable retained was length of time in therapy. The remaining variance was predicted significantly by therapist exploration ($r = -.45$, $p = .003$) such that high therapist exploration predicted low patient ratings of session smoothness/ease. For session three, the sample characteristics of therapist age and professional level were entered first in order to partial out the effects of these sample characteristics. The remaining variance was predicted significantly by patient psychic distress ($r = -.56$, $p = .001$) such that high patient distress predicted low patient ratings of session smoothness/ease. Further analysis indicated that the best prediction of smoothness/ease for session three was achieved with only therapist professional level and patient psychic distress. Closer examination of therapist age and patient psychic distress indicated an intercorrelation ($r = -.24$, $p = .19$) such that high patient distress was associated with younger therapists. As a consequence of this shared variance between these two variables, only one of the variables could be

retained by the multiple regression (Cohen & Cohen, 1983). In the present analysis, the variable retained was patient psychic distress.

Summarizing the results of the multiple regressions, none of the psychotherapy process variables consistently predicted session smoothness/ease over all three sessions. For session one, therapist exploration predicted significantly session smoothness/ease such that low therapist exploration predicted high smoothness/ease. This finding was consistent with the study hypotheses. It is noteworthy that in the zero order correlations for session one, therapist exploration, therapist warmth and friendliness and patient psychic distress were all significantly and negatively correlated with session smoothness/ease (see Table 15). Closer examination of these process variables indicated intercorrelations. Therapist exploration was positively correlated with therapist warmth and friendliness ($r = .55, p \leq .001$) such that high therapist exploration was associated with high therapist warmth and friendliness. Therapist exploration was positively correlated with patient psychic distress ($r = .40, p \leq .05$) such that high therapist exploration was associated with high patient psychic distress. Finally, therapist warmth and friendliness was positively correlated with patient

psychic distress ($r = .33$, $p = .06$) such that high therapist warmth and friendliness was associated with high patient psychic distress. As a consequence of the shared variance among these variables, only one of the variables was entered in the multiple regression (Cohen & Cohen, 1983). For session two, after partialling out the effects of the sample characteristics (i.e., time in therapy and professional level of the therapist) therapist exploration predicted significantly session smoothness/ease such that low therapist exploration predicted high smoothness/ease. This finding was consistent with the study hypotheses. It is noteworthy that in the zero order correlations for session two both therapist exploration and patient psychic distress were significantly and negatively correlated with session smoothness/ease (see Table 15). Closer examination of the correlations between these process variables and the sample characteristics revealed a significant intercorrelation between time in therapy and patient psychic distress ($r = .52$, $p \leq .01$). Since time in therapy was entered first in the regression equation (i.e., to control for its effects) the unique variance accounted by patient psychic distress was no longer significant. As a consequence only therapist exploration was entered into the multiple regression equation. For

session three, after partialling out the effects of sample characteristics, patient psychic distress predicted significantly session smoothness/ease such that low patient distress predicted high smoothness/ease. This finding was consistent with the study hypotheses.

3. HYPOTHESES CONCERNING SESSION GOODNESS

These hypotheses concerned the relationship between patient perception of the goodness of psychotherapy sessions and the psychotherapy process variables. It was hypothesized that perceptions of high goodness would be predicted by high patient participation, low patient hostility, high patient exploration, high therapist exploration, high therapist warmth and friendliness and low negative therapist attitude. Similarly, perceptions of low goodness would be predicted by low patient participation, high patient hostility, low patient exploration, low therapist exploration, low therapist warmth and friendliness and high negative therapist attitude.

Prior to investigating these study hypotheses, correlations between patient perception of session goodness and the sample descriptive characteristics were

examined for possible sample specific relationships. Table 17 presents the correlations between sample characteristics and patient perception of session goodness for each session. For session one, one correlation coefficient was significant at the $p \leq .05$ level. The length of time in therapy before participating in the study was negatively correlated with session goodness ($r = -.39$, $p \leq .05$) such that the longer the time in therapy before participating in the study the lower the ratings of session goodness. For session two, two correlation coefficients were significant at or beyond the $p = .05$ level. Student versus non-student status of the patient was positively correlated with session goodness ($r = .41$, $p \leq .05$) such that non-student patients tended to have higher ratings of session goodness. Also, length of time in therapy was negatively correlated with session goodness ($r = -.54$, $p \leq .001$) such that the longer the time in therapy the lower the ratings of session goodness. For session three, no significant correlations were found between sample characteristics and session goodness.

Following the investigation of sample specific relations to the perception of goodness, correlations were conducted to examine the relationships between psychotherapy process variables and patient perception of

Table 17. Correlations between sample characteristics and patient perception of psychotherapy session goodness for each session number.

Sample Characteristics	Goodness		
	<u>Session Number</u>		
	1	2	3
Sex of Patient	.02	-.05	-.15
Age of Patient	.01	-.04	.19
Income of Patient	-.23	.21	.15
Education of Patient	-.30	.18	.12
Employment of Patient	.11	.24	.18
Marital Status of Patient	-.02	.08	.22
Student Status of Patient	.27	.41*	.24
Frequency of Sessions	-.14	-.10	.22
Time in Therapy	-.39*	-.54***	-.02
Sex of Therapist	.04	-.10	.03
Age of Therapist	.23	.07	.30
Professional Level of Therapist	-.01	-.14	.13

(All correlations based on two-tailed tests of significance.)

* $p \leq .05$
 *** $p \leq .001$

goodness. Table 18 presents the correlations between the process variables and session goodness for each session. For sessions one, two and three, no correlation coefficients were found significant at the $p \leq .05$ level.

In order to examine for the influence of multiple process variables in relation to session goodness, stepwise multiple regressions with session goodness as the criterion and the process variables as predictors were conducted for each session. Due to the previously noted relationships between patient perception of goodness and length of time in therapy and student versus non-student status of the patient, these sample characteristics were entered first in the multiple regressions in order to partial out the effects of sample characteristics prior to examining the influence of psychotherapy process variables. Table 19 presents the results of the multiple regressions predicting patient perceptions of session goodness from the psychotherapy process variables for each session. For session one, the sample characteristic of length of time in therapy was entered first and accounted for fifteen percent of the variance in patient ratings of session goodness. The variance remaining after this procedure was not significantly related to any of the psychotherapy process variables. For session two, the sample characteristics

Table 18. Correlations between psychotherapy process variables and patient perception of psychotherapy session goodness for each session number.

Variables	Goodness		
	1	<u>Session Number</u> 2	3
Patient Participation	.12	.33	.03
Patient Hostility	-.07	-.24	-.27
Patient Exploration	-.13	.31	-.01
Therapist Exploration	-.13	.19	-.06
Therapist Warmth and Friendliness	-.05	.14	-.06
Negative Therapist Attitude	-.20	-.02	-.06
Patient Psychic Distress	-.13	-.10	-.27

(All correlations based on two-tailed tests of significance.)

Table 19. Multiple regressions predicting patient perception of session goodness from the psychotherapy process variables for each session number.

Criterion	R	P	r	r ²	p
Goodness (Session 1)					
Step 1:	.39	.02			
Time in Therapy			-.39	.15	.02
Goodness (Session 2)					
Step 1:	.64	.001			
Time in Therapy			-.49	.24	.001
Student Status of Patient			.35	.12	.02
Goodness (Session 3)					
(no variables significant)					

R - Multiple correlation coefficient.
 P - Significance level of R.
 r - Unique correlation between predictor and criterion.
 r² - Unique variance accounted for by the predictor.
 p - Significance level of r.

of time in therapy and student versus non-student status of the patient were entered first in order to partial out the effects of these sample characteristics. Together these sample characteristics accounted for thirty six percent of the variance in patient ratings of session goodness. The variance remaining after this procedure was not significantly related to any of the psychotherapy process variables. For session three, no sample characteristics were entered into the multiple regression since none were correlated with session goodness. In addition, the variance in session goodness was not predicted significantly by any of the psychotherapy process variables.

Summarizing the results of the multiple regressions, none of the psychotherapy process variables predicted significantly session goodness for session one, two or three. Thus, none of the study hypotheses concerning the relationship between the psychotherapy process variables and session goodness was supported.

4. HYPOTHESES CONCERNING SEVERITY OF DISTURBANCE

These hypotheses concerned the relationship between psychotherapy sessions conducted with patients having

different levels of psychological disturbance and the psychotherapy process variables. It was hypothesized that sessions with patients having severe psychological disturbance would be predicted by high therapist warmth and friendliness, low therapist exploration, high patient hostility and high patient psychic distress. Similarly, sessions with patients having mild psychological disturbance would be predicted by low therapist warmth and friendliness, high therapist exploration, low patient hostility and low patient psychic distress. Using the Millon Clinical Multiaxial Inventory (MCMI) to classify patients' severity of psychological disturbance, twenty patients were classified as mild and thirteen patients were classified as severe.

