Linguistic Research Institute
Report No. 5

Psychotherapy: A means-ends study

James R. Holmes

1970

PSYCHOTHERAPY:
A MEANS-ENDS STUDY
LRI Report 5

Linguistic Research Institute
Report No. 5

Psychotherapy: A means-ends study

James R. Holmes

1970

TABLE OF CONTENTS

CHAPTER PAGE

CHAPTER PAGE

INTRODUCTION

During the last two decades, the demand for psychotherapy has increased tremendously. Hundreds of thousands of men, women and children are seeking help from thousands of therapists of one kind or another. Unfortunately, psychotherapy is a long and costly process, and there are not nearly enough therapists to meet the ever growing social demand. In general, therapists are sometimes able to "cure patients," but no one knows how they do it, and they cannot teach anyone else to do it. Therapists probably acquire the ability to "cure patients" through learning, but there are no demonstrated techniques for reliably teaching people to do psychotherapy, and we know relatively little about the effects that therapists are able to achieve or the way in which they go about achieving those effects. If we are to do anything about the demand for psychotherapy, one place to begin is to try to establish systematically what it is that therapists are now able to do and what it is that they know how to do. If we can identify the skills and abilities that therapists now have, we can begin to identify or develop ways of reliably teaching people to do psychotherapy. In addition, if we can identify what it is that therapists are able to do, we will also be better able to identify what it is that therapists are not able to do and we might then be in a better position to try to discover new and more efficient ways of doing psychotherapy.

One way to begin to systematically identify what it is that therapists are now able to do and what it is they know how to do is to try to describe the ends therapists are able to achieve and the means by which they achieve those ends. The present study is primarily an

attempt to demonstrate the practicality of a means-end analysis of individual psychotherapy by performing such an analysis on a limited scale. A means-end analysis is, however, a relatively new concept in psychotherapy research and it may require a considerable shift in the way in which psychologists usually regard research on the process of psychotherapy. In order to make the present study more comprehensible, several topics should be considered. To this end, (I) the question of whether psychotherapy isn't both an art and a science will be developed; (II) the major types of research on the process of psychotherapy will be summarized and (III) some of the conceptual and methodological issues in psychotherapy research will be discussed. This discussion will include: (A) a review of some of the things therapists and researchers have had to say about the published research on psychotherapy and (B) a brief analysis of what it is we are doing when we try to achieve a description of the process of psychotherapy. The concept of a means-end analysis will then be introduced and the relationship between a means-end analysis and the concept of a "process" will be discussed. Finally, a means-end study for which the above considerations provide reason enough will be presented.

CHAPTER I

ART AND SCIENCE OF PSYCHOTHERAPY

There has been considerable discussion in psychology as to whether psychotherapy is an art or a science (Rubinstein and Parloff, 1959; Rychlak, 1960). In general, the goal in this chapter will be to explore what we mean when we say that psychotherapy is either an art or a science and to develop the question of whether psychotherapy isn't both an art and a science. This discussion will then lead into an evaluation of the present state of affairs in psychotherapy.

A. The Science of Psychotherapy

To the degree that psychotherapy is regarded as being a science, it is usually seen as being one of the applied sciences (Parloff and Rubinstein, 1959) and therapists as well as pragmatically oriented researchers are usually regarded as applied scientists. The fact that we frequently speak of an "applied" science suggests that there is also a "pure" version which is being "applied," and those who see psychotherapy as an applied science may refer to a body of experimentally derived knowledge which it is said the therapist is applying in his practice of psychotherapy. A second distinction that is usually made between applied science and basic or "pure" science is that the applied scientist is concerned with finding or developing solutions for practical problems while the basic or "pure" scientist is concerned with the discovery of the universal laws of nature (i.e. laws of human behavior).

If psychotherapy is a science, however, it seems to be more similar to the basic sciences than it is to the applied sciences. At

present, there does not seem to be a "general psychology" or "basic scientific psychology" that is sufficiently relevant or generalizable to be effectively used by clinicians generally. Therapists are generally engaged in trying to find ways of "curing patients"; they are not applying demonstrated principles of curing patients. That is, therapists seem to be engaged in a process of discovery rather than in the application of a technology. It appears that psychotherapy is still "the art of applying a science that doesn't exist" (Muhl, 1960).

In the physical sciences, there seems to be a close reciprocal relationship between the "basic" and "applied" sciences. For example, the engineer is an applied scientist who uses the knowledge (i.e. universal laws) discovered by the physicist in order to solve problems encountered in the "real" world. The engineer is primarily engaged in the application and development of technology. When the engineer encounters a problem that he cannot solve, he turns to the physicist working in the laboratory. Although the physicist is primarily interested in the discovery of knowledge for its own sake, much of his basic research is stimulated by problems or questions posed by the engineer. The physicist then may be able to arrive at novel yet factually significant conceptualizations which in turn lead to further basic research (experiments) which may require for its achievement the invention of new techniques or practices which can then be applied to the solution of real-life problems. It is a maxim of science that a good answer generates new questions (Conant, 1951), and an increment in what we know how to do with regard to real life situations often reveals problems or questions that we were not

previously aware of. Thus, the engineer receives knowledge and techniques that are relevant to his pragmatic interests while the physicist receives the challenge, support and empirical constraint which acts as a safeguard against trivial conceptualizations and irrelevant practices.

In psychology, there has often been little if any apparent relationship between the activities of the "basic scientist" in the laboratory and the "applied scientist" in the clinic or community. Faced with significant social problems for which there is no apparent solution, the clinician has tried to develop conceptualizations and techniques which would be applicable to these problems. Unfortunately, the pressure of social need has often had the effect of pre-determining the way in which problems are formulated and restricting the ways in which clinicians have tried to deal with these problems. In any event, most of our general theories of behavior, are personality theories developed and used by clinicians in their attempts to understand and help psychologically disturbed persons (White, 1956). For the most part, experimental psychologists have usually not been concerned with problems identified by the clinicians. They have usually justified their lack of interest by saying that psychologists should only be concerned with basic research and the discovery of the universal laws of human behavior (Guthrie, 1950). Unfortunately, the conceptualizations and practices generated in experimental psychology have not been characterized by their generalizability (See Ossorio, 1966 for a discussion of the criteria for genuine generalizations as opposed to a pre-emptive bid to substitute the use of one term for another.). The apparent danger in

the complete separation of the activities of "basic" and "applied" psychologists is that the conceptualizations and empirical relationships generated by the basic scientist may be trivial or irrelevant to the practices of people in the "real" world, and without a two way street from "pure" to "applied" activities, there is no apparent way of finding out which conceptualizations and practices achieve a significant place in significant activities other than psychological research.

What is, at the present time, a matter of discovery may at some future time become a matter of the application of a technology. At one time, physicists did not know how to split atoms and it was not until someone discovered a way to split the atom and could teach others to do it that we began to develop a technology that could be applied to problems of society or to the development of military and industrial uses of nuclear power. Moreover, in discovering how to split atoms physicists discovered a universal law of nature. At the present time, "curing the patient" is something we literally do not know how to do. There is no identifiable technology for reliably "curing the patient" and in discovering how to "cure the patient" psychologists would be discovering a universal law of human behavior. Consequently, the activities of the therapist and clinical researcher might well be viewed as basic research.

At this point someone might well say, "Yes, but the basic scientist is interested in the discovery of knowledge for its own sake while the therapist is interested in finding a solution to practical problems." Although this statement may be true, there are a few other relevant features of the present state of affairs in

psychotherapy that might be mentioned. For example, therapists are no longer doing "outcome" studies; now they study the "process" of psychotherapy, i.e. how "patients get cured" (Rubinstein and Parloff, 1959; Astin, 1961). One way of interpreting this state of affairs is to say that the study of psychotherapy is regarded as having an intrinsic value over and above any outcome that psychotherapy may have. Moreover, given the tremendous social needs, it may well be that psychotherapy or any other form of treatment will be largely irrelevant to the needs or demands of society, and it may be that the solutions to social problems will have to be sought in the area of primary prevention and social action programs (Bloom, 1966). Consequently, there may be little value in knowing how to "cure the patient" except for the intrinsic value in knowledge for its own sake. At the same time, we might recall that prior to the first fission of nuclear material there was considerable speculation that atomic energy would only be destructive, and there was no guarantee that knowing how to split atoms or nuclear energy would ever have a practical application. There is always the possibility that learning how to "cure patients" will help us in some way to do something about primary prevention, but it is also possible that any discovery of a universal law of human behavior will have "some" practical application. In any event, given the present state of affairs in psychotherapy, there seems reason enough to classify the activities of therapists as "basic science," and it would seem that there is little justification for ruling out the study of the process of psychotherapy or attempts to discover ways of "curing patients" on the grounds that such activities are merely "applied science."

B. The Art of Psychotherapy

"But if psychotherapy is a basic science, how can it also be an art?" The apparent contradiction here becomes only apparent when we see that, to a significant degree, doing basic research is also an art. In this section, some of the similarities between "curing the patient," "painting a masterpiece" and "making significant discoveries" will be developed. In addition, consideration will be given to some of the ways in which the present state of affairs in psychotherapy seems to differ from the state of affairs in either the creative arts or the art of doing basic research.

In general, the present state of affairs in psychotherapy seems to be that it works, at least some of the time, but no one knows how it works. Some therapists seem to have the ability to "cure the patient," but no one knows how they do it and they cannot teach anyone else to do it. "How can therapists be said to be able to do something but no one else knows how they do it?" "If therapists really are able to 'cure the patient,' why can't they teach anyone else to do it?" Science is public and observable; if psychotherapy is to be a subject for science, any observer should be able to tell what is going on and to be able to repeat it. "Moreover, if some therapists can 'cure the patient' some of the time, why can't every therapist 'cure patients' reliably?"

Answers to such questions are not easy to formulate, but it is perhaps worth noting that there is a similar state of affairs in the creative arts. For example, only a few artists are ever able to paint a masterpiece, and the artist who is able to paint a masterpiece doesn't do it every time nor can he teach anyone else to paint

a masterpiece. A competent artist can be taught to reliably paint "good" pictures but he cannot be taught how to paint a masterpiece. In an art school, there may be lessons in drawing, preparing a canvas, balancing form and color, anatomy and landscapes but nowhere are there lessons on how to paint a masterpiece. By this time, a psychologist might well begin to wonder what all of this has to do with science and psychology, but let us take a look at another type of art, namely, the art of doing basic research.

The mark of a great scientist is an achievement such as a significant discovery or a major breakthrough in a particular area of knowledge. It is clear that not every scientist is able to make significant discoveries. Moreover, even the most talented scientist may make a great many unsuccessful attempts before he is able to "bring off" a discovery, and scientists often spend a considerable portion of their careers working on a particular problem without achieving any sort of breakthrough. To bring things into a sharper focus, any competent psychologist can do "adequate" or perhaps even "good" research, but relatively few psychologists have the ability to "bring off" experiments which result in significant discoveries or in major advances in human knowledge and even these few psychologists do not bring it off every time or perhaps even most of the time. No one knows how psychologists or other scientists make discoveries (Scott and Wertheimer, 1962), and as any frustrated graduate student can testify, psychologists cannot teach anyone else to do <u>significant</u> research. Graduate students in psychology are taught subjects such as experimental design, statistics and research methodology but they are not taught how to do significant research.

Most graduate students are taught how to do research which is reasonably adequate technically, and some students may acquire the ability through additional experience or perhaps an apprenticeship with a senior level psychologist (Note, the similarity to training in the arts where the student is often an apprentice to a master and in psychotherapy where a similar system prevails.), but there are no demonstrated techniques for teaching psychologists or any other scientists how to make significant discoveries. Finally, not everyone can comprehend much less replicate what is going on in experiments in such areas as quantum mechanics, organic chemistry or neurophysiology. To be able to achieve even a minimal level of understanding or competence in any of these areas would require considerable training and experience, and it is by no means clear as to how many people would have the intellectual capacity to be able to make use of such training and experience.

If psychotherapy is an art, it seems to be a rather primitive art when it is compared to the creative arts or to the art of doing basic research. For example, in the creative arts there is a basic set of skills that have been identified and can be taught to a student with minimal level of capacity in the arts. The student of painting is taught perceptual-motor skills such as how to hold a brush or how to mix colors, prepare a canvas, sketch, draw, and paint portraits or landscapes. Thus, the art student is not only taught specific perceptual-motor skills but he is also taught how to achieve effects that range from getting the color right to sketching and painting a portrait in oils. In psychology, the student is taught such things as how to operate a desk calculator, do statistics, select subjects,

formulate hypotheses and how to design simple experiments. Here again, there is a set of basic perceptual-motor skills and a wide range of achievements which have been identified and can be reliably taught. Moreover, the graduate student's performance in doing all of these things can be evaluated with such things as examinations, masters theses and doctoral dissertations (There are similar kinds of evaluations in the creative arts.). When the student graduates, he has demonstrated a reasonable degree of technical competence as a psychologist (and as an artist).

In psychotherapy there seems to be a somewhat different state of affairs. Few basic skills have been identified, and the range of effects that a beginning therapist can be taught how to achieve seem severely limited. If we take a look at the current theories of psychotherapy (i.e. Freud, Rogers, etc.), they usually specify a number of general goals such as self actualization, helping the "ego" to be able to channel the impulses of the "id" or the congruence of the "self" and the "organism" and a few rather specific techniques such as reflecting feeling, free association or making interpretations, but there is little specification of what it is the therapist does to get from the point of making an interpretation or reflecting a feeling to the general objective of "curing the patient." Rogers (1957) has specified empathic understanding, warmth and genuiness as being the necessary and sufficient conditions for therapeutic change, but these conditions represent achievements by the therapist (They may represent rather high level achievements since it appears that therapists frequently do not achieve these conditions--see Truax and Carkhuff, 1967), and Rogers does not specify how a therapist might

go about achieving empathy, warmth or genuiness with a patient. Thus, to the extent that the current theories of psychotherapy reflect the present state of the art, it appears that very little technology has been identified or developed in psychotherapy. It may be that "curing the patient" will always remain an art (Just as painting a masterpiece and making significant discoveries have remained an art), but it at least seems reasonable to try to raise the level of technology so that there is a set of relatively general effects that "reasonably competent" therapists are able to achieve reliably, and there is at least a basic technology which can be taught to the beginning therapist to assure some general level of competence across all therapists.

C. Goals of Psychotherapy

Before we can begin to describe the process by which the therapist "cures the patient," however, we have to have some degree of agreement on a description of what we mean by "curing the patient." There have been some differences in opinion among clinicians as to the criteria for a "cure" in psychotherapy, but many of these differences have been based on technical issues such as whether self-report, tests or case histories would be accepted as evidence of a successful outcome rather than on any particular substantive issue (Strupp and Luborsky, 1962). If we take a look at the current theories of psychotherapy, we find that there is a fairly high degree of agreement across theorists as to what constitutes a "cure" in psychotherapy. Even two such apparently divergent theorists as Freud (1932) and Rogers (1951) seem to be in general agreement on the goals of psychotherapy.

For Freud (1933), the goal of psychotherapy is to help the patient to achieve a balance between the needs and drives of the id, and the abilities of the ego to satisfy those needs and to maintain itself. In Freudian theory, the id represents all of the inherited instinctual life forces and the goal of the drives of the id (libido) is to be gratified. The ego acts as a mediator between the id and the real world. Feeling, desires, thoughts, etc. which are unacceptable to the ego are repressed and a state of incongruence between the ego and the id results. The task of the therapist is to help the patient to be aware of and to reconcile the conflicting thoughts and feelings so that "where id was, there ego shall be" (Freud, 1933, p. 111).

Rogers (1951) formulates his theory of personality and the goals of psychotherapy in terms of an "organism" and a "self." "The organism has one basic tendency and striving--to actualize, maintain and enhance the experiencing organism" (Rogers, 1951, p. 487). The organism actualizes itself on the lines laid down by heredity and behavior is basically the goal-directed attempt of the organism to satisfy its needs (Hall and Lindzey, 1957). The "self" becomes differentiated out of the total phenomenal field and it is the awareness of one's being and functioning. Experiences which are inconsistent with the structure of the self are denied symbolization or given a distorted symbolization (Rogers, 1951). The self and the organism are regarded as the two behavior-regulating systems in Rogers theory and they can either work together harmoniously and co-operatively or they can oppose each other. Psychological adjustment exists when the concepts of self and the sensory and visceral

experiences of the organism are in congruence. The task of the therapist is to provide an atmosphere of warmth and acceptance in which the client can explore his unconscious feelings and bring them into awareness (Hall and Lindzey, 1957).

There seems to be a good deal of similarity in the two theories with Rogers' organism and self corresponding closely with Freud's id and ego. More importantly, the goals of psychotherapy outlined in the two theories seem virtually identical (however different the techniques for achieving those goals may or may not be). Similar conceptualizations of the goals of psychotherapy can be found in Jung's (1925) theory of conscious and unconscious, Sullivan's (1953) theory of "dynamisms" and in Allport's theory of self-actualization (Hall and Lindzey, 1957). Consequently, it appears that there is a fairly general agreement within the major theories of psychotherapy as to the goals of psychotherapy. Before proceeding to a discussion of how we might try to describe the process by which the therapist "cures the patient," some attention should be given to the current research on the process of psychotherapy and to some of the conceptual and methodological problems that seem to be encountered in every attempt to study the process of psychotherapy.

CHAPTER II

PROCESS STUDIES IN PSYCHOTHERAPY

At present, there are literally hundreds of published studies on the process of psychotherapy (See reviews by Auld, et al, 1955; Marsden, 1965.). In this section, the major types of process studies will be described briefly, and examples of each type of study will be presented. A detailed analysis of each type of study will not be attempted although some of the conceptual and methodological problems in these and other process studies will be discussed in Chapter III (A more thorough review and detailed analysis of studies of the process of psychotherapy is in progress).