Prior to investigating the study hypotheses, correlations between patient severity of psychological disturbance and the sample descriptive characteristics were examined for possible sample specific relationships. Table 20 presents the correlations between sample characteristics and severity of patient psychological disturbance. No significant correlations were found between sample characteristics and severity of patient psychological disturbance.

Following the investigation of sample specific relations to severity of psychological disturbance,

Table 20. Correlations between sample characteristics and severity of patient psychological disturbance.

Sample Characteristics	Severity of Psychological Disturbance
Sex of Patient	.32
Age of Patient	.10
Income of Patient	.11
Education of Patient	-.18
Employment of Patient	-.04
Marital Status of Patient	.04
Student Status of Patient	.13
Frequency of Sessions	.08
Time in Therapy	-.03
Sex of Therapist	-.24
Age of Therapist	.06
Professional Level of Therapist	.01

(All correlations based on two-tailed tests of significance.)

correlations were conducted to examine the relationships between psychotherapy process variables and severity of patient psychological disturbance. Table 21 presents the correlations between the process variables and severity of patient psychological disturbance for each session. For session one, one correlation coefficient was significant at the $p \leq .05$ level. Therapist exploration was positively correlated with severity of psychological disturbance ($r = .40$, $p \leq .05$) such that higher therapist exploration was associated with patients having severe psychological disturbance. For session two, two correlation coefficients were significant at or beyond the $p = .05$ level. Patient exploration was positively correlated with severity of psychological disturbance ($r = .41$, $p \leq .05$) such that higher patient exploration was associated with patients having severe psychological disturbance. Also, therapist exploration was positively correlated with severity of psychological disturbance ($r = .45$, $p \leq .01$) such that higher therapist exploration was associated with patients having severe psychological disturbance. For session three, no significant correlation coefficients were found between the psychotherapy process variables and severity of patient psychological disturbance.

Table 21. Correlations between psychotherapy process variables and severity of patient psychological disturbance for each session number.

Variables	Severity of Psychological Disturbance		
	<u>Session Number</u>		
	1	2	3
Patient Participation	-.03	.08	.03
Patient Hostility	-.26	-.33	-.25
Patient Exploration	.17	.41*	-.10
Therapist Exploration	.40*	.45**	.02
Therapist Warmth and Friendliness	.13	.32	.08
Negative Therapist Attitude	-.13	-.12	-.25
Patient Psychic Distress	.20	.14	-.09

(All correlations based on two-tailed tests of significance.)

*p ≤ .05

**p ≤ .01

In order to examine for the influence of multiple process variables in relation to severity of psychological disturbance, stepwise multiple regressions with severity of disturbance as the criterion and the process variables as predictors were conducted for each session. As noted previously, there were no significant correlations between patient severity of psychological disturbance and the sample characteristics. Thus, it was not necessary to enter any of the sample characteristics in the multiple regressions in order to partial out the effects of sample characteristics prior to examining the influence of psychotherapy process variables. Table 22 presents the results of the multiple regressions predicting severity of patient psychological disturbance from the psychotherapy process variables for each session. For session one, the variance in severity of patient psychological disturbance was significantly related to therapist exploration ($r = .40$, $p = .02$) such that high therapist exploration predicted severe psychological disturbance of patients. For session two, the variance in severity of patient psychological disturbance was also significantly related to therapist exploration ($r = .45$, $p = .01$) such that high therapist exploration predicted severe psychological disturbance of patients. For session three, the variance in severity of

Table 22. Multiple regressions predicting patient's severity of psychological disturbance from the psychotherapy process variables for each session number.

Criterion	R	P	r	r ²	p
Severity of Psychological Disturbance (Session 1)					
Step 1:	.40	.02			
Therapist Exploration			.40	.16	.02
Severity of Psychological Disturbance (Session 2)					
Step 1:	.45	.01			
Therapist Exploration			.45	.20	.01
Severity of Psychological Disturbance (Session 3)					
(no variables significant)					
R - Multiple correlation coefficient. P - Significance level of R. r - Unique correlation between predictor and criterion. r ² - Unique variance accounted for by the predictor. p - Significance level of r.					

patient psychological disturbance was not predicted significantly by any of the psychotherapy process variables.

Summarizing the results of the multiple regressions, none of the psychotherapy process variables consistently predicted severity of patient psychological disturbance over all three sessions. For session one, therapist exploration predicted significantly patient psychological disturbance such that high therapist exploration predicted severe psychological disturbance. This finding was contrary to the study hypotheses. For session two, therapist exploration also predicted significantly patient psychological disturbance such that high therapist exploration predicted severe psychological disturbance. This finding was contrary to the study hypotheses. It is noteworthy that in the zero order correlations for session two both patient exploration and therapist exploration were significantly correlated with severity of patient psychological disturbance (see Table 21). Closer examination of patient and therapist exploration indicated an intercorrelation ($r = .38, p \leq .05$) such that high patient exploration was associated with high therapist exploration. As a consequence of the shared variance between these two variables, only one of the variables was entered in the multiple regression

(Cohen & Cohen, 1983). For session three, none of the psychotherapy process variables predicted significantly patient psychological disturbance.

CHAPTER VI

DISCUSSION

The primary purpose of the present study was to further the development of the strategy of psychotherapy session impact which was generated to provide an alternative method to investigate the relationship between psychotherapy process and outcome. This alternative method was designed due to a flaw in the traditional methodology of studying psychotherapy process x outcome relationships which may contribute in part to the inconsistent findings in the literature. The traditional methodology has been criticized for its assumption that psychotherapy sessions over the course of treatment are homogeneous with respect to psychotherapy process variables. Despite the early warnings against such an assumption by Kiesler (1966), the traditional method was widely employed in the empirical literature. The traditional method involved correlating therapy process variables sampled in one session or correlating the mean of therapy process variables sampled from several sessions over the course of treatment with

psychotherapy outcome measured at the end of the course of treatment.

Relatively recent research provides evidence which contradicts the assumption of the homogeneity of psychotherapy process variables over the course of treatment (Gurman, 1973; Howard et al., 1976; McDaniel et al., 1981; Mintz et al., 1971). In combination these studies have found that psychotherapy process variables involving both patient and therapist behaviors are variable and unstable from session to session within a particular patient - therapist dyad. In general, the findings of the present study are consistent with this research. It was found that the psychotherapy process variables used in this study involving a wide range of patient and therapist characteristics were variable over sessions within a particular patient - therapist dyad. The findings of the present study support the claim that psychotherapy sessions within a specific patient - therapist dyad are different with respect to psychotherapy process variables over the course of treatment. In addition, these findings strengthen the argument concerning the implausibility of assuming that psychotherapy process is homogeneous over the course of treatment. Consequently, the present findings tend to support the development of alternative research

strategies involving micro-outcomes (Orlinsky & Howard, 1986) or sub-outcomes (Elliot et al., 1982) such as the psychotherapy session impact strategy (Stiles, 1980). These strategies involve correlating in-session process variables to a more immediate measure of post session outcome as opposed to some overall measure of psychotherapy outcome assessed at the end of the whole course of treatment.

It can be argued that the present findings concerning the variability of psychotherapy process variables over therapy sessions are limited due to the characteristics of the sample. The majority of the study sample was composed of novice graduate student therapists who were supervised by doctorate level clinical psychologists on a frequent basis, i.e., hour-for-hour supervision. Hence, one might argue that the variability between the sessions is a consequence of utilizing novice therapists who are in the active process of learning psychotherapy from supervisors. However, two of the studies cited as finding evidence for session to session variability in process variables used only experienced professional therapists (Mintz et al., 1971; Howard et al., 1976). Thus, the present findings in conjunction with previous research findings support the contention that psychotherapy sessions cannot be assumed to be

homogeneous with respect to process variables over the course of treatment. Additionally, these findings support the development of alternative research strategies for investigating process x outcome relationships.

1. STRATEGY OF PSYCHOTHERAPY SESSION IMPACT

The strategy of psychotherapy session impact includes two phases. One involves the exploration of what combination of psychotherapy process variables predict consistent dimensions of therapy session impact. The other involves the determination of how these dimensions of session impact predict overall psychotherapy outcome. Thus, by the use of inference, this strategy would make possible the delineation of what psychotherapy processes mediated by session impact are associated with positive therapeutic outcome. The present study was designed to further the development of this strategy by investigating what combination of psychotherapy process variables predict patient ratings of session depth/value and smoothness/ease which have been found by prior research to be consistent dimensions of psychotherapy session impact.