With a few exceptions (Fiedler, 1950a, 1950b, 1951), most published studies on the process of psychotherapy are content analysis studies. In general, content analysis is a technique that usually involves procedures for dividing the content of interviews into units, assigning the units to categories and summarizing the categorized information. Most of the process studies in the literature seem to differ only in the procedures used in the content analysis of the interview material. The content analysis studies to be described in the present paper are divided into four procedure families: (1) Physiological, (2) Classical, (3) Pragmatic and (4) Nonquantitative (Marsden, 1965). These studies differ primarily in the way the investigators have categorized the content of the interviews and in the kinds of interpretations made by the investigators. The Fiedler studies (1950a, 1950b, 1951) will be presented separately because they are one of the few attempts to study the process of

psychotherapy that do not involve some sort of content-analysis procedure.

Although the studies discussed in the present paper are only a sample of the published research on the process of psychotherapy, they are a representative sample, and most of the major research strategies which have been adopted in the attempt to study psychotherapy are included. One exception is the omission of studies which attempt to apply learning theory and particularly the concept of reinforcement to the process of psychotherapy. Although there are a growing number of learning theory studies in psychotherapy, they have been omitted on the grounds that learning theory formulations of psychotherapy have not as yet received any general degree of acceptance among practicing clinicians.

A. Content-Analysis Studies

1. Physiological Process Studies. A number of investigators have tried to study the process of psychotherapy by comparing interview content variables with physiological variables (See review by Lacey, 1959). Almost all of the physiological measures that reflect functioning of the autonomic nervous system have been used in these studies. In general, the rationale for such studies appears to be to use physiological measures as "objective" measures of the "emotional content" of therapy interviews. Data have been collected on changes in psychogalvanic skin response, muscle tension, respiration rate, heart rate and a number of other variables (Dittes, 1957; Margolin, 1951; Auld, et al, 1955; Anderson, 1956; Malmo, et al, 1957). For example, one group of investigators (Coleman, et al,

1956) measured changes in heart rate during 44 interviews and correlated these measurements with judgments of an independent observer based on the content of therapy interview transcripts as to when the therapist and patient were expressing anxiety, depression and hostility. The heart rate was highest during periods categorized as anxiety, lowest during periods categorized as depression and intermediate in periods categorized as hostility. Even more remarkable than these results was the finding that the therapist's heart rate fluctuated in almost the same way as did the patient's. This finding was interpreted by the authors as being an indication that heart rate might provide a physiological indicator of empathy.

In an interesting pair of studies, Malmo, et al, 1956 and Shagass, et al, 1954 found the occurrence of high muscle tension in the forearms associated with discussion of hostility themes but in the legs when sexual material was discussed. Minute by minute plots of muscle tension and of the content of the interview were made, and the analysis of the data provides a convincing demonstration of the association of muscle tension and content themes. The investigators contend, and produce some evidence in support of their contention, that these findings are not instances of a covert muscular accompaniment of imagined or anticipated action. They interpreted the increased tension as a motor manifestation of conflicting neural impulses in the central nervous system.

2. Classical Studies. The classical model of content-analysis studies of psychotherapy is the model first proposed by Berelson (1952): "Content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of

therapy interviews." The classical studies are, therefore, quantitative studies based on the manifest content of the therapy interviews. The focus of these studies is on the syntactic and semantic aspects of communication to the exclusion of the pragmatic aspect of communication (Marsden, 1965). Most of the content-analysis studies have been carried out within the classical model. Because of their number the classical studies are divided into four groups on the basis of the aspect of psychotherapy that the investigator has tried to describe (Marsden, 1965). The four groups of studies are: (a) Patient Characteristics, (b) Therapist Characteristics, (c) Patient-Therapist Interactions, and (d) Contingent Relationships.

a. Patient Characteristics: This is a group of studies concerned with describing changes in the characteristics of the patient during psychotherapy. In particular, one group of investigators have tried to get at the process of psychotherapy by describing what happens to the patient during psychotherapy (Auld, et al, 1955; Dittes, 1959; Vargar, 1954). For example, Rogers (1959) has devised a content-analysis system to assess the patient's progress during therapy. The content-analysis system is based on Rogers theory of personality. Rogers (1961) views personality as being on a continuum with one end representing static rigidity and the other end representing looseness and flexibility. This continuum consists of seven aspects of personality functioning which Rogers calls "strands." Briefly, the client moves through the following stages: (1) Communication is only about externals and there is an unwillingness to communicate self; (2) Feelings may be exhibited but are not recognized as such or owned and problems are perceived as external to

self; (3 and 4) There is a further loosening of expression in regard to feelings, constructs and self; (5) Feelings are expressed freely as in the present and there is an increasing quality of self acceptance of self responsibility for the problems being faced and a concern as to how he has contributed; (6) Feelings are immediate, experiencing takes on a real quality and the incongruence between experience and awareness dissolves into congruence; and (7) There is a growing and continuing sense of self acceptance, new personal constructs and new ways of being are tentatively formulated to be validated against future experience but even then to be held loosely (Rogers, 1958). Rogers states that stages or "strands" 3 and 4 are not well defined although they constitute much of psychotherapy. In general, Rogers holds that if the client receives unconditional positive regard, empathy and warmth, this process of change will inevitably result (Rogers, 1957).

When the client is at the rigid end of the continuum, the strands are separate and discrete but as the client moves toward the flexible end of the continuum the strands blend into a kind of continuous unity. Each of these strands is a category in Rogers' content-analysis system. Within each category a patient can be placed on a continuum by a seven point rating scale. The scores for each category can be combined to give the client's over-all position on the scale. In an initial demonstration of the scale, Rogers (1959) found that clients who were rated as successful on the basis of other criteria began and ended therapy at higher points on the scale than did less successful clients. There was also greater movement along the scale during therapy in the more successful cases.

Another group of investigators has focused on the patient in psychotherapy in a somewhat different way. Matarazzo, Saslow and their associates have conducted a series of process studies using a content-analysis system based on the work of Chapple (1949). In general, Chapple thinks that a scientific theory of personality can be based on the time relationships in observable human interactions. The "interaction chronograph" developed by Chapple is a device which allows an observer to record in time units with a high degree of precision the "behavioral interactions" of two individuals in terms of some ten or more variables. The behaviors recorded include such things as: the number of utterances, number of interruptions and their durations. This is a highly quantitative system and little attention is given to the content of verbalizations. These variables are recorded by a series of electrically controlled counters. A key is depressed whenever the patient is talking, nodding, gesturing or in other ways communicating. The ten interaction chronograph variables are derived from the behaviors that are recorded. Briefly these variables are: (a) Patient's units, the frequency of the patient's verbalizations; (b) Action, the average duration of the pt.'s actions; (c) Silence, the average duration of pt.'s silences; (d) Tempo, the average duration of each action plus its following inaction as a single measure; (e) Activity, the average duration of each action minus its following inaction as a single measure; (f) Pt.'s adjustment, the average duration during which the pt. interrupted the therapist minus the duration during which the pt. failed to respond to the therapist; (g) Therapist adjustment, the durations of the interviewer's interruptions minus

the duration of his failures to respond, divided by pt.'s units; (h) Initiative, the relative frequency with which the pt. acted following a double silence; (i) Dominance, the relative frequency with which the pt. dominates the therapist; (j) Pt.'s synchronization, the frequency with which the pt. failed to synchronize with the therapist either by failing to respond to the therapist or by interrupting the therapist; (k) Therapist's synchronization, same as pt.'s synchronization; (l) Therapist's units, the frequency of the therapist's verbalizations (Chapple, 1949; Matarazzo, et al, 1956).

In most of their studies, Matarazzo and his associates have used a structured interview which is an attempt to standardize the interviewer's behavior thus treating the interviewer as an independent variable. In a series of studies, these investigators have demonstrated a high degree of reliability for both the interviewer's behavior and the content-analysis system (Phillips, et al, 1957; Matarazzo, et al, 1956; Saslow, 1955). Having established the reliability of the interaction chronograph scores, the investigators have turned to the question of the validity or meaning of the interview interaction variables (Matarazzo, et al, 1958). In this study, they factor analyzed the interaction scores for 60 patients each of whom were interviewed twice. Correlational findings of this study were that patients who speak often do so in brief utterances while those patients who speak less frequently do so in longer utterances. The results of the factor analysis of the interaction scores suggested that the therapist-patient interaction consists of two very stable factors for any given individual: (1) how long on the average he or she waits or remains silent before communicating; and (2) the number

and average duration of each of these communicative durations. Three other factors were also extracted although they were less stable and not so clearly interpretable: (1) the frequency with which one initiates or starts again with another communication unit of his own when his partner has not answered him; (2) the efficiency with which a member of the communicating pair adjusts or maladjusts to his partner; and (3) the pattern of therapist-patient dominance for a given pair.

b. Therapist Characteristics: One of the most extensive content-analysis investigations of the therapist as a variable in the process of psychotherapy has been undertaken by Strupp. In three early studies, Strupp (1955a, 1955b, 1955c) used Bales' (1950) interaction process analysis system to compare the therapeutic technique used by Rogerians and psychoanalytically oriented psychotherapists. In general, Strupp tried to find out whether differences in theory make a difference in what therapists do. Rogerian and psychoanalytic therapists were presented with a series of experimental patient statements and asked to respond to them. The therapists' responses were placed in such categories as: Shows solidarity, tension release, agrees, gives suggestions, gives opinion, gives orientation, asks for orientation, asks for suggestion, disagrees, shows tension, and shows antagonism (Bales, 1950). There were sharp differences between the Rogerian and psychoanalytically oriented psychotherapists. The Rogerians relied heavily on reflective techniques while the non-Rogerians showed a predilection for exploratory responses. The non-Rogerian also showed more than minimal frequencies in the following categories: passive acceptance, structuring,

interpretation, reassurance, and passive rejection. In later studies, Strupp (1958a, 1958b, 1958c) has modified the Bales' interaction process analysis system and introduced the use of filmed interviews and spoken responses from the therapist in his attempt to investigate the effects of the therapist's theoretical orientation and level of experience.

In recent years, a number of studies have been published by Truax, Carkhuff and their associates (Truax and Carkhuff, 1967) which are an attempt to relate characteristic behaviors of the therapist to the outcome of psychotherapy. The impetus for these studies was Rogers' (1957) specification of empathic understanding, nonpossessive warmth, and genuineness as being the only therapist characteristics that contribute to patient outcome. For Rogers (1957), these characteristics are necessary and sufficient to account for the therapist's contribution to the outcome of psychotherapy. In one of the early attempts to compare successful and unsuccessful therapists, Whitehorn and Betz (1954) found no significant differences between successful and unsuccessful therapists except that the successful therapists were warm and attempted to understand the patient in a personal, idiosyncratic way while the less successful therapists tended to relate to the patient in a more impersonal way. In an attempt to relate the therapist's level of the therapeutic triad to patient outcome, Halkides (1958) selected brief samples from early and late therapy interviews from ten most successful and ten least successful therapy cases. Ratings were made, using a brief scale developed by Rogers (1957), for the therapist levels of empathic understanding, unconditional positive regard, and self-congruence.

In brief, the results indicated that the most successful cases showed significantly higher levels of these three therapist characteristics than did the least successful cases.

In a growing number of studies (Truax, 1963, 1966; Truax and Carkhuff, 1963), these results have essentially been duplicated with patient populations such as: hospitalized schizophrenics, outpatient neurotics, delinquents and other types of patients. In the later studies, Truax, et al have developed more elaborate and complex measures of the triad of therapist qualities from scales first developed by Rogers (1957) and Barrett-Lennard (1962). The findings from the studies with schizophrenics (Truax, 1961, 1963) indicate not only that patients receiving high accurate empathy, unconditional positive regard and therapist authenticity or congruence showed significant constructive personality change but also that patients who received low therapeutic conditions became worse. In attempting to determine how these therapist qualities operate in producing therapeutic change, Truax (1966) has shown that the therapist's use of these three qualities is consistent with a reinforcement theory of psychotherapy.

c. Patient-Therapist Characteristics: This is a group of studies which attempts to apply content-analysis procedures to the verbalizations of both the therapist and patient. In order to adequately describe the process of psychotherapy, it will probably be necessary to have a description of what both the therapist and patient are doing in psychotherapy. In general, the studies of patient-therapist interactions are more complex versions of the studies that deal only with the therapist or patient. In this

section, the content-analysis system developed and demonstrated by Leary and Gill (1959) will be discussed. Lennard and Bernstein (1962) have also developed an elaborate content-analysis system for categorizing patient-therapist verbalizations, but this system has attracted little attention since its initial presentation (Lennard and Bernstein, 1960, 1962) and it differs little from other systems (Bales, 1960) except that it is somewhat more elaborate.

Leary and Gill (1959) began their investigation with the decision that the most meaningful statements one can obtain regarding the process of psychotherapy are the judgments made by well-trained clinicians. Consequently, a group of twelve experienced therapists were asked to listen to tape recorded therapy interviews and to write down what they thought was going on in the interview. Working partly from the clinicians' judgments and partly from a simplified form of the psychoanalytic model described by Rapaport (1951), the investigators devised a system for categorizing all of the clinicians' statements about what was going on in the therapy interviews.

Having devised a system for categorizing all of the clinicians' evaluations of what was going on in the therapy interviews, Leary and Gill turned their attention to finding some other way of measuring the process of psychotherapy. They wanted an alternative method because even though clinicians' judgments are important they might be in agreement only because they shared certain general assumptions about psychotherapy and not because they were validly stating what was going on. The second method would serve to validate the clinicians' evaluations and the clinicians' evaluations would in turn validate the second method of describing the process of psychotherapy.

Consequently, the investigators decided to see if the patient-therapist verbalizations couldn't be categorized using the same set of categories used to categorize the clinicians' evaluations. That is, would the therapist and patient talk about the things that observer-clinicians said were going on in therapy interviews (Leary and Gill, 1959)?

In general, Leary and Gill then proceeded to develop a set of categories which would encompass both the clinicians' statements about what was going on in an interview and the patient-therapist verbalizations in that interview. The unit for coding both clinicians' evaluations and patient-therapist content was "the shortest verbalization which can be understood to be a combination of a subject--whether a person or impersonal--and some characteristic or attribute of that subject" (Leary and Gill, 1959). The categories used in this system are similar to those used by Strupp (1958a) except that Strupp used fewer categories. Briefly, there were three principal categories for the clinicians' evaluations and patient-therapist verbalizations: (1) psychological, (2) psychotherapeutic, and (3) nonclinical. Within each of the three categories, there was a complex system of subcategories. If a coding unit concerned the patient's life situation, personality, intrapsychic state, person characteristics, psychological functioning, etc., it was placed in one of the psychological subcategories. If the coding unit concerned the relationship between the therapist and patient, implications of that relationship for insight, transference neurosis, etc., it was placed in one of the psychotherapeutic subcategories. Coding units that were not related to either the patient's life situation or his

relationship with the therapist were placed in a nonclinical subcategory. The psychological and psychotherapeutic categories were considered to be clinical categories. All of the clinicians' evaluations and patient-therapist verbalizations were categorized and the reliability of the content-analysis system was demonstrated (Leary and Gill, 1959).

When the clinicians' evaluations were compared with the patient-therapist verbalizations in a first and third therapy interview, there was relatively little correspondence between the two kinds of content. For example, when the clinicians' evaluations indicated that the therapist was trying to help the patient to achieve insight, the patient and therapist were not talking at all about the inhibition or facilitation of insight. Similarly, while clinicians talk a good deal about the emotional interactions and relationship of the patient and therapist the two participants talk very little about these topics at least in these early interviews. The investigators note that such talk would not be expected so early in therapy. When the clinicians indicated that a patient complained about her husband, was frigid with him and had hostile feelings toward him, the content-analysis of patient-therapist verbalizations indicated only that the patient had described her frigidity with her husband. It was apparent that the clinicians had concluded from her description that the patient had hostile feelings toward her husband. The investigators concluded that for these interviews the patient-therapist verbalizations could not be used to validate the clinicians' evaluations and a more extensive study of psychotherapy interviews would be necessary in order to determine how the two process measures

might be used to validate each other.

d. Contingent Relationships: In a few content-analysis studies, attention has been focused on the contingent relationships between categories within summarizing units of a content-analysis system. Briefly, this procedure enables the investigator to interpret category A differently when category A is associated with category B rather than category C. Analysis of contingent relationships in psychotherapy is regarded as one approach to dealing directly with instrumental meanings in verbal behavior (Marsden, 1965). Systems for the analysis of contingent relationships in psychotherapy verbalizations have been developed and demonstrated by Osgood (1959), Rosenberg (1962) and Laffal (1961). One system of this type will be discussed in this section.

Laffal (1961, 1964) has developed a technique of language analysis called the "analysis of contextual associates." In carrying out a contextual analysis, words are categorized on the basis of denotative closeness or synonymity in order to reduce the vast number of items in the language which tend to obscure underlying similarities. Recent research on word associations has apparently shown that word associations appear in clusters corresponding to semantic categories and that common factors underlie single and continuous word associations (Laffal, 1961). The analysis of a context then involves the counting of the frequences of categories which appear in close association with each other. Once the frequency counts of the categories of associations have been made, the investigator can compare the distribution of associates in one language segment with the distribution in another segment (Laffal, 1961).

This procedure sounds very complicated but the author's published illustration of the procedure looks relatively simple. Laffal (1961) has a list of 94 single word categories. Each word in a therapy protocol (excluding articles and conjunctions) is assigned to no more than two of these categories. For example, the word "marriage" was assigned to the categories "sex" and "join." As noted above, the words are assigned to categories on the basis of denotative closeness and synonymity.

Laffal (1961, 1964) has applied his system to various groups of patients. The results demonstrated that the coding reliability of the system is high, the system discriminates between the verbalizations of different individuals, and the language of a patient in one psychological state (unimproved schizophrenic) can be differentiated from his language in another psychological state (improved). In general, schizophrenic patients tend to become more constricted in their use of language as they get better (Laffal, 1961, 1964).

3. Pragmatic Studies. This is a group of studies which constitute an attempt to go beyond the manifest content of the patient's verbalizations and to make judgments about the patient's emotional state. The pragmatic studies have usually been done within the framework of psychoanalytic theory. Stimulated by Murray's early work (Murray, 1956), Dollard and Auld (1959) have developed a complex content-analysis system which is the most elaborate of the current examples of the pragmatic model in content-analysis studies of psychotherapy. Other pragmatic studies have been carried out by Gottschalk, et al (1962), Sklansky, et al (1960) and Ashby, et al (1957). The content-analysis system developed by

Dollard and Auld (1959) will be presented and a demonstration of that system by Auld and White (1959) will be discussed briefly.