Patient Perceptions of Session Depth/Value

The findings of the present study indicated that patient perceptions of session depth/value were not consistently predicted across sampled sessions by any of the psychotherapy process variables measured. Thus, session depth/value was predicted by different process variables or by none of the process variables over the three psychotherapy sessions. In addition, it was found that combinations of process variables were not helpful in yielding the best prediction of depth/value in each of the three psychotherapy sessions.

In session one, the psychotherapy process variable which best predicted patient perceptions of session depth/value was therapist exploration. High therapist exploration predicted high patient perceptions of session depth/value and similarly, low therapist exploration predicted low patient perceptions of session depth/value. This relationship was predicted in the study hypotheses. This finding is consistent with the perspective of theorists in the psychodynamic/psychoanalytically informed orientation to psychotherapy who have emphasized the generation and facilitation of emotional and cognitive insight through uncovering and exploratory

processes, such as therapist interpretations and clarifications, as an important element in effective psychotherapy (Bibring, 1954; Glover, 1955; Langs, 1973). It is suggested by this finding that at times therapist interventions in the form of questions, responses and comments designed to gather information and aid patients in exploring various aspects of their experience are related to patient perceptions of high depth and value of the session.

In session two, none of the psychotherapy process variables predicted patient perceptions of session depth/value. However, in session three, the psychotherapy process variable which best predicted session depth/value was patient psychic distress. High patient psychic distress predicted high patient perceptions of session depth/value and similarly, low patient psychic distress predicted low patient perceptions of session depth/value. This relationship was not predicted in the study hypotheses. This finding appears to be consistent with the views of theorists who have discussed the importance of emotional release in the psychotherapeutic process (Appelbaum, 1981; Breuer & Freud, 1957; Singer, 1970). This finding suggests that at times patient expressions of emotional distress such as guilt, depression, shame and discouragement are

related to patient perceptions of high depth and value of the session.

As already mentioned, the findings indicated that patient perceptions of session depth/value were not consistently predicted by process variables over sessions. In addition, when process variables were found to predict depth/value ratings, the variance accounted by the variables was low. For example, in session one, therapist exploration accounted for fourteen percent of the variance in patient ratings of depth/value and in session three, patient psychic distress accounted for eleven percent of the variance in ratings of depth/value. Several factors, which are not necessarily mutually exclusive, may account for these findings. First, patient perceptions of depth/value may be complex in that individual patients may base their perceptions of session depth/value on different process variables from session to session. Second, another complexity may be that different patients base their perceptions of depth/value on very different psychotherapy process variables. Third, it may be that other psychotherapy process variables not measured in the present study, such as patient insight, are more consistently predictive of patient perceptions of session depth/value. Fourth, it is possible that other factors or characteristics may be

important in predicting patient perceptions of session depth/value. For example, patient expectations, attitudes, beliefs and feelings toward therapy and the therapist may be more important in predicting their perceptions of session depth/value.

As previously noted, combinations of process variables were not useful in finding the best prediction of patient perceptions of session depth/value. This may be related to the intercorrelations and common variance shared by some of the psychotherapy process variables. Thus, these intercorrelations underscored the need and use of multiple regression analyses which take into account the interrelationships of predictor variables.

Patient Perceptions of Session Smoothness/Ease

As was the case with session depth/value, the findings of the study indicated that patient perceptions of session smoothness/ease were not consistently predicted across sessions by any of the psychotherapy process variables measured. In addition, it was found that combinations of process variables were not helpful in yielding the best prediction of smoothness/ease in each of the three psychotherapy sessions.

In session one and two, the psychotherapy process variable which best predicted patient perceptions of smoothness/ease was therapist exploration. High therapist exploration predicted low patient perceptions of session smoothness/ease and similarly, low therapist exploration predicted high patient perceptions of session smoothness/ease. This relationship was predicted in the study hypotheses. This finding is consistent with the perspective of clinicians who have described the uncovering or exploratory processes of psychotherapy as potentially uncomfortable or anxiety inducing for patients since they may involve exploring preconscious or unconscious aspects of the patient's experience (Malan, 1979; Orlinsky & Howard, 1967). It is suggested by this finding that at times therapist interventions involving questions, responses and comments designed to gather information and aid patients in exploring various aspects of their experience are related to patient perceptions of low smoothness and ease of the session. These therapist interventions are more associated with patient perceptions of the session as difficult, rough and uncomfortable.

In contrast, the psychotherapy process variable which best predicted patient perceptions of smoothness/ease in session three was patient psychic

distress. High patient psychic distress predicted low patient perceptions of session smoothness/ease and similarly, low patient psychic distress predicted high patient perceptions of session smoothness/ease. This relationship was also predicted in the study hypotheses. This finding appears to reflect a logical and clinically intuitive relationship between the patient's expression of emotional distress in the session and his/her ratings of the smoothness/ease of the session. It suggests that at times the patient's expression of emotional distress such as depression, guilt, shame and discouragement in a session are related to the patient's perception of the session as rough, difficult and uncomfortable.

It is noteworthy that in combination the findings with respect to patient perceptions of depth/value and smoothness/ease tend to support the common notion in psychotherapy that a session can be experienced as deep or valuable by the patient while at the same time experienced as rough, difficult and uncomfortable (Orlinsky & Howard, 1967). For example, in session one, high therapist exploration predicted high ratings of depth/value and low ratings of smoothness/ease. Additionally, in session three, high patient psychic distress predicted high ratings of depth/value and low ratings of smoothness/ease. Thus, it can be suggested

that sessions perceived by patients as deep or valuable are not necessarily perceived as smooth, easy and comfortable.

As already mentioned, the findings indicated that patient perceptions of session smoothness/ease were not consistently predicted by the psychotherapy process variables over sessions. In addition, when process variables were found to predict smoothness/ease ratings, the variance accounted by the variables was low. For example, in session one and two, therapist exploration accounted for twenty one percent of the variance in ratings of smoothness/ease. In session three, patient psychic distress accounted for thirty one percent of the variance in ratings of smoothness/ease. These findings of non-consistent prediction and low variance accounted by process variables were also noted with respect to patient perceptions of depth/value. The factors noted above to possibly account for these findings with respect to depth/value are also applicable to patient ratings of smoothness/ease.

As previously stated, combinations of process variables were not useful in yielding the best prediction of patient perceptions of smoothness/ease. This may be related to the intercorrelations and common variance shared by some of the psychotherapy process variables.

Thus, these intercorrelations underscored the use of multiple regression analyses which take into account the interrelationships of predictor variables.

Patient Perceptions of Session Goodness

The psychotherapy session impact questionnaire includes the adjective pair "good/bad" which measures the patient's overall positive evaluation or "goodness" rating of the therapy session. Since Stiles and Snow (1984b) found that patients overall ratings of session "goodness" did not consistently load on the session impact dimensions of depth/value or smoothness, this study sought to investigate what combination of therapy process variables predicted patients overall positive evaluation of therapy sessions.

The findings of the study indicated that for each session, none of the psychotherapy process variables predicted patient perceptions of session goodness. Thus, none of the study hypotheses were supported by these findings. These findings may be explained in part by the concept of session goodness. The concept of an overall positive evaluation of a therapy session may be too vague and ambiguous. As a consequence, the meanings ascribed

to it by patients may be very different. Patients may interpret this concept in very idiosyncratic and personal ways. Also, individual patients may vary in their interpretation of session "goodness" over time. Thus, prediction of session goodness as rated by patients might be very difficult. Supporting this notion are the findings of Stiles and Snow (1984b) which indicate that patient ratings of session goodness did not consistently load on the dimensions of session depth/value or smoothness/ease. They suggested that the use of a single global evaluation of therapy sessions may not be fruitful in psychotherapy research since it is an ambiguous concept with respect to what dimensions of session impact it is measuring.

The present findings are in marked contrast to the previous findings of Orlinsky and Howard (1967). These authors found various correlations between patient reports of psychotherapy process and their post session ratings of session goodness. A possible explanation for these different findings might be related to methodological differences. The study by Orlinsky and Howard (1967) utilized a different method for assessing psychotherapy process than the present study. They utilized patient's retrospective reports of therapy session process while the present study assessed process

variables from the perspective of observers. In addition, Orlinsky and Howard (1967) used a sample of very experienced psychotherapists with a median of six years of experience as opposed to the present study in which the majority of the therapists were graduate students in clinical psychology.