Dollard and Auld have developed a complex system of categories that range across the overt behavior of the patient, the patient's symptoms and various events in psychotherapy. But the principal focus of the system is on the motives of the patient. Motives could be either conscious or unconscious with motives being considered conscious if the patient could name them as his own and unconscious if the patient never learned to label them appropriately. There were also categories for processes associated with motives and for motive referents. As there were 78 patient categories and only 6 therapist categories, the principal focus of the system was obviously on the patient. For both patient and therapist categories, the scoring unit was the sentence and five minute intervals were used for those categories in which nonverbal behavior was to be coded. Adequate reliability has been demonstrated for the content-analysis system but there have been relatively few attempts to demonstrate its usefulness in the study of the process of psychotherapy.

In one of the few attempts to use this system to answer questions about psychotherapy, Auld and White (1959) applied the system to four cases of psychoanalytically oriented psychotherapy. Using a form of sequential dependency analysis, they found that the patient's speech tends to persist in the same category to which the previous unit was coded. For example, the likelihood of a sentence scored "Sex" is greater after "Sex" sentences than after other sentences and "Hostility" sentences are more likely to occur after "Hostility"

sentences than after other sentences. They also found that experienced psychoanalytically oriented therapists were more likely to intervene after resistant talk than at other times, that interpretive interventions did not tend to produce greater resistance in the patient units that followed the intervention, and that silence and resistant talk tended to occur in sequential units. This last finding the authors interpreted as evidence that silences can usually be interpreted as being equivalent to other forms of resistance. The authors conclude that these results justify the wider use of this method in studying psychotherapy.

4. Nonquantitative Studies: The nonquantitative studies use linguistic analysis techniques in order to study changes in the patient during psychotherapy. Linguistic analysis techniques have been introduced in an effort to describe the process of psychotherapy independently of its content. In general, linguistic analysis is a nonquantitative system although it may be combined with statistical techniques (Marsden, 1965). Nonquantitative studies have been published by Eldred, et al (1958) and McQuown (1957), and a rationale for linguistic analysis has been presented by Pittinger, et al (1957).

Dittman and Wynne (1961) have used a linguistic analysis system developed by Trager, et al (1951) in an attempt to detect and specify the significance of expressions of affect in psychotherapy. The system used in this study included both linguistic and paralinguistic phenomena. Linguistic phenomena were coded in terms of phonemes "which are speech sounds grouped together so that despite local variation, each group has the same meaning to all native speakers of

the language. The paralinguistic phenomena are superimposed upon the phonemes of speech. They include very diverse phenomena only some of which lend themselves to discrete coding" (Dittman and Wynne, 1961).

The linguistic phenomena that were coded are: (1) juncture-dividing points in speech; (2) stress-pattern of increases and decreases in loudness; and (3) pitch-refers to rise and fall of the speaker's voice.

The paralinguistic phenomena were grouped under vocalizations, voice quality and voice set. In general, paralinguistic phenomena refer to characteristics of the "sound of voice" and include such things as laughing, crying, voice breaks, tempo, rhythm, breathiness, intensity range, nasality and resonance. Physiological characteristics current in the speaker (i.e. fatigue and immaturity) were also coded as paralinguistic phenomena.

The coding system was applied to a series of three minute excerpts from a set of six therapy interviews. An attempt was then made to relate the linguistic and paralinguistic phenomena to expressions of affect during the therapy excerpts. Reliability for the coding of the linguistic phenomena was quite high, but there was no relationship between the linguistic phenomena and expressions of emotion. The reliability of the paralinguistic phenomena was quite low indicating that these phenomena could not be reliably coded, although they seemed to have greater psychological relevance. The authors attribute their lack of success to the discrepancy between language and expressions of emotion. They say that language is made up of discrete elements while emotions are continuous (Dittman and

Wynne, 1961).

B. Fiedler Studies

The Fiedler studies (1950a, 1950b, 1951) were among the earliest attempts to study the process of psychotherapy. Fiedler began with the question of whether or not differences in theoretical orientation are important in determining the type of relationship the therapist will try to achieve. He reasoned that if theoretical differences were important then the expert of any one school could be expected to disagree more in his description of the desired relationship with experts of other schools than novices since experts are generally more knowledgeable about their school's practices and theory than the novices of the school. Initially, Fiedler (1950a) asked groups of therapists to describe the relationship which they considered ideal. This was done by means of Q sort ratings. The therapists differed in level of experience and theoretical orientation (psychoanalytic and nondirective). The instrument used was a series of 119 statements describing therapy relationships in terms of the therapists performances and achievements. The therapists' task was to sort the statements on the basis of how applicable the performance or achievement was to their ideal therapeutic relationship. The results indicated that experienced therapists of different theoretical schools tend to agree on an ideal therapeutic relations more than do experienced and novice therapists of the same school.

In later studies Fiedler (1950b, 1951) used three groups (psychoanalytic, Adlerian and nondirective) of therapists. He asked other therapists to use the same 119 statements to describe the therapy relationship actually achieved by the therapists in each

of the three groups and he found essentially the same results.

CHAPTER III

CONCEPTUAL AND METHODOLOGICAL ISSUES

This chapter constitutes an attempt to explore some of the conceptual and methodological issues which are usually raised in any discussion about research on psychotherapy. A discussion of these issues seems necessary not only because they have been a subject of much discussion and not a little controversy (see Rubinstein and Parloff, 1959; Strupp and Luborsky, 1962) but also because the conceptual and methodological framework for the empirical research to be presented later is one that may be unfamiliar to many psychologists. In this chapter, some of the discussion with regard to the issue of whether or not the current process studies provide an adequate or useful description of psychotherapy will be reviewed,[1] and this discussion will lead into a consideration of what it is that we are doing when we try to describe the process of psychotherapy. In general, the goal in this chapter will be to begin to sketch in some of the considerations that led up to the present study and to make a contribution toward a greater understanding of some of the issues that are encountered in any attempt to achieve an adequate account of the process of psychotherapy.

A tremendous amount of time, money and effort has gone into the published studies on process in psychotherapy, and a fairly large number of process studies have now been published, but most

---

[1]See Cavell (1965) for an interesting parallel discussion of problems regarding the nature and function of criticism in the arts. Much of this discussion follows Cavell's format.

practicing clinicians seem to agree that research on the process of psychotherapy has as yet had little if any identifiable influence on what clinicians do in psychotherapy (Parloff and Rubinstein, 1959; Strupp, 1960; Colby, 1962; Truax and Carkhuff, 1964). In general, the clinicians seem to think that the current process studies do not provide an adequate description of the "coreness" or "essence" of the process of psychotherapy (Shakow, 1959; Strupp, 1960; Colby, 1962). Some therapists have even adopted the position that any attempt to formulate or describe the process of psychotherapy can only lead farther and farther away from the center or core of the process. The dictum that, "Knowledge lessens and obscures whatever is related to my particular experience," (Strupp, 1960, p. 324) seems to summarize the reactions of at least some therapists to any attempt to study the process of psychotherapy. That is to say, these clinicians seem to think that in applying scientific (i.e. objective) methods to psychotherapy the researcher runs a very real risk of sacrificing the essence of what he is studying.

Most therapist-clinicians would, however, probably agree that the current process studies are of interest and that these studies may be useful as simplified models or shorthand descriptions as long as we know what we are doing. But it is highly important that we realize what we are doing and that we see clearly that the currently available process studies do not deal with the "real structure" or the "central core" that constitutes the essence of the process of psychotherapy (Strupp, 1960). Yet, we may have difficulty in seeing clearly that the processes described in these studies are <u>not</u> the "real structure" or "central core" or "essence" of psychotherapy;

the same sort of difficulty we would have in understanding what are any or all of these things since clinicians have so much difficulty in trying to state them. It is, however, hard to imagine that anyone has just flatly proclaimed that they have discovered the essence, core, or real structure of psychotherapy in a particular process study or even in a series of process studies. It is as though somebody has been saying that psychotherapy consists only of resolving transference neuroses (Rioch, 1943; Harper, 1959) or the therapist can only display empathy and warmth (Rogers, 1956; 1957) or saying that the essence of the process of psychotherapy is the interpretations made by the therapist (Fromm-Reichman, 1950), the warmth, empathic understanding and genuiness of the therapist (Truax and Carkhuff, 1966) or the pattern of differential reinforcements provided by the therapist-reinforcement machine (Krasner, 1962). That is, someone has been making the sort of proclamations that lead the practicing therapist to say in a burst of frustration that the researcher is not really dealing with psychotherapy or at least that many of the crucial or essential aspects of the process of psychotherapy are being overlooked in his attempts to formulate the process of psychotherapy (Strupp, 1960). At this point, the researcher may begin to feel that words are being put into his mouth and he will probably answer that he knows perfectly well that his research does not encompass all of the complexity of psychotherapy; psychotherapy involves complexities and mysteries that will not be unraveled quickly if at all (Bordin, 1959). And so the argument seems to go on and on (see Parloff and Rubinstein, 1959; Strupp, 1960; Strupp and Luborsky, 1962; Truax and Carkhuff, 1966).

The clinical investigator trying to study such variables as physiological states, therapist attitudes, patient-therapist verbalizations, therapist activities or patient-therapist speech characteristics thinks that he is describing some aspect of the process of psychotherapy. If it is suggested that these variables are somehow beside the point or not particularly relevant to the process of psychotherapy, the investigator will be a little puzzled or perhaps indignant and he may answer with: "Well, all of these variables were identified in psychotherapy interviews or in similar situations, and since we know so little about psychotherapy, how do you or anyone else know which of the infinite number of variables in psychotherapy to select for observation?" (Parloff and Rubinstein, 1959, p. 282). But then the researcher has a theory about what he is doing when he tries to describe the process of psychotherapy (Parloff and Rubinstein, 1959, p. 286) and so he will have to add some qualifications to his descriptions of psychotherapy explaining that when he tries to describe the process of psychotherapy his descriptions are only approximations to the process of psychotherapy or rather he only points to or suggests significant aspects of the process of psychotherapy (Bordin, 1959). But, even this last statement may not seem to him humility enough, and he may add the additional qualification that he is only describing a number of "interesting" aspects of communication processes that may prove to have some relationship to the process of psychotherapy at a future date (Matarazzo, 1959). By this time someone is likely to break in with, "but of course the process of psychotherapy can be adequately described just like any other complex process, and an approximate or

partial description is merely an inadequate description; with more effort or greater ability you could have done an adequate job of it." To which one response might be, "Oh, I can give you an exact account of the process of psychotherapy," and then proceed to read a transcript of everything said by the therapist and patient during the course of psychotherapy (see Rubinstein and Parloff, 1959, p. 123).

There is a definite sense that the participants in this encounter are talking past each other. Although each of the participants may understand what the other is saying, neither of them seems to be directly responsive to the other.

A possible way out of what seems to be an impasse at which the clinician and researcher are each likely to go their separate way (Strupp, 1960) is suggested by the researcher's statement (Bordin, 1959; Strupp, 1960) that his descriptions of psychotherapy are only approximations of the process of psychotherapy. Perhaps the researcher is not there admitting to a personal lack of effort or inability as he was accused of doing but instead he may be saying that any description of the process of psychotherapy, even the best, will only be an approximation. Certainly, most researchers seem to agree that each investigator has to select a particular phase or aspect of psychotherapy that he wishes to study because you can't deal with everything. (Rubinstein and Parloff, 1959; Strupp, 1960; Strupp and Luborsky, 1962). Thus, in talking about research on psychotherapy, many investigators seem to suggest that a description of the process of psychotherapy and psychotherapy itself operate, as it were, at the same level, are the same kind of thing. That is to say, it is as though researchers have gotten the idea that an adequate

account of the process of psychotherapy would require describing or in some way reporting everything that goes on in psychotherapy. And then, realizing that this would make life as well as research inconvenient if not impossible, reconciled themselves to common sense by saying, "Of course we can point to or describe particular aspects of psychotherapy but we must realize what we are doing and realize that most of the time we are only approximating an account of even these few aspects of what goes on in psychotherapy (Rubinstein and Parloff, 1959; Bordin, 1959; Strupp, 1960; Strupp and Luborsky, 1960).

It appears that this is a sort of thing that happens with surprising frequency in psychology. That is, we impose a demand for absoluteness (usually of some simple physical kind) on a concept and then, finding that our ordinary use of the concept does not meet the demand, we try to adopt research strategies and policies that accommodate the discrepancy as nearly as possible (Cavell, 1965, p. 78). For example, there are these familiar axioms: we cannot be certain of any empirical proposition but only practically certain; we cannot really know what another person is feeling but only infer it (Cavell, 1965); giving a description is like reporting an observation, and therefore what is said is self evident so that there is no possibility of error and everyone will be in agreement; "what is real (i.e. what there is in the world) is both nonverbal and observable," therefore the subject matter of psychology is human bodies and the movements they make.

A. Description in Psychotherapy

Although a diagnosis of the discrepancies mentioned above would be outside the scope of the present discussion, they seem to result

when the connections between language and reality are severed, and words come to mean what we want them to mean. (See Ossorio, 1966 for a discussion of these points.) In any event, it is the case that if we take a look at what we ordinarily mean when we say "P describes X," "P gives an adequate account of X" or "P describes the process by which X," we will see plainly that an adequate description of the process of psychotherapy would in no sense require a report of everything that goes on in psychotherapy. We might also be in a better position to see what it is we are doing when we try to achieve an adequate description of the process of psychotherapy. In this section, describing will be distinguished from theorizing, and some attention will be given to what a description of the process of psychotherapy might look like. Finally, the problem of the experienced observer will be discussed.

B. Description and Theory

To begin with, describing is not the same as theorizing although the two are often equated by psychologists who tend to regard theories as "higher-level" descriptions. It may be that a theory, particularly a good one, is a higher-level description, but we still might ask what it is a description of. Without a separate description of a phenomena, X, it is not possible to specify a subject matter that a theory would be about. Thus, in one sense, S-R theory might be regarded as a theory of the concepts of the theory and the ways in which those concepts are related (e.g. stimuli, responses, reinforcement, extinction, habit-strength and the way in which particular responses come to be associated with particular stimuli).

Alternatively, S-R theory might be regarded as a theory about learning if we have an adequate description of learning that is separate from the concepts that comprise the theory (e.g. the fact that as a result of engaging in particular activities and/or being exposed to particular circumstances humans come to be able to do things they were not able to do previously). Without a separate description of learning, however, S-R theory would be merely a theory of responses, stimuli, etc. rather than a theory about a separately identifiable and describable phenomena.

Without a separate description of the subject matter of a theory, the theory is a theory of the concepts that comprise the theory. Thus, to the extent that the description of the subject matter of a theory is either ambiguous or non-committal, the explanatory value of theory with regard to the phenomena in question will remain in doubt. For example, to say that one has a theory about "some phenomenon" would be completely non-committal and would identify no subject matter at all and to have a theory about "behavior" is probably not greatly different. To say that one has a theory about "learning" or "psychotherapy" is to be even more committed and more clearly to be committed about some subject matter assuming that we have an adequate description of learning or psychotherapy.

One might wonder whether the apparent necessity for an adequate description of psychotherapy couldn't be safely overlooked as long as instances of Q could be identified. For example, could we not identify instances of the process of psychotherapy by pointing to them and then begin to formulate theories about psychotherapy without having to give a descriptive account of the process of psychotherapy?

Pointing, however, would tell us where to look not what to look for unless the latter was already known. For, in pointing to an instance of the process of psychotherapy, we also point to instances of organisms, physiological states, body movements, speech patterns, and to instances of words, phonemes, sentences and to a virtually unlimited number of other concepts. Thus, pointing will not distinguish the process of psychotherapy from any of the other things we might study during the course of psychotherapy. But neither will it identify in any way what it is that would be the subject matter for a theory about or a study of psychotherapy. We may point to instances of the process of psychotherapy but if we have a theory of physiological states (Lacey, 1959), body movements (Rubinstein and Parloff, 1959), time relationships (Matarazzo, 1959) or speech patterns (Laffal, 1961), we will study instances of these concepts as they are encountered during psychotherapy. That is, we will restrict our attention to the sort of the thing we have pointed to and we will apply our theory of P (P = physiological states, speech patterns, etc.) there. It seems clear that there would then be little point to saying that we had a theory about or that we were studying the process of psychotherapy. Yet, it would seem that this is precisely the sort of claim that is made by the researcher who says that he is studying the process of psychotherapy when in fact what he has done is to study physiological states, time relationships and speech patterns as they occur during psychotherapy.

C. Process Description in Psychotherapy

"Perhaps a description of these other variables is not a study of the process of psychotherapy, but we still do not know what a

description of the process of psychotherapy would be." In this section, process description in psychotherapy will be introduced by means of a discussion of several facts about language and the concept of intentional action, and some consideration will be given to the question of how we might begin to describe a process in psychotherapy.

In trying to focus on the process of psychotherapy, many investigators have tried in one way or the other to categorize what is said by one or both of the participants (Marsden, 1965). Merely reporting that someone has made certain statements or types of statements may not do justice to the ties that exist between language and significant human actions. Language is a set of social practices, and the social practices codified in our language go far beyond merely the uttering of declarative sentences (e.g. Asking a question, giving an insult, lashing out in anger, overcoming an opponent, and avoiding a real or imagined threat are all social practices codified by our language.). Thus, when I say something, I do something (engage in an intentional action) in saying something but I may also do something (engage in an intentional action) that is not distinctively verbal in nature by saying something and in saying something I may also refer to something that may or may not be verbal in nature. The significance of this fact for psychotherapy is that all of these things usually happen at the same time so that it becomes possible to speak of someone engaging in an intentional action "merely by saying something." For example, if I say to someone, "That was a stupid thing to do," I have uttered a declarative statement but I have also given the person an insult and referred to an action of his.