2. PATIENT SEVERITY OF PSYCHOLOGICAL DISTURBANCE

The secondary purpose of the present study was to investigate what combination of psychotherapy process variables predict psychotherapy sessions conducted with patient's suffering from severe psychological disturbance and low ego strength versus therapy sessions conducted with patient's having less severe psychological disturbance and higher ego strength. Research in this area represents a contribution to the literature since there has been a lack of empirical studies investigating the variables of severity of psychological disturbance and ego strength in relation to psychotherapy process. The lack of attention to these types of variables may account in part for the inconsistencies found in the empirical literature investigating process x outcome relationships. In addition, research in this area is

congruent with the general direction in psychotherapy research toward more conceptual specificity in terms of addressing complex questions about psychotherapy such as what treatments are effective with what types of patients and what kinds of psychotherapeutic processes occur with different types of patients.

The findings of the present study indicated that patient severity of psychological disturbance and level of ego strength were not consistently predicted across sessions by any of the psychotherapy process variables measured. In addition, it was found that combinations of process variables were not helpful in yielding the best prediction of this variable in each of the three psychotherapy sessions.

In session one and two, the psychotherapy process variable which best predicted patient severity of psychological disturbance and ego strength was therapist exploration. In contrast, none of the psychotherapy process variables were predictive of this variable for session three. In session one and two, high therapist exploration predicted patients with severe psychological disturbance and low ego strength and similarly, low therapist exploration predicted patients with less severe psychological disturbance and higher ego strength. It is suggested by this finding that at times therapist

interventions in the form of questions, comments and responses designed to gather information and help patients explore their experiences are more likely to characterize sessions with seriously disturbed patients. This finding was contrary to the relationship predicted in the study hypotheses. It was hypothesized that high therapist exploration would be predictive of patients with less severe psychological disturbance and higher ego strength and low therapist exploration would be predictive of patients with severe psychological disturbance and low ego strength. This hypothesis was based on psychodynamic/psychoanalytically informed theories of psychotherapeutic process which have stressed the importance of supportive, ego covering and ego building therapeutic processes rather than ego uncovering or exploratory processes for patients with low ego strength and severe psychological disturbance (Blanck & Blanck, 1974; 1979). Similarly, these theorists have emphasized the importance of ego uncovering or exploratory processes for patients with higher ego strength and less severe psychological disturbance.

One possible explanation for the contradictory findings of the present study might be related to therapist activity level. The therapist exploration process variable involves therapist questions, responses

and comments which are intended to gather information about the patient's experiences as well as help the patient to understand his personal experiences. It might be suggested that these types of therapist responses reflect the activity level of the therapist in the session. Consequently, therapists demonstrating high therapist exploration in a session may be adopting a more active stance with respect to their patient. The findings of the present study may be interpreted as suggesting that therapists adopt a more active posture toward patients with severe psychological disturbance versus those with less serious psychological disturbance. Psychodynamic/psychoanalytically informed clinicians have discussed the importance of therapists maintaining a more active stance or more active participation with seriously disturbed patients. For example, Blanck and Blanck (1974) discuss the therapist's more active use of clarifications, questions and confrontations to help seriously disturbed patients understand their experiences.

The failure of the present study to find process variables which consistently predicted severity of patient disturbance over sessions and the lack of support of the study hypotheses may be related in part to several limitations of the study which will be discussed in the

next section. For example, there are limitations with respect to the generalizability of the study sample which was composed largely of inexperienced graduate student therapists. In addition, the method used to categorize patients may have resulted in very heterogeneous groupings.

3. LIMITATIONS

The Sample

The findings of the present study are limited due to issues of sample generalizability. The study utilized a specific sample which was composed of a majority of graduate student therapists. In addition, all patients and therapists volunteered to participate in this project. Another restriction with the sample is that a majority of the patients sought treatment in training facilities, for example, a psychological clinic for graduate students in clinical psychology and an outpatient psychiatric clinic for psychiatric residents and clinical psychology interns. Hence, the sample is not representative of the diversity in patient and

therapist populations. Therefore, the findings of the present study cannot be generalized to other patient and therapist samples. For example, it is possible that other samples comprised of more experienced therapists would yield more consistent relationships between psychotherapy process variables as measured by observers and patient perceptions of session impact. Additionally, a sample of more experienced therapists with a psychodynamic/psychoanalytically informed orientation might yield more consistent relationships between psychotherapy process variables and patient severity of psychological disturbance.

Another limitation of the present study relates to sample size. As discussed by Cohen (1977) the ability to find significant results is dependent on the size of the sample and the estimated magnitude of the relationship. Large sample sizes are needed to detect low magnitude relationships while relatively smaller sample sizes are needed for large magnitude relationships. The estimated magnitude of the relationships explored in the present study was based on prior research conducted by O'Malley et al. (1983) which explored relationships between psychotherapy process variables and overall therapeutic outcome. The tables presented by Cohen (1977) were then used to determine the sample size required to detect such

a relationship effect size. However, the present study found correlations between process variables and patient perceptions of session impact to be lower than expected. Thus, the probability of the present sample being able to detect these lower order correlations was low. Therefore, larger sample sizes would seem to be needed to detect relationships between psychotherapy process variables and patient perceptions of session impact. However, the limited availability of appropriate resources to acquire the needed larger sample sizes would pose many difficulties for researchers.

Another limitation of the present study pertains to the sample characteristics. Several of the sample characteristics were found to be significantly correlated with patient perceptions of session impact, for example, marital status of the patient, professional level of the therapist, age of the therapist and length of time in therapy. No prior research had indicated that such relationships might exist. In the present study, the effects of these sample characteristics were partialled out statistically in order to explore the relationships between psychotherapy process variables and patient perceptions of session impact. However, future study might be directed toward controlling for these variables by non-statistical means or further investigating these

specific effects. Indeed, some of these sample characteristics might have an important influence on the relationship between therapy process variables and patient perceptions of session impact. For example, the length of time in therapy might influence the relationship between process variables and patient perceptions of the session. In an early phase of treatment, certain process variables may predict patient perceptions of the session whereas in a later phase very different process variables might predict patient perceptions of the session.

The Methods and Design

In addition to sample issues, methodological issues may have limited the results of the present study. There are some difficulties with the measures utilized in the study. The Vanderbilt Psychotherapy Process Scale was selected for use in this study for several reasons. It represented a measure with adequate reliability and validity. It sampled a wide range of process variables and it involved the use of a well developed training manual. However, many of the variables measured by the instrument failed to assess the meaningfulness of

appropriateness of the variables. For example, the variables of patient and therapist exploration and therapist warmth and friendliness were not measured in terms of their meaningfulness for the patient or their appropriateness in the interaction between therapist and patient. These variables may be very important to explore in future refinements of psychotherapy process scales. The Vanderbilt Psychotherapy Process Scale represents an instrument that is viewed as an important development in the measurement of psychotherapy process (Greenberg & Pinsof, 1986). However, continued research with an instrument will always point toward the need for further refinements.

The method used to assess patient severity of psychological disturbance also may be problematic from a methodological standpoint. The Millon Clinical Multiaxial Inventory was selected for use because it represented an instrument with adequate reliability and validity as well as a very practical and efficient method for assessing this variable. However, the method used to classify patients with respect to the variable of severity of psychological disturbance most likely resulted in very heterogeneous groups of patients. Consonant with the movement toward specificity in psychotherapy research, future research might benefit

from employing refined methods which might result in more homogeneous groups of patients. As a consequence, there may be more consistent findings of different psychotherapy process variables with such relatively more homogeneous patient groups.

Another methodological limitation of this study pertains to the lack of reliability data on the Session Evaluation Questionnaire. The inconsistency in predicting patient session impact may have been due in part to the possible unreliability of this measure.

The design of the present study also may have limited the findings. All of the findings reported were based on correlational data. As a consequence, no determination of causality can be made with respect to the relationships found between psychotherapy process variables and patient perceptions of session impact or between psychotherapy process variables and severity of patient psychological disturbance. The present findings just indicate the presence or absence of relationships between these variables. The problem of correlational data in psychotherapy process x outcome research is a pervasive one due to the extreme difficulty of utilizing true experimental designs in this field. Thus, the importance of employing sound theoretical perspectives to guide empirical research in this area is underscored.

4. IMPLICATIONS AND FUTURE RESEARCH

In general, psychotherapy process x outcome research has been criticized for its methods of sampling process variables. The inconsistency found in this body of research may be in part due to the inconsistency with which process variables are sampled across studies as well as the flaw in the traditional methodology. Typically, psychotherapy process variables are sampled either from one session or are averaged over several sessions in the course of treatment and then correlated with some therapeutic outcome criteria assessed at the end of treatment. As Kiesler (1966) has discussed, this methodology is flawed since it is based on the dubious assumption of homogeneity of psychotherapy process variables over the course of treatment within a particular patient - therapist dyad. Thus, it is questionable that these sampled process variables are representative of the course of treatment with a specific patient and therapist. The findings of the present study pertaining to the instability or variability of process variables over therapy sessions within a patient - therapist dyad contradict this assumption of homogeneity and seriously question the representativeness of process

variables sampled in the typical manner. These present findings in conjunction with similar findings by researchers support the development and utilization of alternative methodologies or strategies which are not based on the assumption of homogeneity and take full advantage of the variability of psychotherapy process variables across sessions. Several researchers have discussed the importance of such strategies (Elliot et al., 1982; Orlinsky & Howard, 1986). Orlinsky and Howard (1986) discussed a strategy involving micro-outcomes and similarly Elliot et al. (1982) discussed a strategy utilizing sub-outcomes. Stiles (1980) discussed and began developing a strategy of this kind involving psychotherapy session impact. Thus, the findings of the present study point toward the need for further research with strategies of a similar nature.