Although it is possible to distinguish the linguistic practices of saying something from the non-linguistic practices which they codify, we literally could not have one without the other. This feature will become clearer if we try to think of how there could be a non-linguistic practice of hitting someone on the nose if there was not the linguistic practice of saying when that was what someone had done. Moreover, the linguistic practice of saying the words "hitting someone on the nose" would be nonsense in the absence of some non-linguistic practice. What is suggested by this functional correspondence of linguistic and non-linguistic practices is that it is possible to engage in almost any human action "merely by saying something." This is a basic fact for psychotherapy because it means that therapists and patients could potentially engage in nearly the complete range of human behaviors. This is, in part, what we mean when we say that psychotherapy is a complex process. In any event to engage in an intentional action by saying something has the characteristic features of a process, and an intentional action can be described in psychotherapy with the same descriptive apparatus that we use outside of psychotherapy.

An analysis of intentional actions has been presented elsewhere by Ossorio (1966); therefore, only a brief summary of this analysis will be presented here.

To describe a person's behavior as being an instance of intentional action is to simultaneously classify what the person is observed to be doing under four concept types: (1) reason concepts (i.e. want, desire, etc.), (2) ability concepts (i.e. know how), (3) knowledge concepts (i.e. know, believe, expect, etc.), and (4) per-

formance concepts (i.e. overt attempt). To describe a person as being engaged in an intentional action is to say that what the person is observed to be doing (his performance) is being done for a reason, is something the person is aware of and is something he knows how to do. The observed behavior, the person's performance, is described as being the person's attempt to get something he wants or to achieve some state of affairs that he wants or has reason enough to bring about (See Felknor, 1966 for a discussion of performance, activity and social practice concepts.).

The person's overt attempt, his performance, is the process by which a person gets something that he wants or the process by which he brings about a state of affairs that he has reason enough to try to bring about. It is the process by which the person achieves an end. For example, if a person, P, is described as "getting the camera out of the car," there is an observable process which occupies some period of time; the state of the process can be described part way through the process; and the process can be described separately from either a set of initial conditions or an outcome.

To merely say that one is going to describe the performances of the therapist or patient is, however, not adequate for a science of psychotherapy. In science, a process, like a set of experimental procedures, must be both identifiable and repeatable. One of the complexities in trying to describe the process by which a state of affairs is achieved (e.g. the process of walking from here to the door or the process of "curing the patient") is that we often identify a process only by means of its outcome, and there may be an unlimited number of distinguishably different processes each of which

would be the process of achieving that state of affairs or outcome. For example, there are an unlimited number of processes which would count as the process of walking from here to the door. While the description, "He is walking to the door," identifies a process (i.e. His walking to the door has the characteristic features of a process: it occupies an interval of time, it can be interrupted and it can be described separately from either an outcome or initial conditions), but the process identified in such a description is not repeatable. On subsequent occasions, someone else could walk to the door, but there would be no way to determine whether the person walked to the door (or "cured the patient") in the same way or in one of an unlimited number of other ways. Therefore, a set of procedures for describing a process that is identifiable and repeatable seems necessary if a description of the process of psychotherapy is to become a part of a science of psychotherapy.

In psychology, the standard for process descriptions has usually been a mathematical formula which expresses the stage of a process (i.e. the state of affairs) as a joint function of the initial conditions and elapsed time for any point in time. A process described by such a continuous formula would also be a determinate process. There are, however, a wide range of processes, including behavior processes such as "curing the patient," for which a continuous mathematical formula neither is available nor even prospectively available and we need some other way of describing processes for which there is no continuous mathematical formula.

In general, the description of an identifiable and repeatable process might also be achieved by means of a description of the stages or sub-processes into which a process is divisible. For example, the process of walking from here to the door would be described by a description of a succession of stages or sub-processes such as: "He walked from here to the table in the middle of the room then he walked to the edge of the carpet then he stepped over the sleeping dog and then he took two steps to the door." This sort of process description is carried out by dividing an identifiable process (e.g. walking to the door or "curing the patient") into component stages or sub-processes each of which is identified by means of a description of an observable change in a state of affairs. A process is therefore described as a succession of changes in a state of affairs, and the description of a process would include a description of the changes in the states of affairs that constitute the occurrence of that process. Thus, a description of the stages or sub-processes mentioned above constitutes a description of the process of walking from here to the door. A similar division of the process of "curing the patient" into stages or sub-processes is at least in principle possible.

One of the complexities in the sort of process description mentioned above is that one could divide a process into stages or sub-processes of various degrees of generality or specificity. Each of the stages of the process of walking to the door is at least potentially capable of being divided into more specific stages, each of which could be divided even further, each of which, etc. "But aren't we right back where we started with a process that is

infinitely divisible?" Although a process may "in principle" be infinitely divisible, it should be remembered that each of the stages or sub-processes into which a process is divided is identified by means of an observable change in a state of affairs so that there are in practice limits on the number of stages or sub-processes into which a process can be divided, and as a result, the divisions of a process are neither arbitrary nor infinite. Moreover, since the process is fixed at the top by a description of the whole process (e.g. He walked to the door or the therapist "cured the patient."), a continuous description along a time dimension is not required, and the division of a process can be carried out at whatever level of generality or specificity is required for the task at hand.

Obviously a process of psychotherapy would be more complex than a process of walking from here to the door, and an adequate description of the process of psychotherapy could not easily be achieved. The procedures outlined above do, however, constitute at least a methodological solution to the problem of how to describe the process of psychotherapy. There is, however, the data collection problem of how to encompass all of the complexity required for an adequate description of a process of psychotherapy. Given even a minimal number of stages or sub-processes, the existence of alternative ways of moving from one state of affairs to another together with the contingencies that may depend on which of those alternative ways is selected at a particular time (e.g. Confronting the patient with his own behavior may have quite different consequences depending on when and how it is done.) would require that a description of the process of psychotherapy have at least the degree

of complexity of a branching tree augmented by contingency rules (Ossorio, 1968). A discussion of the technology necessary for such a description is beyond the scope of the present discussion except to say that such a description seems feasible through the use of the storage capacity of high-speed computers to systematically map the practices of therapists. An illustration of the application of a similar technology to means-end relationships is presented in Chapter V. However, there is still the problem of who would provide a description of the process of psychotherapy, and some consideration will be given to the perennial problem of the trained observer in the next section.

D. Trained Observer

One of the apparent problems in trying to achieve an adequate description of the process of psychotherapy is determining who you should ask to provide you with a description. It seems obvious that if you want to find out how something works you will ask someone who knows what it is you want to know and is willing to tell you, and therapists probably know as much about psychotherapy as anyone. Experimenters, however, are quick to point out the fact that clinicians cannot be counted on to make reliable judgments about what they or other clinicians are doing in psychotherapy (Shakow, 1959) and the judgments made by clinicians do not agree with the judgments made by non-clinicians (Strupp and Luborsky, 1962). Still, it is the case that clinicians are frequently able to "see" things going on in psychotherapy that untrained observers are not able to "see." Often, this lack of reliability has been taken to suggest the irrationality

of the clinician's judgment. But, how are we to assess such phenomena as the clinician's judgment that the therapist and patient are forming a relationship when the participants are talking about a football game or the judgment that the wife is hostile toward her husband when all she talks about is her own frigidity?

Cavell (1965), in a discussion of criticism in the arts, refers to a story from Don Quixote in order to illustrate that "delicacy" of taste said to be essential to those critics who are to form our standard of it, and the story may serve to illustrate some of the issues involved in evaluating the judgment of the experienced observer in psychotherapy.

> It is with good reason, says Sancho to the squire with the great nose, that I pretend to have a judgment in wine: This is a quality hereditary in our family. Two of my kinsman were once called in to give their opinion of a hogshead which was supposed to be excellent, being old and of good vintage. One of them tastes it; considers it; and after mature reflection pronounces the wine to be good were it not for a small taste of leather which he perceived in it. The other, after using the same precautions, gives also his verdict in favour of the wine; but with the reserve of a taste of iron, which he could easily distinguish. You cannot imagine how much they were both ridiculed for their judgment. But who laughed at the end? On emptying the hogshead, there was found at the bottom, an old key with a leathern thong tied to it.

First of all, as Cavell (1965) says, the fine drama of the gesture is greater than its decisiveness since the taste may have been present and the object not or the object present and taste not. Second, however, the gesture misrepresents the efforts of the critic (or the expert observer in psychotherapy) and the sort of vindication to which he aspires. "It dissociates the exercise of taste from the discipline of accounting for it: but all that makes the critic's expression of taste worth more than another man's is his ability to produce for himself the thong and key of his response; and his

vindication comes not from pointing out that it is, or was, in the barrel, but in getting us to taste it there" (Cavell, 1965, p. 88). We were told that Sancho's ancestors, after taking the precaution of reflecting, pronounced in favor of the wine, but we were not told what those reflections were or whether they were vindicated in their favorable verdict. And, we might add that the only thing that makes the clinician's judgment worth more than any other man's is his ability to produce for himself the hostility of the wife and his vindication comes not from demonstrating or "proving" that the wife is or was hostile (i.e. by getting her to say it) but in getting us to "see" that she is hostile.

At this point, the psychologist is likely to say that all of this is well and good, but will other observers make the same judgments reliably? (Shakow, 1959). This statement seems to put the clinician's worth at the mercy of popular opinion whereas if he has a particular value in the study of psychotherapy, it is not that he agrees with other observers which would prove nothing except that they agreed. But, rather, his value is that he sets the terms in which the judgment of others will be either protected or overcome. This may sound as though the clinician is legislating what goes on in psychotherapy or what it is the participants are doing and in a certain sense the clinician does speak as though his judgments demand or claim universal validity. But another way of describing this claim or demand, this sense that the clinician is judging, not merely for himself, but for all men is that while the clinician may not really expect everyone to agree when he says that therapist or patient is doing X, he thinks they are "missing something" if they

don't (Cavell, 1965).

Here though we have hit upon a main bone of contention between the positivistic experimentalist and the clinician trying to describe the process of psychotherapy. The experimental psychologist hearing a description of psychotherapy that is so obviously a matter of the clinician's subjectivity (therefore, so obviously un-scientific) grits his teeth and becomes angry or uncomfortable. The clinician stares back helplessly, asking, "Don't you see what I see? Look: you must see. Listen: you must hear what he is saying." Generally each of the participants feel the other is perverse, irrelevant or worse. Perhaps the clinician will point out some of the reasons for his judgment or try to point out relevant features of what is going on but at some point he will have to say: don't you see, don't you hear, don't you dig? Because if the experimental psychologist does not see something without explanation then there is nothing else that can be discussed although the clinician might begin to teach, instruct or berate the experimenter (Cavell, 1965). At some point, however, the clinician will have to say: "This is what I see. Reasons--at definite points, for definite reasons in different circumstances--come to an end" (Cavell, 1965, p. 94).

It would seem that the problem with the clinician's judgment might not be to eliminate or cancel out its subjectivity but rather to utilize it as fully as possible. In psychotherapy research (and in psychology generally), universal agreement has been the standard that provides the vindication of every judgment. Most psychologists have come to expect neither agreement nor any sort of vindication from clinicians and, as a result, they generally regard the clinician's

judgment as being at best unreliable and at worst untrustworthy (Shakow, 1959). In part, this state of affairs seems quite understandable. Far too frequently clinicians "dissociate the exercise of judgment from the discipline of accounting for it." Moreover, the only thing that does seem to make the clinician's judgment worth more than any other man's is his ability to produce the "taste" for himself and the only vindication comes from his getting us to taste it there. It is this sort of discipline and this sort of vindication that clinicians have seldom been willing to expose themselves to, and without them, one might well ask of what particular value is the clinician's judgment in psychotherapy research or anywhere else in psychology?

In this chapter, the question of whether the current research on psychotherapy has had any identifiable effect upon the practices of psychotherapists was reviewed. The concept of a behavior process was then introduced, and the problem of representing an identifiable and repeatable process when the latter cannot readily be represented by a mathematical formula was dealt with. A solution to the problem of data collection in describing a process of psychotherapy was suggested, and the problem of the trained observer in psychological research was discussed. In the next chapter, a technology for systematically describing what it is that therapists do (i.e. performances) and what it is that therapists achieve (i.e. states of affairs) will be developed.

CHAPTER IV

MEANS-END ANALYSIS IN PSYCHOTHERAPY

It has been previously noted that while therapists are sometimes able to "cure the patient," no one seems to know how they do it, and they cannot teach anyone else to do it. In general, if we can find some way of systematically identifying the effects that therapists are able to reliably achieve, it may be possible to begin to develop ways of reliably teaching people to do psychotherapy, and we may be in a better position to try to discover new and more efficient ways of "curing the patient." One way to begin to establish systematically what it is that therapists are able to do is to try to describe the ends that therapists are able to achieve and the means by which they achieve those ends. Moreover, a description of the sequence of means by which an end is achieved would be a description of a process by which that end can be achieved. The empirical research to be reported in the present paper is an attempt to demonstrate the practicality of a means-end analysis of psychotherapy by performing such an analysis on a limited scale. A means-end analysis is, however, a relatively novel concept in psychological research, and some explanation and illustration of such an analysis seems necessary. In the present chapter, the concept of a means-end analysis will be introduced, and the general objectives of such an analysis will be developed. In the final chapter, an empirical study of means-end relationships in psychotherapy will be presented.

A. Means-End Analysis:

There are two cases of means-end relationships that might be

identified in a means-end analysis. In the first case, I perform B by means of performing A and, in the second case, I then perform C in order to achieve D. In the first case, where I perform B by means of or by virtue of performing A, the means-end relation of A to B is that of part to whole and no temporal sequence is involved. A and B are achieved simultaneously. That is, in the "Simultaneous" type of means-end relationships, I perform A and B at the same time and in the same way. For example, if I show affection to P by holding P's hand, holding P's hand corresponds to performing A. Showing affection is what I accomplish by holding P's hand, given the more inclusive context of what has gone before and my relationship with regard to P. Showing affection and holding P's hand are accomplished at the same time and in the same way. In a similar fashion, if I insult P by saying, "That was a silly thing to do," saying that corresponds to performing A and, giving the insult and saying, "That was, etc.," are accomplished at the same time and in the same way. What differs is the extent of the context that is involved in identifying what was done. Thus holding P's hand or saying to P, "That was a silly thing to do," are the means by which I show affection or give an insult to P given the larger or more inclusive context of what has gone before and my position with regard to P. On the basis of these two examples, it seems clear that instances of the "Simultaneous" type of means-end relationship are quite common.

In the second case, there is a time sequence that is involved. Thus, in the Sequential type of means-end relationships, I first do B and then C and the outcome is D. There may also be a process or

sequential order that is important (i.e. I first do B and then C but not C and then B in order to achieve D.). When I do B and C in order to achieve D, D is the further end in view which provides the reason for my doing B and C. For example, I buy books, then attend classes for a semester and then take the final examination and, as a result, I pass the course. Or, I walk to the table, then to the edge of the carpet and then step over the dog and, as a result, I reach the door.

The two cases of means-end relationships are related in that the last stage of a Sequential means-end relationship is a Simultaneous type of means-end relationship. Thus, if Q, X and Y are the means by which an end, Z, is achieved and if I have done Q and X then Z is performed by means of performing Y. That is I perform Y and Z at the same time and in the same way. Here, the other means, Q and X, provide the broader context within which Z is what I accomplish by means of or by virtue of performing Y. For example, if in a game of chess I place my opponent in checkmate by taking his pawn with my queen, taking his pawn is the last stage or step in a series of means-end relationships and taking my opponent's pawn and putting him in checkmate are accomplished at the same time and in the same way. Putting my opponent in checkmate is what I accomplish by taking his pawn given the broader context of the moves I have made (i.e. of the other means I have adopted) previously.

A general feature of the means that are the components of a means-end analysis is that each of them could qualify as an intentional action in itself. That is to say, each of them is a means to an end and, whether or not I actually chose them, I could have chosen

them deliberately as means to those ends. And, I could have chosen to perform each of the component actions separately on some other occasion or as means to a different end. For example, holding someone's hand may be a means to help them across the street and buying books may be done because I enjoy owning books or I am about to give someone a gift.

At this point, perhaps a brief illustration will at least suggest what a means-end analysis might look like. For example, a means-end analysis of a complex and highly structured task such as manufacturing a car would be most clearly represented by a branching tree graph. Such a graph would have a general achievement which is the overriding goal or end-result of the task at the top with the sub-goals and performances which are means to that general achievement represented by the major branches of the graph. Thus, a specification of a means-end hierarchy for the production of an automobile would begin with major sub-goals such as the chassis, engine, drive train and transmission. Under each of these sub-goals would be other less-inclusive sub-goals and performances which are the means by which the major sub-goals are achieved. Each of the less-inclusive sub-goals might have other still less-inclusive sub-goals and performances grouped beneath them. For example, in order to manufacture an engine, one puts all of the parts together by means of performances such as tightening belts, welding, putting part A into part B, etc., but first, each of the parts has to be manufactured, and this is achieved by means of performances such as welding, molding the pieces to the

required size, tightening bolts, etc.[2] Finally, a means-end hierarchy would include performances which are means to other performances. For example, in order to put a piston into the combustion chamber of a car, I may have to turn the engine around by means of a chain hoist, clean foreign matter out of the chamber, lift the piston and turn it to exactly the right position before dropping it into the chamber.

It may seem that there would be no limit to the number of means that could be identified in a means-end analysis. There is, however, a limited range of performances which would count as the means to a given end. For example, let us consider the end or goal of making a million dollars. Merely sitting on the grass contemplating ones toes would ordinarily not be counted as a means to making a million dollars. Mowing the grass at $1.50 per hour would be a borderline case that might or might not be counted as a means to making a million dollars while investing in real estate could well be counted as a means to making a million dollars. Moreover, at some point a means-end analysis would identify performances that could actually be done by someone correctly without anything else having to be done correctly so that there would be a point at which a means-end analysis would stop. Finally, there is a difference between a complete means-end scheme that schematically shows a way of getting the job done (i.e. of "curing the patient") and an exhaustive specification of every way it could be done. The first of these would already be a contribution to the state of the art.

---

[2]It should be noted that similar performance descriptions might well appear at various levels of a means-end hierarchy.