The primary purpose of this study was to further the development of the strategy of psychotherapy session impact by exploring what combination of psychotherapy process variables predict patient perceptions of session impact such as depth/value, smoothness/ease and goodness. The findings of the present study were disappointing in that none of the process variables were found to predict patient perceptions of goodness and none of the process variables were found to predict patient perceptions of

depth/value or smoothness/ease consistently over sessions. The strategy of session impact as discussed by Stiles (1980) requires that process variables consistently predict dimensions of impact over sessions in order to ultimately infer the relationships between process variables and therapeutic outcome. Hence, the present findings tend to question the feasibility of this strategy for exploring psychotherapy process x outcome relationships. However, future research designed to replicate these findings and correct the various limitations of this study would be needed to adequately assess the feasibility of this strategy. For example, studies involving larger sample sizes, different patient and therapist samples and different measures of psychotherapy process would be needed. In addition, the present study measured session impact from only the patient's perspective due to ethical considerations. As envisioned by Stiles (1980) in his discussion of this strategy, future study might be directed toward measuring session impact from the therapist's perspective. Another possibility is that session impact could be measured from the perspective of non-participant observers such as expert therapists.

The secondary purpose of this study was to explore what combinations of psychotherapy process variables

predict psychotherapy sessions conducted with patients having different levels of psychological disturbance and ego strength. The present study did not discover consistent differences in process variables with these groups of patients over sessions but the findings suggested that differences in process variables with these patient groups may occur at times in therapy. Thus, these findings suggest that future research explore these patient variables in relation to psychotherapy process x outcome. The inconsistency in the psychotherapy process x outcome literature may be due in part to the lack of attention to different patient populations or groups. Future study might also be directed toward identifying relatively more homogeneous patient populations then were used in the present study. This research would be consistent with the general trend toward specificity in empirical psychotherapy research.

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APPENDIXES

APPENDIX A

SESSION EVALUATION QUESTIONNAIRE

Session Evaluation Questionnaire--Form 3

Directions: Please place an "X" on each line to show how you feel about this session.

This session was:

BAD	_: _: _: _: _: _: _:	GOOD	
SAFE	_: _: _: _: _: _: _:	DA	
DIFFICULT	_: _: _: _: _: _: _:	E	
VALUABLE	_: _: _: _: _: _: _:	NGER	
SHALLOW	_: _: _: _: _: _: _:	OUS	
RELAXED	_: _: _: _: _: _: _:	EASY	
UNPLEASANT	_: _: _: _: _: _: _:	WORTHLESS	
FULL	_: _: _: _: _: _: _:	DEEP	
WEAK	_: _: _: _: _: _: _:	TENSE	
SPECIAL	_: _: _: _: _: _: _:	PLEASANT	
ROUGH	_: _: _: _: _: _: _:	EMPTY	
COMFORTABLE	_: _: _: _: _: _: _:	POWERFUL	
		ORDINARY	
		SMOOTH	
		UNCOMFORTABLE	

APPENDIX B

VANDERBILT PSYCHOTHERAPY PROCESS SCALE

VANDERBILT PSYCHOTHERAPY PROCESS SCALE

(Revised Version)

	Very Poor	Poor	Fair	Good	Excellent
1. What is your global impression of the quality of the relationship?	1	2	3	4	5
2. How productive was this hour?	1	2	3	4	5
3. How well does the patient seem to be getting along at this time?	1	2	3	4	5

I. Characterize the Patient's Behavior During the Hour:

	Not at all	Some	Fair amount	Pretty much	Great Deal
4. Actively participated in the interaction.	1	2	3	4	5
5. Took the initiative in bringing up the subjects that were talked about.	1	2	3	4	5
6. Seemed to be motivated for therapy.	1	2	3	4	5
7. Asked for advice on how to deal more effectively with self or others.	1	2	3	4	5
8. Concern was with how to deal more effectively with self and others.	1	2	3	4	5
9. Tried to elicit approval, sympathy, or reassurance from the therapist.	1	2	3	4	5
10. Relied upon the therapist to solve his/her problems.	1	2	3	4	5
11. Reacted negatively to the therapist's comments.	1	2	3	4	5
12. Tried to learn more about what to do in therapy and what to expect from it.	1	2	3	4	5
13. Discussed his/her feelings and perceptions about the therapist.	1	2	3	4	5
14. Focused on a particular problem.	1	2	3	4	5
15. Was logical and organized in expressing thoughts and feelings.	1	2	3	4	5
16. Tried to understand the reasons behind problematic feelings or behavior.	1	2	3	4	5
17. Explored feelings and experiences.	1	2	3	4	5
18. Was struggling to achieve better control over feelings or impulses.	1	2	3	4	5
19. Seemed to trust the therapist.	1	2	3	4	5

SEQUENT NO. _____

RATER _____

I. Characterize the Patient's behavior during this hour: (cont'd)

	Not at all	Some	Fair Amount	Pretty Much	Great Deal
20. Discussed his/her feelings as a patient and his/her progress in therapy.	1	2	3	4	5
21. Talked about his/her feelings.	1	2	3	4	5
22. Portrayed himself/herself as overwhelmed by his/her problem.	1	2	3	4	5

II. Describe the Patient's Demeanor During this Hour:

	Not at all	Some	Fair Amount	Pretty Much	Great Deal
23. Withdrawn	1	2	3	4	5
24. Guilty	1	2	3	4	5
25. Optimistic	1	2	3	4	5
26. Self-Critical	1	2	3	4	5
27. Mistrustful	1	2	3	4	5
28. Depressed	1	2	3	4	5
29. Hostile	1	2	3	4	5
30. Frustrated	1	2	3	4	5
31. Tense	1	2	3	4	5
32. Impatient	1	2	3	4	5
33. Intellectualizing	1	2	3	4	5
34. Defeated	1	2	3	4	5
35. Dependent	1	2	3	4	5
36. Controlling	1	2	3	4	5
37. Deferential	1	2	3	4	5
38. Defensive	1	2	3	4	5
39. Inhibited	1	2	3	4	5
40. Spontaneous	1	2	3	4	5
41. Passive	1	2	3	4	5
42. Ashamed	1	2	3	4	5
43. Emotional	1	2	3	4	5

III. Characterize the therapist's behavior during this hour:

	Not at all	Some	Fair amount	Pretty much	Great deal
44. Communicated approval of some aspects of the patient's behavior.	1	2	3	4	5
45. Tried to help the patient evaluate his/her reactions and feelings.	1	2	3	4	5
46. Placed the patient's report in a new perspective or reorganized the patient's experience.	1	2	3	4	5
47. Showed warmth and friendliness towards the patient.	1	2	3	4	5
48. Helped the patient feel accepted in the relationship.	1	2	3	4	5
49. Supported the patient's self-esteem, confidence, and building hope.	1	2	3	4	5
50. Responded empathically to the patient.	1	2	3	4	5
51. Explicitly encouraged the patient to express feelings and concerns.	1	2	3	4	5
52. Tried to get a better understanding of the patient, of what was really going on.	1	2	3	4	5
53. Tried to help the patient recognize his/her feelings.	1	2	3	4	5
54. Tried to help the patient understand the reasons behind his/her reactions.	1	2	3	4	5
55. Encouraged depth rather than shallowness.	1	2	3	4	5
56. Dealt with interpersonal dynamics between himself/herself and the patient.	1	2	3	4	5
57. Actively participated in the interaction.	1	2	3	4	5
58. Encouraged the patient to take a more active role in therapy.	1	2	3	4	5
59. Identified themes in the patients behavior and experiences.	1	2	3	4	5
60. Encouraged the patient to accept responsibility for his/her problems.	1	2	3	4	5