B. Means-End Analysis and Process Description In Psychotherapy:

One general objective of a means-end analysis of psychotherapy would be to identify or develop a process of psychotherapy. However, the achievement of a means-end hierarchy in psychotherapy would not necessarily be equivalent to a description of the process of psychotherapy. The difference between having a hierarchy of means-end relationships and having a description of the process of psychotherapy is roughly the difference between having a description of how to achieve X (or of what is required in order to achieve X) and having a description of the set of practices that is the process by which X is ordinarily achieved or can be regularly achieved. Thus, I may know how to achieve X (building a car or "curing the patient") and even be able to teach someone else to achieve X without knowing the details of how X is ordinarily achieved by those who are regularly engaged in the practice of achieving X. For example, one could describe a series of procedures by which a car could be constructed. Such a description would not necessarily include a description of the same procedures that would be included in a description of the process by which a car is ordinarily constructed although one might expect some overlap in the two descriptions. Moreover, being able to say what is required in order to achieve X does not require that there be a standard set of social practices that is the process by which X is achieved. The only requirement is that X be an identifiable and describable state of affairs and that there be someone who is able to achieve X reliably and who can teach others to achieve X.

Various theorists (cf Chapter I) seem to have identified some of the end-results which therapists try to achieve as well as a number of

the means by which they achieve those ends, but as yet no one has identified a repeatable sequence of stages having a relation of temporal succession which would constitute the process of psychotherapy. Whether such a process can, at present, be identified is an empirical question that will not be answered conclusively in the present study of means-end relationships in psychotherapy. However, a logical prerequisite for there being such a process of psychotherapy is that there be a hierarchial structure of means-end relationships by which a therapist could reliably "cure the patient" or achieve various other general effects in psychotherapy. Consequently, if we can identify such a hierarchical structure, it would suggest that there is a process that exhibits sufficient regularity so that we can describe the process of psychotherapy rather than merely saying that there is such a process. Conversely, the absence of such a hierarchy in the means-end relationships identified in a means-end analysis of psychotherapy would suggest that there is not at present any process of psychotherapy having sufficient regularity to be scientifically viable. Such a finding would suggest that a process of psychotherapy will have to be developed. The development of a complete scheme of means-end relationships which provided a systematically related range of ways of achieving general ends in psychotherapy would constitute the development of a process by which those general ends could be achieved. Such a process could then become[3] a part of the standard practices of psychotherapists (i.e. a part of the process of psychotherapy).

---

[3]See the next section for a discussion of the development of standard teaching paradigms.

C. A Grammar of Psychotherapy:

In psychotherapy, the only relevant standards seem to be achievement standards (i.e. Does it work? Did he cure the patient?). There is no equivalent to the statement, "The operation was a success but the patient died." That is to say, the only criterion for success in psychotherapy is whether or not the therapist "cured the patient" (Truax and Carkhuff, 1967). One of the consequences of this state of affairs is that in the absence of standards for doing X correctly, as against achieving success, the kinds of training that can be given are effectively limited to little more than demonstration, evaluation of performance and exhortations such as, "Keep trying!" "Remember Rule B!" The danger here is that in the absence of an effective and reliable means of teaching therapists to do psychotherapy, the training of a capable therapist will be in large part accidental. Without a technology for reliably training reasonably competent therapists, there is no way to provide quality control in the training of therapists except by reference to whether or not they "cure the patient" and at present therapists do not know how to reliably "cure the patient."

It was mentioned earlier that the general goal of a means-end analysis of psychotherapy would be to identify ends such as "curing the patient" and other general effects that therapists are able to achieve and to identify or develop a hierarchy of means-end relationships by which therapists can reliably achieve those ends. In general, if we can identify or develop a means-end hierarchy in which each of the means is "doable," we may be able to develop techniques for reliably teaching people to do psychotherapy.

The achievement of a means-end hierarchy in psychotherapy will not, however, be merely a matter of generating in a straight line a series of means-end relationships. Instead, a means-end hierarchy will have the complexity of a branching tree graph and the characteristic features of a generative grammar including a phrase structure, horizontal contingencies at lower levels, and delineation of specific elements as well as transformations such as the deletion, addition, substitution and permutation of the order of those elements.

As an example of a generative grammar, consider the case of a generative grammar of English. We may describe English grammar as an articulation of the concept of an English sentence. The initial articulation of the concept of an English sentence is: "Every sentence is a case of a noun phrase followed by a verb phrase." The immediate further developments have the form: "Every case of a noun phrase is either a solitary noun or a noun preceded by an article, or . . . . Finally, the most detailed developments involve the delineation of specific elements and the deletion, addition, substitution and permutation of the order of those elements. Eventually the elements delineated have English words as their instances and so if we can distinguish one word from another, the grammar serves to identify which sequence of English words are English sentences (Ossorio, 1969). The sequence outlined above is a sequence of increasing representational power, hence it is an increasingly fine-grained delineation of the concept of an English sentence. As we shall see, a hierarchy of means-end relationships in psychotherapy would have a similar form and could be regarded as a grammar of

psychotherapy.

At the present time, we can identify the form of a grammar of psychotherapy but we cannot specify the substance of such a grammar. To put it a little differently, we cannot "instantiate" a grammar of psychotherapy at the present time. In general, the development of a grammar of psychotherapy would involve an increasingly fine-grained delineation of the means-end relationships in psychotherapy. For example, the initial articulation of the end of "curing the patient" would involve a specification of the general ends which are either a prerequisite for or a part of the general end of "curing the patient." The immediate further developments would involve a specification of the range of ways in which each of these general ends can be achieved. Such a specification would require the adoption of horizontal contingency rules which would specify the possible options given particular judgments and decisions. For example, if the patient has characteristic X then the therapist can move from A to B in Q way rather than in P way. Or, if a type Y patient seems to be unaware of some of the consequences of his actions and if the therapist helps him to be aware of those particular consequences of his actions, the therapist can treat the patient in A, B and C ways but not in P, Q and R ways. At a minimum, the therapist cannot sensibly treat the patient as being someone who is unaware of those particular consequences of his actions. Finally, the most detailed delineation of means-end relationships are likely to be a specification of elements such as performances which can be done correctly without anything else having to be done correctly and operations such as the deletion, addition, substitution and permutation of the order of

those elements.

It appears that there would be other parallels between English grammar and a grammar of psychotherapy. For example, English grammar serves to specify which sequences of English words are English sentences and, in a similar fashion, a grammar of psychotherapy would serve to specify sequences of actions that are means by which particular ends can ordinarily be achieved in psychotherapy. That is, an adequate grammar of psychotherapy would serve to specify a range of ways of achieving various ends in psychotherapy. Such a grammar would therefore provide a standard for doing psychotherapy "correctly" as against achieving success. If an adequate grammar of psychotherapy can be achieved it might then be possible to develop techniques for teaching such a grammar to people who are doing psychotherapy.

On the face of it, it appears that a grammar of psychotherapy could be taught to psychotherapists in much the same way that English grammar is taught to speakers of English. Specifically, English grammar is taught by means of a Standard Teaching Paradigm. A S.T.P. includes: (a) A teacher and a method of teaching that is recognizable as the "done thing," (b) Practice of some sort and (c) An achievement which marks the achievement of an ability. In teaching English grammar, a teacher teaches students to parse English sentences by telling, showing how, giving examples, etc. The students practice by trying to identify the various parts of speech and drawing diagrams which depict the various parts of speech. In the later stages, teaching consists of effectively critizing the child's performance and telling him what to do differently. Finally,

the student is given an examination in which he is asked to write grammatically correct sentences or to identify the various parts of speech in a sentence (achievements which mark the acquisition of his ability to parse sentences). If at the end, the student was not able to parse sentences, it would be in order for the teacher to ask, "What did I do wrong or fail to do?" A S.T.P. therefore provides an effective and reliable technology for transmitting English grammar from one generation to the next.

The achievement of a grammar of psychotherapy and the development of Standard Teaching Paradigms for teaching such a grammar would, therefore, provide an effective and reliable technology for teaching people how to do psychotherapy. Such a development would permit a reliable transmission of what it is that therapists know how to do from one generation to the next (i.e. the development of a set of social practices). The development of standard teaching paradigms would also provide a means of evaluating the abilities of a particular therapist or group of therapists and insuring a measure of quality control in the training of therapists. For example, the development of Standard Teaching Paradigms would make it possible to determine that a student-therapist does or does not have the ability to achieve a particular end or what is more likely that he has the ability to achieve that particular end with a single type of patient under a narrow range of circumstances (e.g. He can only reassure patients who are mildly anxious about vocational problems or he can accept only people who have the same values he has.). On the face of it, it appears that the achievement of a grammar of psychotherapy and the development of a technology for teaching such a grammar would make

the training of reasonably competent therapists a more systematic and reliable process than it is at the present time.

In this chapter, the concept of a means-end analysis was introduced and the long-range goals of a means-end analysis of psychotherapy were discussed. At this point, an appropriate question is, "What if there are other ends that therapists ought to be able to achieve or more efficient means of achieving those ends?" In general, a grammar of psychotherapy can be changed to correspond with new practices in psychotherapy (i.e. new means or ends). Moreover, a specification of what it is that therapists are able to do and the means by which they do it would also be a specification of what it is that therapists are not able to do (i.e. any effects not included in the above specification). Thus, a means-end analysis of psychotherapy would be a way to systematically identify both what it is that therapists are able to do and what it is that they are not able to do. There are no guarantees, but having a description of what it is that therapists are not able to do may at least allow the experimenter to make more systematic attempts to discover new and hopefully more efficient ways of doing psychotherapy.

This last statement suggests that what is at one time a unique achievement may at a later time be a low-level technique (Consider, for example, the solution to certain mathematical and engineering problems in our space program.). It may very well be that therapists will continue to be merely able to "cure the patient" some of the time as opposed to having the ability to "cure the patient" reliably (i.e. whenever they want to). However, if we can identify or develop ways of reliably achieving effects that are prerequisites for or a

part of "curing the patient," it may be that therapists will be able to cure more patients and cure them more efficiently. Teaching the graduate student statistics and experimental design doesn't guarantee that he will do significant research but knowing statistics, etc. makes it more probable that the student will be able to bring off the significant experiment. But perhaps it is time to take a look at an example of a means-end study of psychotherapy.

CHAPTER V

A MEANS-END STUDY OF PSYCHOTHERAPY

A. Introduction

The research to be reported in this chapter was primarily an attempt to investigate the practicality of a means-end analysis of psychotherapy. More specifically, the aim of the present study was to investigate the possibility and potential value of using a geometric model to represent means-end relationships in psychotherapy. To this end, certain simple psychometric procedures were used to construct a geometric representation of means-end relationships in psychotherapy, and the application of such a representation to research on psychotherapy was illustrated.

It was suggested earlier that a branching tree graph would provide a clear and precise way of representing means-end relationships. To develop such a graph in psychotherapy would, however, require time-consuming procedures, and there is no straightforward way of computing numerical estimates of the degree of the relationship between means and ends included in such a graph. Moreover, the introduction of even a minimal number of alternative means or ends into a means-end hierarchy would probably make developing such a graph excessively time-consuming and the computational procedures

would be so cumbersome as to be of little practical value.[4] For these reasons, the possibility of achieving a geometric representation of means-end relationships in psychotherapy was selected for investigation in the present study.

In the next section, the general method for trying to achieve a geometric model of means-end relationships will be developed. This will lead into a discussion of the specific empirical questions investigated in the present study. The procedures adopted in the present study will then be described. Finally, the results of the study will be presented and discussed with particular reference to the present state of affairs in psychotherapy and future attempts to identify and develop a process of psychotherapy.

B. Method

In general, a geometric representation of means-end relationships in psychotherapy might be achieved in the following way:

Given a set of means and a set of ends, numerical estimates of the degree of effectiveness of the means with respect to the achievement of each of the ends can be obtained by asking competent

---

[4] A case study was however undertaken by Mr. Larry Brittain of the University of Colorado in an effort to achieve a rigorous graph of means-end relationships in psychotherapy. The subject in the case study was one of the therapists who served as an informant in the present psychometric study. The case study was designed to provide a validity criterion for the present study but the study was not completed since the patient terminated therapy after 12 interviews. Some of the tentative results of the case study will be mentioned later in the present report. Also, see Ossorio (1968) for a comparison of the results of a case study and a psychometric study of means-end relationships in the same scientific-technical domain.

therapists to rate each of the means with respect to their effectiveness in achieving each of the ends. The result is a two-dimensional data matrix reflecting the degree of effectiveness of each of the means with respect to the achievement of each of the ends. If the ends are treated as variables and intercorrelated on the basis of the means-end data, the result for K ends is a K x K correlation matrix. When this correlation matrix is factor analyzed, the result is a N x K factor matrix which can be interpreted as a N-dimensional Euclidean space in which is embedded a configuration of K vectors (corresponding to the K ends) extending from the origin of the space. This configuration is determined by the fact that the angle between any two ends vectors is proportional to the numerical value of the correlation between the two corresponding ends. The configuration of vectors represents the collective scope of the K ends, and the reference axes of the Euclidean space provide a framework for systematically indexing ends that are within the scope of the space.

The degree of effectiveness of a means with respect to the achievement of an end may be represented as the projection of a means vector on the ends vector. If the degree of effectiveness of a means with respect to the achievement of each of the ends is known, then the projection of the means vector on each of the ends vectors is known. Since the projection of each of the ends vectors on the reference axes of the space are given by the results of the factor analysis, the projection of the means on the reference axes can be estimated. When a metric is adopted for the space, the estimation of these latter projections is equivalent to assigning each of the means to a specific and unique point location within the space (i.e. It is

equivalent to assigning a set of Cartesian coordinates to each of the means.). Consequently, each of the means can be represented by a unique point location while each of the ends can be represented by a unit vector within an Ends Space.[5]

There is a one-to-one relation between the coordinate values assigned to a means in the Ends Space and the set of projections of the corresponding means vector on each of K ends. The latter set of projections represents the degree of effectiveness of that means with respect to the achievement of any actual or possible ends within the scope of achievements defined by the K ends. A means can either be a performance or an achievement. Thus, the assignment of coordinates in an Ends Space to a performance or achievement is equivalent to classifying that performance or achievement with respect to the degree to which it would be a means of achieving ends within the domain of that particular Ends Space. It is for this reason that an Ends Space can serve as a system for indexing means according to the degree to which they contribute to the achievement of ends within the space.

In summary, a geometric Ends Space provides a framework or structure for systematically mapping the ends therapists are able to achieve and the means by which they achieve those ends. Within an Ends Space, means are mapped or indexed by their projections on the ends while the ends in turn are mapped by their projections on the

---

[5]A converse geometric Means Space in which the means are represented by vector units and ends are represented by point locations would be identified if the means were intercorrelated and the resulting correlation matrix factor analyzed.

reference axes or factors. Since each of the ends is indexed with respect to the reference axes and the means are indexed with respect to the ends, each of the means is also indexed with respect to the reference axes. Each of the reference axes may therefore be interpreted as representing a general end or achievement and the total configuration of reference axes may be regarded as a configuration of ends within which means and ends can be systematically mapped.

A map of the ends therapists try to achieve and the means by which they achieve those ends could be used to identify the means by which a particular end can be achieved, identify new ends that might be achieved and recognize ends that are similar (i.e. ends that require the same means) even though the ends are described in theoretical or technical terms and do not appear to be similar. Such a map could also be used to test hypotheses about the framework of ends (i.e. the structure) within which therapists operate and the means (i.e. the process) by which therapists can get from one point to another within that framework and to systematically map the means-end repertoire of a particular therapist or group of therapists.

At this point, one might be inclined to ask, well, can it be done? The present study was, in part, an attempt to investigate the possibility of achieving a geometric model of means-end relationships in psychotherapy by trying to construct such a model on a limited scale. More specifically, a geometric Ends Space was constructed in the present study.[6] It appears that a demonstration of

---

[6]The original plan was to construct a geometric Means Space as well as an Ends Space but because of economic limitations only an Ends Space was constructed.

the possibility of achieving a functional geometric model of means-end relationships would require at least the achievement of a coherent and interpretable representation of means-end relationships that is in accord with what would be expected on the basis of general knowledge about psychotherapy.

To show that the achievement of a geometric model of means-end relationships is possible, is not, however to show that such a model would be of any particular value in the study of psychotherapy. The long-range objectives of a means-end analysis of psychotherapy were discussed earlier but certainly it is the case that the discussion up to this point has been programmatic (if not problematic) and not a description of a current state of the art. Consequently, an attempt was made in the present study to provide a simple though not entirely trivial example of the utility of a geometric Ends Space in research on psychotherapy. More specifically, an attempt was made to test certain hypotheses about the framework of ends within which therapists seem to operate and to compare the geometric Ends Spaces constructed for three relatively distinct groups of therapists.

It was suggested earlier that a geometric Ends Space might be used to test hypotheses about the framework of ends (i.e. the structure) within which therapists operate and the means (i.e. the process) by which therapists get from one point to another within that framework of ends. In the present study, an attempt was made to test certain hypotheses about the framework of ends within which therapists operate. On the basis of a survey of the literature on psychotherapy, conversations with other therapists and some experience in the practice of psychotherapy, the present investigator

has tried to specify some of the general ends that therapists try to achieve during the course of psychotherapy. These ends are presented in Table 1. In general, it is the experimenters hypothesis that the ends in Table 1 are some of the broad sub-goals that provide the framework for many of the therapists' activities; i.e. that they are the further goals in view that provide reason enough for many of the means adopted by the therapist. If the ends in Table 1 do represent some of the broad subdivisions in the framework within which therapists operate, these ends should define at least some of the broad subdivisions in the framework of a geometric Ends Space. In the geometric Ends Space described above the broad subdivisions are marked out by the reference axes or factors. It was, therefore, predicted that the ends in Table 1 would define (i.e. have the highest projections on) some of the factors in the geometric Ends Spaces constructed in the present study. Since it was suggested earlier that most therapists are trying to achieve similar ends, it was predicted that the ends in Table 1 would be represented as factors in the three Ends Spaces to be constructed in the present study for each of three relatively distinct groups of therapists (i.e. psychoanalytic, Rogerian and "other" oriented therapists) who served as informants in the present study.