III. Characterize the Therapist's Behavior During this Hour: (cont'd)

	Not at all	Some	Fair amount	Pretty Much	Great deal
61. Maintained focus on therapy-related topics.	1	2	3	4	5
62. Modeled behavior or set an example for the patient.	1	2	3	4	5
63. Tried to help the patient to achieve better control over his/her feelings and impulses.	1	2	3	4	5
64. Encouraged the patient to try new ways of dealing with self and others.	1	2	3	4	5
65. Explicitly tried to impose his/her own set of values on the patient.	1	2	3	4	5
66. Offered specific suggestions for things that the patient could do.	1	2	3	4	5
67. Conveyed expertise.	1	2	3	4	5
68. Disclosed his/her own feelings, attitudes, values, or experiences.	1	2	3	4	5
69. Confronted the patient.	1	2	3	4	5
70. Confronted the patient in a negative manner.	1	2	3	4	5

IV. Describe the Therapist's Demeanor During this Session.

	Not at all	Some	Fair amount	Pretty much	Great deal
71. Annoyed	1	2	3	4	5
72. Involved	1	2	3	4	5
73. Relaxed	1	2	3	4	5
74. Intimidating	1	2	3	4	5
75. Authoritarian	1	2	3	4	5
76. Optimistic	1	2	3	4	5
77. Lecturing	1	2	3	4	5
78. Defensive	1	2	3	4	5
79. Judgmental	1	2	3	4	5
80. Respectful	1	2	3	4	5

APPENDIX C

SUBSCALES OF THE VANDERBILT PSYCHOTHERAPY PROCESS SCALE

Subscales for the Vanderbilt Psychotherapy Process Scale

PATIENT PARTICIPATION

- 4. Patient actively participated in the interaction.
- 5. Patient took the initiative in bringing up the subjects that were talked about.
- 15. Patient was logical and organized in expressing thoughts and feelings.
- 19. Patient seemed to trust the therapist.
- 23. Patient was withdrawn. (-)
- 39. Patient was inhibited. (-)
- 40. Patient was spontaneous.
- 41. Patient was passive. (-)

PATIENT HOSTILITY

- 11. Patient reacted negatively to the therapist's comments.
- 29. Patient was hostile.
- 30. Patient was frustrated.
- 32. Patient was impatient.
- 33. Patient was intellectualizing
- 38. Patient was defensive.

PATIENT EXPLORATION

- 2. How productive was this hour.
- 6. Patient seemed motivated for therapy.
- 8. Patient concern was with how to deal more effectively with self and others.
- 14. Patient focused on a particular problem.
- 16. Patient tried to understand the reasons behind problematic feelings or behavior.
- 18. Patient was struggling to achieve better control over feelings or impulses.
- 21. Patient talked about his/her feelings.

THERAPIST EXPLORATION

- 45. Therapist tried to help the patient evaluate his/her reactions and feelings.
- 46. Therapist placed the patient's report in a new perspective or reorganized the patient's experience.
- 52. Therapist tried to get a better understanding of the patient, of what was really going on.
- 53. Therapist tried to help the patient recognize his/her feelings.
- 54. Therapist tried to help the patient understand the reasons behind his/her reactions.
- 55. Therapist encouraged depth rather than shallowness.

THERAPIST EXPLORATION (Continued)

- 59. Therapist identified themes in the patients behavior and experiences.
- 60. Therapist encouraged the patient to accept responsibility for his/her problems.
- 61. Therapist maintained focus on therapy-related topics.
- 62. Therapist modeled behavior or set an example for the patient.
- 63. Therapist tried to help the patient to achieve better control over his/her feelings and impulses.
- 67. Therapist conveyed expertise.
- 68. Therapist disclosed his/her own feelings, attitudes, values, or experiences. (-)

THERAPIST WARMTH AND FRIENDLINESS

- 44. Therapist communicated approval of some aspects of the patient's behavior.
- 47. Therapist showed warmth and friendliness towards the patient.
- 48. Therapist helped the patient feel accepted in the relationship.
- 49. Therapist supported the patient's self-esteem, confidence, and building hope.
- 50. Therapist responded empathically to the patient.
- 72. Therapist was involved.
- 73. Therapist was relaxed.
- 76. Therapist was optimistic.
- 80. Therapist was respectful.

NEGATIVE THERAPIST ATTITUDE

- 70. Therapist confronted the patient in a negative manner.
- 74. Therapist was intimidating.
- 75. Therapist was authoritarian.
- 77. Therapist was lecturing.
- 78. Therapist was defensive.
- 79. Therapist was judgmental.

PATIENT PSYCHIC DISTRESS

- 3. How well does the patient seem to be getting along at this time. (-)
- 22. Patient portrayed himself/herself as overwhelmed by his/her problem.
- 24. Patient was guilty.
- 25. Patient was optimistic. (-)
- 26. Patient was self-critical.
- 28. Patient was depressed.
- 34. Patient was defeated.
- 42. Patient was ashamed.
- 43. Patient was emotional.

(-) = scored in reverse direction.

APPENDIX D

MILLON CLINICAL MULTIAXIAL INVENTORY

MCMI

MILLON CLINICAL MULTIAXIAL INVENTORY

By Theodore Millon

MCMI Reusable Test Booklet

The following pages contain a list of statements that people use to describe themselves. They are printed here to help you in describing your feelings and attitudes. Try to be as honest and serious as you can in marking the statements since the results will be used to help your doctor in learning about your problems and in planning to help you.

Do not be concerned that a few of the statements will seem unusual to you; they are included to describe people with many types of problems. When you agree with a statement or decide that it describes you, fill in the T on the separate answer sheet to mark it true (●○). If you disagree with the statement or decide that it does not describe you, fill in the F to mark it false (○●). Try to mark every statement even if you are not sure of your choice. If you have tried your best and still cannot decide, mark the ○ for false.

There is no time limit for completing the inventory, but it is best to work as rapidly as is comfortable for you.

Use a soft, black lead pencil and make a heavy, dark mark when filling in the circles. If you make a mistake or change your mind, please erase the mark fully and then fill in the correct circle. *Do not make any marks on this booklet.*

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45114

1. I always follow my own ideas rather than do what others expect of me.
2. All my life I have worn myself out trying to please other people.
3. Talking to other people has almost always been difficult and painful for me.
4. I believe in being strong willed and determined in everything I do.
5. In the last few weeks I begin to cry even when the slightest of things goes wrong.
6. I love to have many different social activities and like to go from one to another.
7. I am a very weak person who has to lean on others for almost everything.
8. I always feel I am not wanted in a group.
9. I often criticize people strongly if they annoy me.
10. I am content to be a follower of others.
11. I enjoy doing so many different things that I can't make up my mind what to do first.
12. I am very changeable in my likes and dislikes.
13. I have little interest in making friends.
14. I think I am a very sociable and out-going person.
15. I know I'm a superior person, so I don't care what people think.
16. People have never given me enough recognition for the things I've done.
17. I have a drinking problem that I've tried unsuccessfully to end.
18. Lately, I get butterflies in my stomach and break out in cold sweats.
19. I have always wanted to stay in the background during social activities.
20. I will often do things for no reason other than they might be fun.
21. I keep my room well organized with everything in the correct place all the time.
22. I am the sort of person who changes his opinions and attitudes from day to day.
23. There have been times when people have become annoyed with me because I talked too much or too fast for them.
24. I'll make a sharp and critical remark to someone if they deserve it.
25. I find myself quick to agree with the opinions of others.
26. I tend to burst out in tears or in anger for unknown reasons.
27. Lately, I've begun to feel lonely and empty.
28. I have a talent to be dramatic.
29. I have a hard time keeping my balance when walking.
30. I enjoy intense competition.
31. When I run into a crisis, I quickly look for someone to help me.
32. I prefer to be with people who are religious.
33. I feel weak and tired much of the time.
34. Something exciting always comes along to pull me out of a sad mood.
35. My drug habit has often gotten me into a good deal of trouble.
36. Lately, I find myself crying without any reason.
37. I have always avoided getting involved with people socially.
38. Under no circumstances do I ever let myself be tricked by people who say they need help.
39. One sure way to make a peaceful world is by improving people's morals.
40. I am a very well read person.
41. I find it hard to sympathize with people who are always unsure about things.
42. I am a very agreeable and submissive person.
43. My own "bad temper" has been a big cause of my unhappiness.
44. I have always felt a pain somewhere in my body.
45. I get very depressed now by even minor things.
46. Sometimes my mind goes so fast I can hardly keep up with it.
47. I'm so quiet and withdrawn, most people don't even know I exist.
48. I like to flirt with members of the opposite sex.
49. I am a quiet and fearful person.
50. I'm a very erratic person, changing my mind and feelings all the time.
51. I feel very tense when I think of the day's happenings.
52. Drinking alcohol on my part has never caused any real problems in my work.
53. Lately, my strength seems to be draining out of me, even in the morning.
54. I've begun to feel like a failure in recent weeks.
55. I hate to talk, even to people I know.
56. I have always had a terrible fear that I will lose the love of people I need very much.
57. There have been times when I had so much energy that I didn't need any sleep for days.
58. Lately, I have begun to feel like smashing things.
59. I have given serious thought recently to doing away with myself.
60. I am always looking to make new friends and meet new people.
61. I keep very close track of my money so I am prepared if a need comes up.