- - - - - - - - - - - - - -
Insert Table 1 about here
- - - - - - - - - - - - - -

A map of the ends therapists are able to achieve and the means by which they achieve those ends might also be used to systematically compare the practices of therapists. During the last two decades, there has been a good deal of discussion as to whether there are

TABLE 1

HYPOTHETICAL FRAMEWORK OF ENDS

I	Get the patient to be involved in therapy.
II	Establish a relationship in which I am on the patient's side.
III	Get the patient to express his feelings and reactions openly and directly.
IV	Let the patient know how I react to him.
V	See the patient's world as he sees it.
VI	Help the patient to see that his reactions are reasonable and understandable given his present circumstances and past learning.
VII	Use the therapy relationship to teach the patient new ways of relating to people.
VIII	Get the patient to see himself and others in action terms (i.e. as acting in terms of what he wants, is aware of and knows how to do).

appreciable differences in the practices of both individual therapists and various coherent groups of therapists. In particular, there has been a lot of discussion and at least some controversy (Rubinstein and Parloff, 1959) regarding the question of whether differences in theoretical orientation are reflected in what it is that therapists do in psychotherapy. The Fiedler studies (1950a, 1950b, 1951) suggest that the differences between experienced and novice therapists of the same theoretical orientation are greater than the differences between experienced therapists of different theoretical orientations. In the Fiedler studies, however, therapists were only compared with regard to the general relationship that they try to achieve, and there have been few attempts to systematically compare therapists in terms of either the specific effects they try to achieve or the means by which they achieve those effects.

Two of the difficulties that have been encountered in attempting to compare the practices of therapists (Strupp, 1960) are (1) there is at present no method for systematically mapping either what it is that therapists do or the effects they are able to achieve and (2) therapists often describe what they do and the effects they are trying to achieve in theoretical or technical language. As a result, it is often not clear when two therapists of different theoretical orientation are describing similar or different performances and achievements. A geometric Ends Space provides a procedure for systematically indexing the ends a therapist or group of therapists is able to achieve and the means by which they try to achieve those ends so that therapists can be compared with regard to both the effects they are able to achieve and the means by which they achieve those

effects. Moreover, the difficulties presented by the therapists' use of technical and theoretical language would be reduced appreciably if therapists could describe the ends they achieve and the means to those ends in non-technical or non-theoretical language.

In the present study, an attempt was made to explore some of the similarities and differences in the geometric Ends Spaces constructed for three relatively distinct groups of therapists that have different theoretical orientations (i.e. psychoanalytically, Rogerian and "otherwise" oriented therapists). These three groups of therapists served as informants in the present study, and separate analyses were carried out for each group of therapists.

In summary, the major goals of the present study were the following: (a) To provide empirical evidence with regard to the general feasibility of achieving a geometric model of means-end relationships in psychotherapy by trying to construct such a model on a limited scale. (b) To provide a simple and not entirely trivial example of the application of a geometric model of means-end relationships to research problems in psychotherapy by using such a geometric model to (1) test hypotheses about the ends therapists seem to try to achieve and (2) investigate some of the similarities and differences in the geometric Ends Spaces obtained for three distinct groups of therapists.

C. Procedure

1. Identification of means and ends. A list of means was obtained by asking a group of 40 therapists to identify the things they do during psychotherapy (i.e. performances). A list of ends was also

obtained by asking the same therapists on other occasions to identify things they try to achieve during psychotherapy. The 40 therapists included 20 graduate students in clinical psychology who had completed at least one year of a clinical practicum and 20 clinical psychologists with the doctoral degree who were, for the most part, either employed in a clinical setting or engaged in private practice.[7] One stipulation in the instructions to the therapists (See Appendix A) was that they were not to use technical or theoretical language in the lists of means and ends submitted. In general, this stipulation seemed to present no particular problems, and there were few instances of the use of technical or theoretical terms in the lists submitted. A few items which included theoretical terms such as transference and reflection of feeling were later included in the list of means and the list of ends for purposes of comparison. In addition, the eight ends in Table 1 were included in the list of ends.

2. Selection of means and ends. Approximately 80 means and 100 ends were identified by the foregoing procedures. Since an end may also be a means to other ends within a means-end hierarchy, it seemed desirable to include the items in the list of ends in the list of means so that some items would be both means and ends. Because of the limitations on the number of variables which could be handled by the then available computer programs for factor analysis, it was necessary to reduce the list of means to 60 items and the list of

---

[7]Nineteen of these 40 therapists including the author later served as subject-informants in the major data collection effort of the present study.

ends to 70 items. Reduction was accomplished by making a forced choice apriori assignment of less inclusive ends to the more general ends and eliminating means items which did not seem to be related to any of the items in the list of ends. Alternative forms of the 70 ends were then added to the list of means. The final list of 130 means is presented in Table 2 and the list of 70 ends is presented in Table 3.

- - - - - - - - - - - - - - - - - -
Insert Tables 2 and 3 about here
- - - - - - - - - - - - - - - - - -

3. Selection of therapists. The present study was designed to make use of three groups of five therapists as informants with each group of therapists having a different theoretical orientation (i.e. psychoanalytically, Rogerian and "otherwise" oriented therapists). However, some difficulty was encountered in identifying three groups of therapists having a clearly identifiable theoretical orientation. Few therapists were willing to be characterized as representative of a "school" or theory of psychotherapy, and the principal selection criteria were (1) that the therapists were willing to be characterized as generally oriented toward a psychoanalytic, Rogerian or pragmatic form of psychotherapy and (2) they said they regarded themselves as being more like the other therapists in the group than like the therapists in the other two groups. This selection procedure was an attempt to identify three relatively coherent groups of therapists with the therapists in each group having a generally similar theoretical orientation.

Since it seemed likely that rating a large means-end matrix would require an appreciable amount of time from practicing

TABLE 2

MEANS

1. Motion toward myself for pt. to continue.
2. Look skeptical.
3. Try to observe pt's vocal change, gestures, speech blocks, etc.
4. Look directly at the pt.
5. Frown at the pt. or something he has said.
6. Look puzzled.
7. Smile or laugh with the pt.
8. Offer the pt. a cigarette.
9. If behavior of anyone around pt. changes, raise question of how pt. contributed to the change.
10. Try to let pt. talk about whatever he wants to talk about.
11. Tell pt. that the function of therapy is to give him greater control and more freedom of choice in his life.
12. Tell pt. that his experiences are human and acceptable.
13. Try to tell pt. about my experiences and feelings outside of therapy.
14. Try to listen attentively.
15. Try to tell pt. how I think he feels about me.
16. Try to tell pt. how I feel about what he does to me in therapy.
17. Try to ask myself questions about what the pt. is doing to me.
18. Tell pt. that I could react to him in a particular way (i.e. be angry, frustrated, hurt) but I don't because of our special relationship.
19. Suggest specific actions for pt. to do as homework.
20. End a silence.
21. Remain silent when I think it is appropriate.

TABLE 2 Continued

22. Repeat pt's last few words.

23. Sit relaxed with an interested expression on my face.

24. Tell pt. that although his behavior may seem mysterious and be hard to understand, his behavior is understandable and reasonable.

25. Ask pt. to describe circumstances under which he acted ("What was going on at the time?").

26. Ask myself the question "What did he get out of doing that?"

27. Try to answer pt's questions about me.

28. Try to avoid pt's questions about me.

29. Try to ask myself why doesn't the pt. succeed at something he seems to know how to do.

30. Try to slightly misstate what the pt. has said.

31. Try to suggest alternative means of functioning to the pt.

32. Try to praise the pt. for trying new behavior.

33. Tell pt. that he is responsible for his behavior and that he will be the one who changes it.

34. Try to point out pt's digressions from the present topic as defenses.

35. Try not to ask the pt. direct questions.

36. If pt. says "well maybe I did that unconsciously" say "O.K., but now it is conscious."

37. Try to point out an interpretation as a possible view of the situation and then "wonder" about it.

38. Try to remind the pt. of past behavior, feelings, reactions, etc.

39. Try to tell pt. about instances of new behavior and how I or others seem to react to him when he does new things.

40. Try to point out the choices the pt. seems to have and their apparent consequences.

41. Try to caution pt. about possible mistakes or disappointments.

TABLE 2 Continued

42. Tell pt. that I have confidence in his ability to do something.

43. Try to attribute noble motives to pt. when I don't think they're there.

44. When pt. puts a negative connotation on a positive or innocuous behavior, try to flatly contradict it.

45. If given a compliment, try to accept it, don't analyze it.

46. Tell pt. that I think therapy is going well.

47. Try to tell pt. when what he says does not seem to be in line with the affect he expresses or the situation he is in.

48. Try to tell pt. what I think has just happened between us.

49. Try to tell pt. why I think he did something.

50. Ask pt. to describe significant others.

51. Ask pt. to tell me what he thinks of me.

52. Clean or fill a pipe or light a cigarette.

53. Try to ask myself what has the pt. not talked about and what does that mean.

54. Try to figure out what feelings the pt. is expressing but not verbalizing.

55. When pt's stated reasons for his actions make little sense, try to find reasons for such actions that do make sense.

56. Try to tell pt. when I think he is more successful than he says he is (i.e. like when he effectively argues with me about how incompetent he is).

57. Tell pt. that a person's feelings often change when his actions change the situation he is in.

58. Try to notice pt's use of special words or phrases and use them whenever it is appropriate.

59. Try to tell pt. how I would react if I were in his shoes.

60. Try to use tentative prefacing remarks such as: "in a sense," "I guess," and "maybe."

61. Get pt. to feel that his problems are not hopeless.

TABLE 2 Continued

62. Reduce pt's initial guilt about his problems.

63. Get pt. to believe that insight will enable him to behave differently.

64. Get pt. to talk about why he came into therapy and his current circumstances.

65. State feelings expressed by pt. in slightly stronger terms than he does.

66. Let pt. know that I am concerned with and interested in his problems.

67. Be at ease with the pt.

68. Get pt. to continue talking about difficult subjects.

69. Get pt. to discuss his feelings.

70. Get pt. to deal with specific problems rather than general abstractions.

71. Get pt. to consider therapy sessions during the week.

72. Arrive at some idea with the pt. of what we are initially trying to accomplish.

73. Understand how pt. sees his problems.

74. Get a feel for the pt.

75. Become aware of pt's unverbalized feelings.

76. Get pt. to see me as a person who is strong enough to help him.

77. Become aware of my own actions in therapy.

78. Let pt. know what I think he really wants when he asks for help or advice from me.

79. Express my reactions and feelings toward the pt.

80. Get pt. to really become involved in therapy.

81. Let pt. know that his behavior could have many functions which he is usually not aware of.

82. Talk about what the pt. does rather than constructs that cause his behavior.

TABLE 2 Continued

83. Get pt. to feel that I do not see him as irrational but as a person whose actions are understandable given his present situation.

84. React to pt. on basis of his circumstances and expressed feelings rather than on the basis of what he says he feels.

85. Establish a therapeutic alliance.

86. Keep my emotional reactions out of therapy.

87. Get pt. to express his feelings more openly and freely.

88. Get pt. to purge himself of feelings trapped inside.

89. Give pt. a sense of warmth and security with me.

90. Be as open and honest as I can be with the pt.

91. Get pt. out of idea that he can do nothing about his behavior until he understands all of the causes of his conflicts.

92. Get pt. to express unconscious motivation.

93. Use relationship between the T and pt. as an example of how pt. relates to others.

94. Get pt. to question his reasons for doing things.

95. Take pt. seriously and act out the consequences of what he is saying.

96. Show pt. that his reported reaction to others might be a reaction to the therapist.

97. Get pt. to use language that I understand.

98. Relate pt's present actions to what he learned how to do in previous situations and let pt. know how they seem to be related.

99. Let pt. know that I understand and accept him.

100. Get pt. to say what he thinks of me.

101. Make the pt. aware of the relationship between apparently unrelated difficulties that he is having.

102. Show pt. the funny things he and other people do.

TABLE 2 Continued

103. Discover as much of what the pt. is communicating as possible.

104. Formulate as complete and understandable a description of the pt. as possible.

105. Get pt. to look for what he does to others and what they in turn do to him.

106. Discover and point out reasons the pt. might have for acting as he does.

107. Give the pt. psychoanalytic concepts which will explain his past behavior.

108. Raise doubts in pt's mind concerning the unexamined assumptions on which he bases his behavior.

109. Get pt. to be aware of what he gets out of his behavior and what it costs him.

110. Let pt. know me as a person.

111. Instill in pt. an appreciation for the influence of his own past on his thinking, feeling and behavior.

112. Get pt. to be able to stand on his own feet.

113. Get some behavioral change even if it is forced and awkward at first.

114. Let the pt. know I will support him in doing whatever he wants to try to do.

115. Let the pt. decide how or if he wants to change.

116. Present pt. with an understandable description of his behavior.

117. Get pt. to see his behavior as understandable though ineffective or costly.

118. Get pt. to understand behavior of others.

119. Get pt. to feel that he does some things well.

120. Give pt. an opportunity to practice interpersonal skills in therapy.

121. Use the therapy relationship to demonstrate new ways of relating to people.

TABLE 2 Continued

122. Treat pt. as a person who is generally able to manage his own life.

123. Get pt. to understand and accept most or all of the functions of his behavior.

124. Make my skills and abilities as available to pt. as possible.

125. Step into pt's world.

126. Get pt. to be able to understand his behavior without my help.

127. Get pt. to be comfortable with himself as a human being who isn't and won't be perfect.

128. Get pt. to be aware of and to accept his feelings.

129. Get pt. to see his behavior as something he does intentionally because he wants to.

130. Get pt. to be fairly comfortable in interpersonal situations.

TABLE 3

ENDS

1. Get pt. to feel that he can be helped.
2. Let pt. know that I am not repulsed or horrified by what he tells me.
3. Get pt. to believe that understanding his behavior will make it possible for him to behave differently.
4. Get pt. to talk about what brought him to therapy and his present life situation.
5. Reflect pt's feelings.
6. Get pt. to feel that I am interested in and concerned with his problems.
7. Be comfortable with the pt.
8. Get pt. to stay on difficult subject matter.
9. Get pt. to talk about his feelings.
10. Get pt. to focus his difficulties down to specific situations.
11. Get pt. to think about therapy sessions outside the therapy hour.
12. Formulate some tentative goals with the pt.
13. Understand pt's view of his present situation.
14. Get some sense of the pt. as a person.
15. Become sensitive to emotions pt. expresses but does not verbalize.
16. Get pt. to feel that I am strong enough to help him.
17. Become sensitive to what I am doing to the pt.
18. Interpret pt's requests for help or advice as examples of transference.
19. Let pt. know how I react to him.
20. Get pt. to be committed to therapy.

TABLE 3 Continued

21. Get pt. to be aware of alternative descriptions of his behavior.

22. Talk about the results of pt's actions rather than his motives.

23. Let pt. know that I think his actions are reasonable and understandable given his circumstances.

24. React to pt. in terms of the feelings he expresses and his circumstances rather than his verbalized feelings.

25. Establish a relationship in which I am on the pt's side.

26. Maintain an objective relationship with the pt.

27. Get pt. to express his feelings more spontaneously.

28. Promote catharsis.

29. Be one whom pt. can trust with intimate thoughts and feelings.

30. Be as real as I can be with the pt.

31. Get pt. to adopt attitude that action is required in order to solve problems as opposed to the resolution of an intrapsychic conflict.

32. Get pt. to express ignoble motives.

33. Utilize transference appropriately to point out ways in which pt. relates to people.

34. Get pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).

35. Act out for the pt. what he is saying or the feelings he is expressing.

36. Interpret pt's reactions to others as reactions to the therapist.

37. Get pt. to use my language.

38. Show the pt. how his present behavior is related to what he learned how to do in earlier situations.

39. Let pt. know that I am with him.

40. Get pt. to express his feelings toward me.

TABLE 3 Continued

41. Tie pt's experiences together and show him how he constantly gets into the same sort of difficulty time after time even if these experiences seem unrelated.

42. Get pt. to see the funny side of himself and others.

43. Understand all that the pt. is trying to say.

44. Organize my observations and descriptions into a coherent and meaningful view of the pt.

45. Get pt. to see himself and others in action terms.

46. Uncover the unconscious, irrational premises which are guiding the pt's behavior.

47. Use psychoanalytic concepts to provide the pt. with an explanation for his past behavior.

48. Get pt. to question his present convictions and beliefs which lead to ineffective behavior.

49. Get pt. to view his behavior in terms of economics--he gets something but it costs him something.

50. Communicate my values and style of life.

51. Get pt. to be aware of how his past influences his present behavior, thoughts and feelings.

52. Get pt. to be less dependent on me and others.

53. Get pt. to try some new ways of behaving no matter how awkward they may be.

54. Get pt. to feel that I will support him in what he wants to try to do.

55. Allow the pt. to make decisions about how or whether he will change.

56. Give the pt. a reasonable account of his behavior.

57. Get pt. to see his behavior as reasonable though ineffective or costly.

58. Get pt. to be able to interpret actions of others.

59. Get pt. to have some feeling of success as a human being.

TABLE 3 Continued

60. Set up situations in which pt. can practice interpersonal skills.

61. Use the therapy relationship as an example of how the pt. can relate differently to other people.

62. Treat pt. as a competent and responsible person.

63. Get pt. to be aware of and accept all or most of the results of his actions.

64. Teach pt. new ways of behaving.

65. See pt's world as he sees it.

66. Get pt. to be able to analyze and understand his own actions.

67. Get pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.

68. Get pt. to live closer to his feelings and impulses (i.e. to be aware of them, if not to act on them).

69. Get pt. to accept responsibility for his actions.

70. Get pt. to feel reasonably comfortable with others around him.

clinicians, the possibility of having each of several therapists rate part of a means-end matrix and combining their ratings to obtain a total matrix of means-end ratings was investigated. Nineteen therapists were selected as informants from the 40 therapists who previously provided the lists of means and ends. Fourteen of the therapists (4 psychoanalytic, 5 Rogerian and 5 other oriented therapists) were given the total matrix of 130 means and 70 ends and asked to rate each of the means with respect to each of the ends while five additional psychoanalytically oriented therapists were asked to rate 1/5 of the means-end matrix. The judgments of these five psychoanalytically oriented therapists were later combined and treated as though they were the judgments of one subject in the analysis of the group and individual data.

All of the therapists selected as subjects were judged to be competent in that they had each received at least three years of supervised experience in individual psychotherapy. Five of the therapists were advanced graduate students at the University of Colorado. The other fourteen therapists had completed the doctoral degree, and with the exception of one academic clinical psychologist, they were employed in either a clinical setting or private practice. The amount of clinical experience of the subjects ranged from three to twenty years with eleven of the subjects having more than five years of post-doctoral experience in some form of clinical activity.

4. Apparatus. The means and ends were presented to the therapists in the form of a series of 26-page booklets with each page containing ten means items along the side and one end at the top in the format described in Appendix B. The order of presentation of

the materials was varied so that a different end appeared at the top of each page in a random order.

5. Instructions. In general, the therapists were asked to rate each of the means with respect to the degree to which they would expect the means to contribute to the achievement of each of the ends. The written instructions for the means-end ratings that were given to each of the therapists are presented in Appendix B. It soon became apparent that the written instructions alone were not effective and the following orientation procedure was followed for each of the 19 therapist-informants: (1) presentation of the written instructions, (2) preliminary practice ratings, (3) general discussion of the study with a question and answer period, (4) additional practice items and (5) final questions. The therapists were also asked to do a few practice items if they left the task for more than a few hours. Finally, a debriefing session was held with each of the therapists in an effort to explore their reactions to the task of making means-end judgments after they had completed the task.

D. Results

A mean estimate of the degree to which each of the 130 items in the list of means is a means to each of the 70 items in the list of ends was obtained by averaging the means-end judgments of the five therapists in each of the three groups. The ends were then intercorrelated on the basis of these mean estimates, and each of the three resulting correlation matrices were factor analyzed by the minimum residual method of factoring. When the 24 factors extracted by this method were rotated in accordance with the varimax criterion,

there were 16 factors for the Group I or psychoanalytic therapists, 14 factors for the Group II or Rogerian therapists and 15 factors for the Group III or other oriented therapists that retained appreciable (i.e. .400 or greater) loadings by one or more ends. These factors accounted for 77, 86 and 81 per cent of the total variance of the 70 ends analyzed in Groups I, II and III. The factor matrices obtained for each of the three groups of therapists are summarized in Tables 4, 5 and 6 by listing the ends separately for each of the factors in order of decreasing magnitude of their loadings (projections) on that factor. In general, those ends which have loadings of less than .400 and therefore do not contribute appreciably to the characterization of the factor are omitted.

Since a major goal of the present study was to achieve a geometric representation of a set of ends and some of the means to those ends, the coordinate values of the 130 means in each of the Ends Spaces were computed.[8] These results are summarized in Tables 4A, 5A and 6A. This summarization is achieved by listing for each factor those means that have substantial (i.e. 3.0 or greater) coordinate values on that factor. This arrangement was adopted in order to facilitate visual inspection and judgment of the appropriateness of the means to the type of end represented by the factor in question.

- -
Insert Tables 4, 4A, 5, 5A, 6 and 6A about here
- -

1. General findings. By inspection, the geometric Ends Spaces developed in the present study appear to be coherent and interpretable

---

[8]The computational formula used to compute the coordinate values is presented in Appendix C.

TABLE 4

GROUP I

PSYCHOANALYTICALLY ORIENTED THERAPISTS

FACTOR NUMBER 1 Get Pt. to be less dependent on me and others.

0.819	52	Get Pt. to be less dependent on me and others.
0.746	62	Treat Pt. as a competent and responsible person.
0.702	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.
0.667	55	Allow the Pt. to make decisions about how or whether he will change.
0.646	69	Get Pt. to accept responsibility for his actions.
0.626	59	Get Pt. to have some feeling of success as a human being.
0.540	53	Get Pt. to try some new ways of behaving no matter how awkward they may be.
0.531	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.525	70	Get Pt. to feel reasonably comfortable with others around him.
0.523	64	Teach Pt. new ways of behaving.
0.517	31	Get Pt. to adopt the attitude action required in order to solve problems as opposed to the resolution of intrapsychic conflict.
0.471	1	Get Pt. to feel that he can be helped.
0.460	23	Let Pt. know that I think his actions are reasonable and understandable given his circumstances.
0.428	66	Get Pt. to be able to analyze and understand his own actions.

FACTOR NUMBER 2 See Pt's world as he sees it.

0.877	14	Get some sense of the Pt. as a person.
0.843	43	Understand all that the Pt. is trying to say.
0.805	13	Understand Pt's view of his present situation.
0.786	15	Become sensitive to emotions Pt. expresses but does not verbalize.
0.774	65	See Pt's world as he sees it.
0.704	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.660	5	Reflect Pt's feelings.
0.636	17	Become sensitive to what I am doing to the Pt.
0.606	24	React to Pt. in terms of feelings he expresses and his circumstances rather than his verbalized feeling.
0.458	46	Uncover the unconscious, irrational premises which are guiding the Pt's behavior.

TABLE 4 Continued

FACTOR NUMBER 3		Establish a relationship in which I am on the Pt's side.
0.822	39	Let Pt. know that I am with him.
0.817	25	Establish a relationship in which I am on the Pt's side.
0.812	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.760	6	Get Pt. to feel that I am interested in and concerned with his problems.
0.680	7	Be comfortable with Pt.
0.659	29	Be one whom Pt. can trust with intimate thoughts and feelings.
0.641	2	Let Pt. know that I am not repulsed or horrified by what he tells me.
0.619	16	Get Pt. to feel that I am strong enough to help him.
0.504	30	Be as real as I can be with the Pt.
0.491	1	Get Pt. to feel that he can be helped.
0.489	20	Get Pt. to be committed to therapy.
FACTOR NUMBER 4		Use therapy relationship to teach Pt. new way of relating to people.
0.782	60	Set up situations in which Pt. can practice interpersonal skills.
0.701	61	Use therapy relationship as example of how Pt. can relate differently to other people.
0.610	58	Get Pt. to be able to interpret actions of others.
0.522	33	Utilize transference appropriately to point out way in which Pt. relates to people.
0.508	36	Interpret Pt's reactions to others as reactions to the therapist.
0.406	70	Get Pt. to feel reasonably comfortable with others around him.
FACTOR NUMBER 5		Get Pt. to express feelings and reactions openly and directly.
0.785	9	Get Pt. to talk about his feelings.
0.778	28	Promote catharsis.
0.768	27	Get Pt. to express his feelings more spontaneously.
0.626	32	Get Pt. to express ignoble motives.
0.596	68	Get Pt. to live closer to his feelings and impulses (i.e. be aware of them if not act on them).
0.566	40	Get Pt. to express his feelings toward me.
0.468	8	Get Pt. to stay on difficult subject matter.
0.448	42	Get Pt. to see the funny side of himself and others.
0.399	29	Be one whom Pt. can trust with intimate thoughts and feelings.

TABLE 4 Continued

FACTOR NUMBER 6		Help Pt. to see that his actions are reasonable and understandable given his present circumstances and past learning.
0.837	38	Show Pt. how present behavior related to what he learned how to do in earlier situations.
0.833	51	Get Pt. to be aware of how his past influences his present behavior, thoughts and feelings.
0.816	41	Tie Pt's experiences together to show how he constantly gets into the same sort of difficulty time after time.
0.787	21	Get Pt. to be aware of alternative descriptions of his behavior.
0.710	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.680	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reason for his behavior but rather to hold decisions in abeyance until the information is adequate).
0.653	3	Get Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.611	47	Use psychoanalytic concepts to provide Pt. with an explanation for his past behavior.
0.608	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.
0.604	48	Get Pt. to question convictions and beliefs which lead to ineffective behavior.
0.592	18	Interpret Pt's requests for help or advice as examples of transference.
0.556	66	Get Pt. to be able to analyze and understand his own actions.
0.524	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.493	33	Utilize transference appropriately to point out way in which the Pt. relates to people.
0.470	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.468	36	Interpret Pt's reactions to others as reactions to the therapist.
0.460	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).
0.457	49	Get Pt. to view his behavior in terms of economics--he gets something out of it but it costs him something.
0.437	23	Let Pt. know that I think his actions are reasonable and understandable given his circumstances.
0.427	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.423	26	Maintain an objective relationship with the Pt.
0.403	20	Get Pt. to be committed to therapy.

TABLE 4 Continued

0.396	64	Teach Pt. new ways of behaving.
0.396	45	Get Pt. to see himself and others in action terms.

FACTOR NUMBER 7 Let Pt. know how I react to him.

0.663	50	Communicate my values and style of life.
0.644	19	Let Pt. know how I react to him.
0.608	30	Be as real as I can be with the Pt.
0.532	37	Get Pt. to use my language.

FACTOR NUMBER 8 Get Pt. to question his present convictions and beliefs which lead to ineffective behavior.

0.502	48	Get Pt. to question his present convictions and beliefs which lead to ineffective behavior.
0.287	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily accept or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).

FACTOR NUMBER 9 Get Pt. to see the funny side of himself and others.

0.518	42	Get Pt. to see the funny side of himself and others.
0.258	58	Get Pt. to be able to interpret actions of others.
0.240	67	Get Pt. to see and accept himself as a reasonably competent but fallible person who will continue to have problems.

FACTOR NUMBER 10 Get Pt. to talk about what brought him to therapy and his present life situation.

0.531	4	Get Pt. to talk about what brought him to therapy and his present life situation.

FACTOR NUMBER 11 Get Pt. to think about therapy sessions outside the therapy hour.

0.602	11	Get Pt. to think about therapy sessions outside the therapy hour.
0.372	53	Get Pt. to try new ways of behaving.
0.261	20	Get Pt. to be committed to therapy.

FACTOR NUMBER 12 Formulate some tentative goals with the Pt.

0.486	12	Formulate some tentative goals with the Pt.
0.322	20	Get Pt. to be committed to therapy.

TABLE 4 Continued

FACTOR NUMBER 13		Get Pt. to focus his difficulties down to specific situations.
0.615	10	Get Pt. to focus his difficulties down to specific situations.
0.569	45	Get Pt. to see himself and others in action terms.
0.551	31	Get Pt. to adopt attitude that action is required in order to solve problems as opposed to the resolution of intrapsychic conflict.
0.548	22	Talk about the results of Pt's actions rather than his motives.
FACTOR NUMBER 14		Get Pt. to see his behavior as reasonable though ineffective or costly.
0.547	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.452	49	Get Pt. to view his behavior in terms of economics--he gets something but it costs him something.
0.330	23	Let Pt. know that I think his behavior is reasonable and understandable given his present circumstances and past learning.
FACTOR NUMBER 15		Act out for the Pt. what he is saying or the feelings he is expressing.
0.523	35	Act out for the Pt. what he is saying or the feelings he is expressing.
0.286	5	Reflect Pt's feelings.
FACTOR NUMBER 16		Interpret Pt's requests for help or advice as examples of transference.
0.436	18	Interpret Pt's requests for help or advice as examples of transference.
0.360	36	Interpret Pt's reactions to others as reactions to the therapist.
0.257	40	Get Pt. to express his feelings toward me.

TABLE 4A

GROUP I

PSYCHOANALYTICALLY ORIENTED THERAPISTS

MEANS AND COORDINATE VALUES

FACTOR NUMBER 1 Get Pt. to be less dependent on me and others.

4.05 Arrive at some idea with the Pt. of what we are initially trying to accomplish.
3.90 Tell Pt. that I have confidence in his ability to do something.
3.13 Get Pt. to believe that insight will enable him to behave differently.

FACTOR NUMBER 2 See Pt's world as he sees it.

3.81 Understand how Pt. sees his problems.
3.39 Take Pt. seriously and act out the consequences of what he is saying.
3.28 React to Pt. on basis of his circumstances and expressed feelings rather than on the basis of what he says he feels.
3.12 Try to listen attentively.
2.90 Get some behavioral change even if it is forced and awkward at first.
2.88 Become aware of Pt's unverbalized feelings.
2.73 Sit relaxed with an interested expression on my face.

FACTOR NUMBER 3 Establish a relationship in which I am on the Pt's side.

5.05 Get Pt. to question his reasons for doing things.
3.35 Look puzzled.
3.45 Express my feelings and reactions toward the Pt.
3.15 State feelings expressed by Pt. in slightly stronger terms than he does.
2.73 Discover and point out reasons the Pt. might have for acting as he does.

FACTOR NUMBER 4 Use therapy relationship to teach Pt. new ways of relating to people.

4.90 Try to tell Pt. about my experiences outside of therapy.
4.61 Try to slightly misstate what the Pt. has said.
4.42 Try to suggest alternative means of functioning to the pt.
3.31 Offer the Pt. a cigarette.
3.15 Frown at the Pt. or something he has said.
2.91 Get Pt. to be fairly comfortable in interpersonal situations.

TABLE 4A Continued

FACTOR NUMBER 5 Get Pt. to express feelings and reactions openly and directly.

5.17 Get Pt. to express his feelings more openly and freely.
4.60 Raise doubts in Pt's mind concerning the unexamined assumptions on which he bases his behavior.
4.23 Try to tell Pt. about instances of new behavior and how I or others seem to react to him when he does new things.
2.99 Relate Pt's present actions to what he learned how to do in previous situations and let Pt. know how they seem to be related.

FACTOR NUMBER 6 Help the Pt. to see that his actions are reasonable and understandable given his present circumstances and past learning.

4.35 Get Pt. to continue talking about difficult subjects.
4.08 Get Pt. to feel that his problems are not hopeless.

FACTOR NUMBER 7 Let Pt. know how I react to him.

3.97 Try to use tentative prefacing remarks such as: "in a sense," "I guess" and "maybe."
3.83 If behavior of anyone around Pt. changes, raise question of how Pt. contributed to the change.
3.61 Give Pt. an opportunity to practice interpersonal skills.
3.32 Tell Pt. that a person's feelings often change when his actions change the situation he is in.
3.27 Ask myself the question, "What did he get out of doing that?"
3.17 Get Pt. to discuss his feelings.

FACTOR NUMBER 8 Get Pt. to question his present convictions and beliefs which lead to ineffective behavior.

4.61 Try to remind the Pt. of past behavior, feelings, reactions, etc.
3.24 Tell Pt. that although his behavior may seem mysterious and be hard to understand, his behavior is understandable and reasonable.

FACTOR NUMBER 9 Get Pt. to see the funny side of himself and others.

5.78 Show Pt. the funny things he and other people do.
4.56 Show Pt. that his reported reaction to others might be a reaction to the therapist.
3.00 Offer the Pt. a cigarette.

TABLE 4A Continued

FACTOR NUMBER 10 Get Pt. to talk about what brought him to therapy and his present life situation.

6.49 Let the Pt. know that I will support him in doing whatever he wants to try to do.
3.45 Let Pt. decide how or if he wants to change.

FACTOR NUMBER 11 Get Pt. to think about therapy sessions outside the therapy hour.

5.87 Try to tell Pt. how I would react if I were in his shoes.
3.98 End a silence.

FACTOR NUMBER 12 Formulate some tentative goals with the Pt.

4.78 Reduce Pt's initial guilt about his problems.
3.56 State feelings expressed by Pt. in slightly stronger terms than he does.

FACTOR NUMBER 13 Get Pt. to focus his difficulties down to specific situations.

5.30 Try to praise the Pt. for trying new behavior.
4.04 Ask Pt. to describe significant others.
3.56 Let the Pt. decide how or if he wants to change.

FACTOR NUMBER 14 Get Pt. to see his behavior as reasonable though ineffective or costly.

5.52 Get Pt. to be comfortable with himself as a human being who isn't and won't be perfect.
5.40 Try to tell Pt. why I think he did something.
3.63 Try to attribute noble motives to Pt. when I don't think they're there.

FACTOR NUMBER 15 Act out for the Pt. what he is saying or the feelings he is expressing.

7.04 Try not to ask the Pt. direct questions.
4.43 Try to notice Pt's use of special words or phrases and use them whenever it is appropriate.
3.66 Try to figure out what feelings the Pt. is expressing but not verbalizing.

FACTOR NUMBER 16 Interpret Pt's requests for help or advice as examples of transference.

6.29 Tell Pt. that I think therapy is going well.
3.45 Get Pt. to be aware of and to accept his feelings.
3.31 Instill in Pt. an appreciation for the influence of his own past on his thinking, feeling and behavior.

TABLE 5

GROUP II

ROGERIAN ORIENTED THERAPISTS

FACTOR NUMBER 1 Get Pt. to see himself and others in action terms.

0.902	53	Get Pt. to try some new ways of behaving no matter how awkward they may be.
0.870	31	Get Pt. to adopt the attitude that action is required in order to solve problems as opposed to the resolution of intrapsychic conflict.
0.844	64	Teach Pt. new ways of behaving.
0.832	69	Get Pt. to accept responsibility for his actions.
0.829	45	Get Pt. to see himself and others in action terms.
0.790	49	Get Pt. to view his behavior in terms of economics--he gets something but it costs him something.
0.784	52	Get Pt. to be less dependent on me and others.
0.774	55	Allow the Pt. to make decisions about how or whether he will change.
0.771	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.757	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.
0.742	22	Talk about the results of Pt's actions rather than his motives.
0.737	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.727	1	Get Pt. to feel that he can be helped.
0.726	59	Get Pt. to have some feeling of success as a human being.
0.721	62	Treat Pt. as a competent and responsible person.
0.719	60	Set up situations in which Pt. can practice interpersonal skills.
0.663	3	Get Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.623	21	Get Pt. to be aware of alternative descriptions of his behavior.
0.613	70	Get Pt. to feel reasonably comfortable with others around him.
0.601	66	Get Pt. to be able to analyze and understand his own actions.
0.582	48	Get Pt. to question convictions and beliefs which lead to ineffective behavior.
0.578	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).

TABLE 5 Continued

0.568	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.552	11	Get Pt. to think about therapy sessions outside the therapy hour.
0.541	61	Use therapy relationship as example of how Pt. can relate differently to other people.
0.540	23	Let Pt. know that I think his actions are reasonable and understandable given his circumstances.
0.535	12	Formulate some tentative goals with the Pt.
0.507	10	Get Pt. to focus his difficulties down to specific situations.
0.487	20	Get Pt. to be committed to therapy.
0.457	58	Get Pt. to be able to interpret actions of others.
0.450	41	Tie Pt's experiences together to show how he constantly gets into the same sort of difficulties time after time.
0.418	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.416	38	Show Pt. how present behavior is related to what he learned how to do in earlier situations.
0.415	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).
0.397	25	Establish a relationship in which I am on the Pt's side.