62. I was on the front cover of several magazines last year.
63. Few people like me.
64. If someone criticized me for making a mistake, I would quickly point out some of that person's mistakes.
65. I often have difficulty making decisions without seeking help from others.
66. I often let my angry feelings out and then feel terribly guilty about it.
67. Lately, I feel jumpy and under terrible strain, but I don't know why.
68. I very often lose my ability to feel any sensations in parts of my body.
69. When I am home alone I telephone one friend after another just to talk.
70. Taking so-called illegal drugs may be unwise, but in the past I found I needed them.
71. Lately, I feel tired all the time.
72. Lately, I can't seem to sleep, and wake up just as tired as when I went to bed.
73. I have a tight feeling in the pit of my stomach every few days or so.
74. I used to enjoy performing for family friends when I was younger.
75. We should respect earlier generations and not think we know better than they.
76. I feel terribly depressed and sad much of the time now.
77. I am the sort of person that others take advantage of.
78. I always try hard to please others, even when I dislike them.
79. Serious thoughts of suicide have occurred to me for many years.
80. I quickly figure out how people are trying to cause me trouble.
81. I have periods of so much energy that I can't sit still at all.
82. I can't understand it, but I seem to enjoy hurting persons I love.
83. A long time ago, I decided it's best to have little to do with people.
84. I am ready to fight to the death before I'd let anybody take away my self-determination.
85. Since I was a child, I have always had to watch out for people who were trying to cheat me.
86. When things get boring, I like to stir up some excitement.
87. I have an alcoholic problem that has made difficulties for me and my family.
88. If a person wants something done that calls for real patience, they should ask me.
89. I am probably the most creative thinker among the people I know.
90. I have not seen a car in the last ten years.
91. I feel I am not a likeable person.
92. Punishment never stopped me from doing what I wanted.
93. There are many times, when for no reason, I feel very cheerful and full of excitement.
94. It would be good for me to be married to a person who is more grownup and less immature than I am.
95. I very often say things quickly that I regret having said.
96. In recent weeks I feel worn out for no special reason.
97. I feel very guilty lately because I am not able to do things right anymore.
98. Ideas keep turning over and over in my mind and they won't go away.
99. I've become quite discouraged and sad about life recently.
100. Many people have been spying into my private life for years.
101. I have always gone for long periods when I hardly talk to anyone.
102. I hate or fear most people.
103. I speak out my opinions about things no matter what others may think.
104. Sometimes I do things so fast that others get annoyed with me.
105. My habit of abusing drugs has caused me to miss work in the past.
106. I am always willing to give in to others to avoid disagreements.
107. I am often cross and grouchy.
108. I just don't have the strength lately to fight back.
109. Lately, I have to think things over and over again for no good reason.
110. Looking back on my life, I know I have made others suffer as much as I have suffered.
111. I use my charm to get the attention of other people.
112. Though my body pains and problems are real, nobody seems to understand them.
113. When things scared me as a child, I almost always ran to my mother.
114. Lately, I've been sweating a great deal and feel very tense.
115. Sometimes I feel like I must do something to hurt myself or someone else.
116. I keep so busy doing so many things that people can't figure out what I'll be doing next.
117. I've become very jumpy in the last few weeks.

118. I keep having strange thoughts that I wish I could get rid of.
119. I have a great deal of trouble trying to control an impulse to drink to excess.
120. Most people think that I'm a worthless nothing.
121. I very often feel a lump in my throat.
122. I have succeeded over the years in drinking a minimum of alcohol.
123. I have always "tested" people to find out how much they can be trusted.
124. Even when I'm awake, I don't seem to notice people who are near me.
125. It is very easy for me to make many friends.
126. I always make sure that my work is well planned and organized.
127. I very often hear things so well that it bothers me.
128. If it weren't for the medicines I'm taking, I'd be running around with too much energy in me.
129. I don't blame anyone who takes advantage of some one who allows it.
130. I am very easily led by people.
131. I've many ideas that are ahead of the times.
132. Lately, I've been feeling sad and blue and I can't seem to snap out of it.
133. I think it is always best to seek help in what I do.
134. All my life I have felt guilty for letting down so many people.
135. I have always known what my mind tells me and I have never listened to what others say.
136. In the last few years, I have felt so guilty that I may do something terrible to myself.
137. I never sit on the sidelines when I'm at a party.
138. People tell me that I'm a very proper and moral person.
139. There have been times recently when I ran around doing so many things at once that I got worn out.
140. I have a problem using so-called illegal drugs that has led to family arguments.
141. I am very ill-at-ease with members of the opposite sex.
142. I have a way of speaking directly that often makes people angry.
143. I don't mind that people are not interested in me.
144. Frankly, I lie quite often to get out of trouble.
145. People can easily change my ideas, even if I thought my mind was made up.
146. Others have tried to do me in, but I have the will power to overcome them.
147. I often say annoying things, without thinking, that hurt someone's feelings.
148. I often make people angry by bossing them.
149. I have great respect for those in authority over me.
150. I have almost no close ties with other people.
151. People have said in the past that I became too interested and too excited about too many things.
152. I have flown across the Atlantic thirty times in the last year.
153. I believe in the saying, "early to bed and early to rise . . ."
154. I attempt to be the life of the party.
155. I could never be friendly with people who do immoral things.
156. My parents always disagreed with each other.
157. On occasion I have had as many as ten or more drinks without becoming drunk.
158. In social groups I am almost always very self-conscious and tense.
159. I think highly of rules because they are a good guide to follow.
160. Ever since I was a child, I have been losing touch with the real world.
161. I rarely feel anything strongly.
162. I have a strong need to depend on others.
163. Ideas very often run through my mind much faster than I can speak them.
164. Sneaky people often try to get the credit for things I have done or thought of.
165. I would really enjoy being in show business.
166. I have the ability to be successful in almost anything I do.
167. Lately, I have gone all to pieces.
168. I have always looked for help in everything I do.
169. There has never been any hair on either my head or my body.
170. When I am with others I like to be the center of attention.
171. I always feel like an outsider in social groups.
172. I'm the kind of person who can walk up to anyone and tell him or her off.
173. I prefer to be with people who will be protective of me.
174. I've had many periods in my life when I was so cheerful and used up so much energy that I fell into a low mood.
175. I have had difficulties in the past stopping myself from over-using drugs or alcohol.

APPENDIX E

ANNOUNCEMENT LETTER

ANNOUNCEMENT TO CLIENTS

The Psychological Clinic is cooperating in a research project with the University of Tennessee, Department of Psychology. The purpose of this project is to explore the effective ingredients in psychotherapy. This project will investigate those elements of psychotherapy that are the most effective in facilitating positive change. This project may help us to discover ways to improve our services as well as supply valuable information for the further advance of psychotherapy in general.

Your participation in this project would involve taking a personality questionnaire, filling out a therapy session rating form for three different therapy sessions and allowing these three therapy session which you have rated to be audiotaped. Therefore, participation in this study will involve 20-35 minutes to complete the personality questionnaire and a total of 30 minutes to fill out the three therapy session rating forms. All the information obtained will be held in strict confidence in order to fully protect your rights of confidentiality. In addition, various protective measures will be used to protect your privacy, for example, your name and identity will be known to the project director, Mr. Castino, and all information collected will be identified by code number as well as locked in a secure file. Also, all audiotapes will be erased after the completion of the project.

Please understand that your participation in this project is completely voluntary and in no way relates to or influences the treatment services you are receiving here. Also, keep in mind that you can discontinue participation at any time. I would encourage you to talk with your therapist about your participation in this project.

If you would like to know more about this project and find out how you can be involved, please check YES below and leave information (name, phone number and address) where you can be reached. Then, return this form to the receptionist. I will be contacting you in the next few days to more fully explain the project and invite you to participate.

Sincerely,

Robert J. Castino, M.A.
Doctoral Student in Clinical Psychology
University of Tennessee

YES I would like to find out more about this project and the possibility of participating.

Name _____

Phone _____

Address _____

APPENDIX F

PATIENT INFORMED CONSENT FORM AND

RELEASE OF INFORMATION FORMS

Informed Consent

We are conducting a research project on psychotherapy in cooperation with the Psychological Clinic. The goal of this research is to increase our understanding of the effective ingredients in psychotherapy in order to improve the provision of psychotherapeutic services. Your participation in this research, should you decide to be involved, would help researchers and therapists better understand what factors are involved in effective psychotherapy.

Your participation in this project would involve taking a personality questionnaire, allowing us to audiotape three different therapy sessions and filling out a therapy session rating form for these three audiotaped sessions. First, you will be asked to fill out the personality questionnaire which is made up of 175 true/false items and will take approximately 20 to 35 minutes to complete. This questionnaire will be given to you by the project director, Mr. Castino. Next, three different therapy sessions will be audiotaped by your therapist which he/she will give to the project director. Immediately after each of these therapy sessions, you will be asked to fill out a therapy session rating form. Each rating form has twenty-four items and will take approximately 5 to 10 minutes to complete. You will receive these rating forms from your therapist and will be asked to return them to the receptionist. Advanced clinical psychology graduate students at the University of Tennessee will listen to these audiotaped therapy sessions in order to gather information about the effective ingredients of psychotherapy. These advanced clinical students will have no knowledge of your name or identity. This procedure will be used in order to protect your rights of confidentiality. We will also need your permission to review your records and to speak to your therapist in order to discuss your participation in this study and to enlist his/her cooperation in this project. We encourage you to talk with your therapist about your own participation in this project, as well as his or hers.

All the information obtained will be held in the strictest confidence in order to fully protect your rights of confidentiality. All the materials collected, the personality questionnaire, the therapy session rating forms, and the audiotaped therapy sessions, will be coded by number and will be identified only through a master list. The project director will be the only person who has access to this list. The master list will be kept in a locked cabinet. After all the materials are obtained, the master list will be destroyed. From that point on, the materials will be identified by number only. After the completion of the project, all audiotaped therapy sessions will be erased.

Please understand that your decision for participating in this research in no way relates to or influences the treatment services you are receiving here. Also, if you agree to take part in this research, please understand that you are free to withdraw at any time without penalty. All you need to do is inform us that you no longer want to be involved. The major risk of this study is that in some unforeseeable way you may feel uncomfortable

about participating in the project after it has started, however, please keep in mind that you may discontinue at any time.

Your participation in this study may be helpful in the further understanding and implementation of effective psychotherapy. You may also find your participation in this study as personally helpful since it involves thinking about your experience in therapy in possibly new ways. Furthermore, your participation in this study may be helpful to future clients seeking therapy as well as therapists who wish to improve their skills.

If you have any questions at this point, or at any point later in the study, please do not hesitate to ask us. You will be given a copy of this informed consent to keep, should you wish to contact us at any time about this research project.

Robert J. Castino, M.A. Doctoral Student in Clinical Psychology

Lance T. Laurence, Ph.D., Clinical Psychology

Alvin G. Burstein, Ph.D., Clinical Psychology

Address: Psychology Department
University of Tennessee
Knoxville, Tennessee 37916
Telephone: 974-2161 or 974-2531

I have read the above statement with the project director, Mr. Castino, and agree to take part in this project.

Signature _____ Date _____

RELEASE OF INFORMATION

CLIENT NAME: _____ BIRTHDATE _____

I hereby authorize _____ to release to

_____ Robert J. Castino, M.A. _____

agency: _____ University of Tennessee, Department of Psychology _____

address: _____ 27 Austin Peay Bld., Knoxville, TN 37916 _____

information concerning _____ presenting complaints; diagnosis _____

This release will be in effect for three months or until _____

_____ completion of my participation in Robert Castino's project _____

unless withdrawn beforehand

Date: _____ Signed _____

Witnessed _____

RELEASE OF INFORMATION

CLIENT NAME: _____ BIRTHDATE _____

I hereby authorize _____ to release to

_____ Robert J. Castino, M.A. _____

agency: _____ University of Tennessee, Department of Psychology _____

address: _____ 27 Austin Peay Bld., Knoxville, TN 37916 _____

information concerning _____ my participation and my therapist's
_____ participation in Robert Castino's project _____

This release will be in effect for three months or until _____
_____ completion of my participation in Robert Castino's project _____
unless withdrawn beforehand

Date: _____ Signed _____

Witnessed _____

APPENDIX G

THERAPIST INFORMED CONSENT FORM

Informed Consent

We are conducting a research project on psychotherapy in cooperation with the Psychological Clinic. The goal of this research is to increase our understanding of the effective ingredients in psychotherapy in order to improve the provision of psychotherapeutic services. You and your client's participation in this research, should you decide to be involved, would help researchers and therapists better understand what factors are involved in effective psychotherapy.

At this point, the project director has met with your client and obtained a release of information to discuss his/her participation in this project. We have also encouraged your client to discuss his/her participation in this project with you. Your client's participation in this study would involve taking a personality questionnaire (Millon Clinical Multiaxial Inventory) and filling out a therapy session rating form (Session Evaluation Questionnaire) for three different therapy sessions. The project director will also obtain a release of information to review your client's chart in order to obtain presenting complaints and diagnosis. Both you and your client's participation would involve allowing us to audiotape these three therapy sessions which your client has rated.

First, your client will be asked to fill out the personality questionnaire which is comprised of 175 true/false items and will take approximately 20 to 35 minutes to complete. This personality questionnaire will be administered by the project director. Next, your client will be asked to fill out a therapy session rating form for three different therapy sessions. He/she will be asked to fill out the rating form immediately after the session. You will be asked to give this rating form to your client, who is to return it to the receptionist. Each rating form has 24 items and will take approximately 5-10 minutes to complete. The three therapy sessions which your client has rated will be audiotaped. You will be asked to audiotape these sessions with tape recorders which will be provided for you. Advanced clinical graduate students at the University of Tennessee will listen to these audiotapes in order to gather information about the effective ingredients of psychotherapy. These advanced clinical students will have no knowledge of the names or identities of the persons on these audiotapes. This procedure will be used in order to protect you and your client's confidentiality.

All the information obtained will be held in the strictest confidence in order to fully protect you and your client's rights of confidentiality. All the materials collected, the personality questionnaire, the therapy session rating forms, and the audiotaped sessions, will be coded by number and will be identified only through a master list. The project director will be the only person who has access to this list. The master list will be kept in a locked cabinet. After all the materials are obtained, the master list will be destroyed. From that point on, the materials will be identified by number only. After the completion of the project, all audiotaped therapy sessions will be erased.

Please understand that your participation in this project is completely voluntary. Furthermore, it has been explained to your client that his/her participation in this research in no way relates to or influences the treatment services he/she is receiving here. Also, if you and your client agree to take part in this research, please understand that you are free to withdraw at any time without penalty. If at any time you feel that your client has been adversely affected by this project, he/she will be excused from the project. All you need do is inform us that you no longer want to be involved. If at any time you need to seek help in dealing with the effects which the research procedures may have had on your client's treatment, an ABPP boarded, licensed clinical psychologist will be provided for you without charge for consultation.

Your participation in this study may be helpful in the further understanding and implementation of effective psychotherapy. Although you may not directly benefit from this study, your client may find his participation as personally helpful since it involves thinking about his/her therapy experience in possibly new ways. Information as to the general results and conclusions of this study will be provided to you if you so desire.

If you have any questions at this point, or at any point later in the study, please do not hesitate to ask us. You will be given a copy of this informed consent to keep, should you wish to contact us at any time about this research project.

Robert J. Castino, M.A. Doctoral Student in Clinical Psychology

Lance T. Laurence, Ph.D., Clinical Psychology

Alvin G. Burstein, Ph.D., Clinical Psychology

Address: Psychology Department
University of Tennessee
Knoxville, Tennessee 37916
Telephone: 974-2161 or 974-2531

I have read the above statement and agree to take part in this project.

Signature _____ Date _____

VITA

Robert Joseph Castino was born in New York City on January 22, 1954 of Italian immigrants, Stephen F. Castino and Maria Clara Castino. After his family moved to New Jersey, he attended elementary school in Union City, New Jersey. In June 1972, he graduated from high school in Ridgefield, New Jersey. The following September he entered Rutgers University in New Brunswick, New Jersey. In May 1976, he received a Bachelor of Arts degree from Rutgers University, graduating with general honors and high distinction in Psychology. The following September he entered the University of Dayton in Ohio. At this university, he received a Masters degree in Psychology with specialization in Clinical Psychology. He was employed for several years in an adolescent drug rehabilitation program in Dayton. In the fall of 1981, he entered the graduate program at the University of Tennessee, Knoxville specializing in Clinical Psychology. His psychology residency was completed at the Eastern Virginia Medical School in Norfolk, Virginia. His graduate school career culminated in being awarded the Doctor of Philosophy Degree in Psychology.

The author is currently employed as an Assistant Professor by the Department of Psychiatry at the Louisiana State University Medical Center, New Orleans. His plans are to pursue his interests in clinical practice and research with children and adults.