FACTOR NUMBER 2 See Pt's world as he sees it.

0.891	43	Understand all that the Pt. is trying to say.
0.890	65	See Pt's world as he sees it.
0.880	15	Become sensitive to emotions Pt. expresses but does not verbalize.
0.872	13	Understand Pt's view of his present situation.
0.865	28	Promote catharsis.
0.862	5	Reflect Pt's feelings.
0.841	9	Get Pt. to talk about his feelings.
0.833	27	Get Pt. to express his feelings more spontaneously.
0.816	14	Get some sense of the Pt. as a person.
0.805	29	Be one whom Pt. can trust with intimate thoughts and feelings.
0.796	6	Get Pt. to feel that I am interested in and concerned with his problems.
0.791	24	React to Pt. in terms of feelings he expresses and his circumstances rather than his verbalized feeling.
0.782	17	Become sensitive to what I am doing to the Pt.
0.781	40	Get Pt. to express his feelings toward me.
0.764	7	Be comfortable with the Pt.
0.761	4	Get Pt. to talk about what brought him to therapy and his present life situation.
0.756	8	Get Pt. to stay on difficult subject matter.

TABLE 5 Continued

0.732	25	Establish a relationship in which I am on the Pt's side.
0.727	39	Let Pt. know that I am with him.
0.680	2	Let Pt. know that I am not repulsed or horrified by what he tells me.
0.670	32	Get Pt. to express ignoble motives.
0.622	20	Get Pt. to be committed to therapy.
0.619	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).
0.571	35	Act out for the Pt. what he is saying or the feelings he is expressing.
0.562	30	Be as real as I can be with the Pt.
0.536	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.517	16	Get Pt. to feel that I am strong enough to help him.
0.472	46	Uncover the unconscious irrational premises which are building the Pt's behavior.
0.439	12	Formulate some tentative goals with the Pt.
0.435	1	Get Pt. to feel that he can be helped.
0.430	42	Get Pt. to see the funny side of himself and others.
0.413	70	Get Pt. to feel reasonably comfortable with others around him.
0.405	61	Use therapy relationship as example of how Pt. can relate differently to other people.

FACTOR NUMBER 3 Help Pt. to see that his actions are reasonable and understandable given his present circumstances and past experiences.

0.885	47	Use psychoanalytic concepts to provide Pt. with an explanation for his past behavior.
0.873	18	Interpret Pt's requests for help or advice as examples of transference.
0.786	33	Utilize transference appropriately to point out way in which Pt. relates to people.
0.772	46	Uncover the unconscious, irrational premises which are guiding the Pt's behavior.
0.756	36	Interpret Pt's reactions to others as reactions to the therapist.
0.741	38	Show Pt. how present behavior is related to what he learned how to do in earlier situations.
0.688	41	Tie Pt's experience together to show how he constantly gets in the same sort of difficulties time after time.
0.680	51	Get Pt. to be aware of how his past influences his present behavior thoughts and feelings.
0.575	26	Maintain an objective relationship with the Pt.
0.564	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.554	21	Get Pt. to be aware of alternative descriptions of his behavior.

TABLE 5 Continued

0.523	48	Get Pt. to question convictions and beliefs which lead to ineffective behavior.
0.518	3	Get the Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.506	66	Get the Pt. to be able to analyze and understand his own actions.
0.475	57	Get the Pt. to see his behavior as reasonable though ineffective or costly.
0.432	58	Get the Pt. to be able to interpret the actions of others.
0.430	34	Get the Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).
0.423	23	Let Pt. know that I think his actions are reasonable and understandable given his circumstances.
0.397	49	Get the Pt. to view his behavior in terms of economics--he gets something but it costs him something.

FACTOR NUMBER 4 Let Pt. know how I react to him.

0.778	19	Let Pt. know how I react to him.
0.752	50	Communicate my values and style of life.
0.718	30	Be as real as I can be with the Pt.
0.425	61	Use therapy relationship as example of how Pt. can relate differently to other people.
0.402	35	Act out for the Pt. what he is saying or the feelings he is expressing.

FACTOR NUMBER 5 Get the Pt. to adopt a speculative approach to his own behavior.

0.453	34	Get the Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).
0.352	48	Get the Pt. to question convictions and beliefs which lead to ineffective behavior.

FACTOR NUMBER 6 Get the Pt. to see the funny side of himself and others.

0.623	42	Get the Pt. to see the funny side of himself and others.
0.324	67	Get the Pt. to see and accept himself as a reasonably competent person who will continue to have problems.

FACTOR NUMBER 7 Get the Pt. to focus his difficulties down to specific situations.

0.526	10	Get the Pt. to focus his difficulties down to specific situations.

TABLE 5 Continued

FACTOR NUMBER 8 Formulate some tentative goals with the Pt.

0.453 12 Formulate some tentative goals with the Pt.

FACTOR NUMBER 9 Get Pt. to think about therapy sessions outside the therapy hour.

0.474 11 Get the Pt. to think about therapy sessions outside the therapy hour.
0.238 20 Get the Pt. to be committed to therapy.

FACTOR NUMBER 10 Let Pt. know that I think his actions are reasonable and understandable given his circumstances.

0.461 23 Let the Pt. know that I think his actions are reasonable and understandable given his circumstances.
0.319 2 Let the Pt. know that I am not repulsed or horrified by what he tells me.

FACTOR NUMBER 11 Get Pt. to use my language.

0.477 37 Get the Pt. to use my language.

FACTOR NUMBER 12 Get the Pt. to feel that I am strong enough to help him.

0.489 16 Get the Pt. to feel that I am strong enough to help him.

FACTOR NUMBER 13 Act out for the Pt. what he is saying or the feelings he is expressing.

0.182 15 Become sensitive to emotions the Pt. expresses but does not verbalize.

FACTOR NUMBER 14 Get the Pt. to be able to interpret actions of others.

0.427 58 Get the Pt. to be able to interpret actions of others.

TABLE 5A

GROUP II

ROGERIAN ORIENTED THERAPISTS

MEANS AND COORDINATE VALUES

FACTOR NUMBER 1 Get Pt. to see himself and others in action terms.

2.19 Try to tell Pt. why I think he did something.

FACTOR NUMBER 2 See Pt's world as he sees it.

2.49 Get the Pt. to express his feelings more openly and freely.

FACTOR NUMBER 3 Get Pt. to see that his actions are reasonable and understandable given his present circumstances and past experiences.

2.32 Get the Pt. to continue talking about difficult subjects.

FACTOR NUMBER 4 Let the Pt. know how I react to him.

3.88 Try to use tentative prefacing remarks such as: "in a sense," "I guess," and "maybe."
3.44 If behavior of anyone around Pt. changes, raise question of how Pt. contributed to the change.
3.17 Ask myself the question, "What did he get out of doing that?"
2.94 Give Pt. an opportunity to practice interpersonal skills.
2.92 Smile or laugh with the Pt.

FACTOR NUMBER 5 Get Pt. to adopt a speculative approach to his own behavior.

4.00 Get the Pt. to really become involved in therapy.
3.82 Give the Pt. psychoanalytic concepts which will explain his behavior.
3.47 Try to remind the Pt. of past behavior, feelings, reactions, etc.
3.44 Tell Pt. that although his behavior may seem mysterious and be hard to understand, his behavior is understandable and reasonable.

FACTOR NUMBER 6 Get the Pt. to see the funny side of himself and others.

4.96 Show the Pt. the funny things he and other people do.

TABLE 5A Continued

3.16 Get the Pt. to use language I understand.
2.92 Offer the Pt. a cigarette.

FACTOR NUMBER 7 Get the Pt. to focus his difficulties down to specific situations.

4.09 Try to point out the choices the Pt. seems to have and their apparent consequences.
3.41 Try to praise the Pt. for trying new behavior.

FACTOR NUMBER 8 Formulate some tentative goals with the Pt.

5.30 Reduce the Pt's initial guilt about his problems.
4.39 Let the Pt. know that I will support him in what he wants to try to do.

FACTOR NUMBER 9 Get the Pt. to think about therapy sessions outside the therapy hour.

7.00 Ask the Pt. to tell me what he thinks of me.
4.03 End a silence.

FACTOR NUMBER 10 Let the Pt. know that I think his actions are reasonable and understandable given his circumstances.

3.59 Try to attribute noble motives to the Pt. when I don't think they're there.
2.78 Present the Pt. with an understandable description of his behavior.

FACTOR NUMBER 11 Get the Pt. to use my language.

4.46 Tell the Pt. that a person's feelings often change when his actions change the situation he is in.
3.89 Get the Pt. to discuss his feelings.
3.73 Discover and point out reasons the Pt. might have for acting as he does.
3.10 Make the Pt. aware of apparently unrelated difficulties he is having.
3.07 Present the Pt. with an understandable description of his behavior.

FACTOR NUMBER 12 Get the Pt. to feel that I am strong enough to help him.

5.64 Discover and point out reasons the Pt. might have for acting as he does.
3.47 Get the Pt. to question his reasons for doing things.

TABLE 5A Continued

FACTOR NUMBER 13 Act out for the Pt. what he is saying or the feelings he is expressing.

6.00 Try not to ask the Pt. direct questions.

FACTOR NUMBER 14 Get the Pt. to be able to interpret actions of others.

4.31 Keep my emotional reactions out of therapy.
4.15 Offer the Pt. a cigarette.
3.08 Let the Pt. know me as a person.
3.03 Become aware of the Pt's unverbalized feelings.

TABLE 6

GROUP III

OTHERWISE ORIENTED THERAPISTS

FACTOR NUMBER 1		Get Pt. to see himself and others in action terms.
0.877	45	Get Pt. to see himself and others in action terms.
0.870	69	Get Pt. to accept responsibility for his actions.
0.866	31	Get Pt. to adopt the attitude that action is required in order to solve problems as opposed to the resolution of intrapsychic conflict.
0.847	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.824	49	Get Pt. to view his behavior in terms of economics--he gets something but it costs him something.
0.788	66	Get Pt. to be able to analyze and understand his own actions.
0.780	53	Get Pt. to try some new ways of behaving no matter how awkward they may be.
0.771	64	Teach Pt. new ways of behaving.
0.762	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.757	22	Talk about the results of the Pt's actions rather than his motives.
0.744	3	Get the Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.723	62	Treat Pt. as a competent and responsible person.
0.691	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.
0.672	48	Get Pt. to question convictions and beliefs which lead to ineffective behavior.
0.665	55	Allow the Pt. to make decisions about how or whether he will change.
0.617	21	Get Pt. to be aware of alternative descriptions of his behavior.
0.560	59	Get Pt. to have some feeling of success as a human being.
0.548	1	Get Pt. to feel that he can be helped.
0.526	41	Tie Pt's experiences together to show how he constantly gets into the same sort of difficulty time after time.
0.525	11	Get Pt. to think about therapy sessions outside the therapy hour.
0.521	70	Get Pt. to feel reasonably comfortable with others around him.
0.511	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).

TABLE 6 Continued

0.508	12	Formulate some tentative goals with the Pt.
0.501	58	Get Pt. to be able to interpret actions of others.
0.499	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.470	23	Let Pt. know that I think his actions are reasonable and understandable given his circumstances.
0.438	10	Get Pt. to focus his difficulties down to specific situations.
0.437	38	Show Pt. how present behavior is related to what he learned how to do in earlier situations.
0.431	51	Get Pt. to be aware of how past influences present behavior thoughts and feelings.
0.405	61	Use therapy relationship as example of how Pt. can relate differently to other people.
0.401	46	Uncover the unconscious irrational premises which are guiding the Pt's behavio .
0.391	26	Maintain an objective relationship with the Pt.

FACTOR NUMBER 2 See Pt's world as he sees it.

0.905	14	Get some sense of the Pt. as a person.
0.894	43	Understand all that the Pt. is trying to say.
0.862	15	Become sensitive to emotions Pt. expresses but does not verbalize.
0.856	65	See Pt's world as he sees it.
0.853	13	Understand Pt's view of his present situation.
0.793	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.733	5	Reflect Pt's feelings.
0.639	17	Become sensitive to what I am doing to the Pt.
0.630	24	React to Pt. in terms of feelings he expresses and his circumstances rather than his verbalized feelings.
0.501	35	Act out for the Pt. what he is saying or the feelings he is expressing.
0.491	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.
0.419	28	Promote catharsis.

FACTOR NUMBER 3 Establish a relationship in which I am on the Pt's side.

0.884	39	Let Pt. know that I am with him.
0.844	25	Establish a relationship in which I am on the Pt's side.
0.832	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.784	29	Be one whom Pt. can trust with intimate thoughts and feelings.
0.751	2	Let Pt. know that I am not repulsed or horrified by what he tells me.

TABLE 6 Continued

0.698	6	Get Pt. to feel that I am interested in and concerned with his problems.
0.612	7	Be comfortable with Pt.
0.576	20	Get Pt. to be committed to therapy.
0.487	30	Be as real as I can be with the Pt.
0.480	59	Get Pt. to have some feeling of success as a human being.
0.466	19	Let Pt. know how I react to him.
0.422	8	Get Pt. to stay on difficult subject matter.
0.409	62	Treat Pt. as a competent and responsible person.
0.405	1	Get Pt. to feel that he can be helped.
0.403	23	Let Pt. know that I think his actions reasonable and understandable given his circumstances.

FACTOR NUMBER 4 Use therapy relationship to teach the Pt. new ways of relating to other people.

0.807	33	Utilize transference appropriately to point out way in which Pt. relates to people.
0.714	40	Get Pt. to express his feelings toward me.
0.709	36	Interpret Pt's reactions to others as reactions to the therapist.
0.683	61	Use therapy relationship as example of how Pt. can relate differently to other people.
0.611	18	Interpret Pt's requests for help or advice as examples of transference.
0.515	17	Become sensitive to what I am doing to the Pt.
0.496	58	Get Pt. to be able to interpret actions of others.
0.485	30	Be as real as I can be with the Pt.
0.471	19	Let Pt. know how I react to him.
0.455	60	Set up situations in which Pt. can practice interpersonal skills.

FACTOR NUMBER 5 Get Pt. to express his feelings and reactions openly and directly.

0.747	27	Get Pt. to express his feelings more spontaneously.
0.710	28	Promote catharsis.
0.650	9	Get Pt. to talk about his feelings.
0.535	32	Get Pt. to express ignoble motives.
0.498	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).
0.495	8	Get Pt. to stay on difficult subject matter.
0.344	40	Get Pt. to express his feelings toward me.

FACTOR NUMBER 6 Help Pt. to see that his actions are reasonable and understandable given his present circumstances and past learning.

0.721	51	Get Pt. to be aware of how past influences present behavior thoughts and feelings.

TABLE 6 Continued

0.715	38	Show Pt. how his present behavior is related to what he learned how to do in earlier situations.
0.653	47	Use psychoanalytic concepts to provide the Pt. with an explanation for past behavior.
0.637	41	Tie Pt's experiences together to show how he constantly gets into the same sort of difficulty time after time.
0.576	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.422	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.
0.398	18	Interpret Pt's requests for help or advice as examples of transference.

FACTOR NUMBER 7 Let Pt. know how I react to him.

0.673	50	Communicate my values and style of life.
0.604	37	Get Pt. to use my language.
0.445	19	Let Pt. know how I react to him.
0.410	30	Be as real as I can be with the Pt.

FACTOR NUMBER 8 Get Pt. to adopt a speculative approach to his own behavior.

0.522	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).
0.371	48	Get Pt. to question convictions and beliefs which lead to ineffective behavior.

FACTOR NUMBER 9 Get Pt. to see the funny side of himself and others.

0.523	42	Get Pt. to see the funny side of himself and others.
0.253	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.

FACTOR NUMBER 10 Get Pt. to focus his difficulties down to specific situations.

0.619	10	Get Pt. to focus his difficulties down to specific situations.
0.605	4	Get Pt. to talk about what brought him to therapy and his present life situation.
0.385	8	Get Pt. to stay on difficult subject matter.

FACTOR NUMBER 11 Get Pt. to be involved in therapy.

0.556	20	Get Pt. to be committed to therapy.

TABLE 6 Continued

0.502	1	Get Pt. to feel that he can be helped.
0.458	11	Get Pt. to think about therapy sessions outside the therapy hour.

FACTOR NUMBER 12 Set up situations in which Pt. can practice interpersonal skills.

0.500	60	Set up situations in which the Pt. can practice interpersonal skills.
0.385	64	Teach Pt. new ways of behaving.
0.340	53	Get Pt. to try new ways of behaving no matter how awkward they may be at first.

FACTOR NUMBER 13 Get Pt. to feel reasonably comfortable with others around him.

0.466	70	Get Pt. to feel reasonably comfortable with others around him.
0.366	59	Get Pt. to have some feeling of success as a human being.
0.306	58	Get Pt. to be able to interpret actions of others.

FACTOR NUMBER 14 Maintain an objective relationship with the Pt.

0.505	26	Maintain an objective relationship with the Pt.
0.260	19	Let Pt. know how I react to him.
0.234	30	Be as real as I can be with the Pt.

FACTOR NUMBER 15 Get Pt. to be less dependent on me and others.

0.418	52	Get Pt. to be less dependent on me and others.
0.314	55	Allow the Pt. to make decisions about how or whether he will change.
0.246	62	Treat Pt. as a competent and responsible person.

TABLE 6A

GROUP III

OTHERWISE ORIENTED THERAPISTS

MEANS AND COORDINATE VALUES

FACTOR NUMBER 1 Get Pt. to see himself and others in action terms.

2.98 Try to tell Pt. why I think he did something.

FACTOR NUMBER 2 See Pt's world as he sees it.

2.94 Get some behavioral change even if it is forced and awkward at first.
2.92 Understand how the Pt. sees his problem.
2.88 Try to listen attentively.
2.77 React to Pt. on the basis of his circumstances and expressed feelings rather than on the basis of what he says he feels.
2.66 Become aware of the Pt's unverbalized feelings.
2.27 Sit relaxed with an interested expression on my face.

FACTOR NUMBER 3 Establish a relationship in which I am on the Pt's side.

3.48 Express my feelings and reactions toward the Pt.
3.31 Get the Pt. to question his reasons for doing things.
3.05 Look puzzled.

FACTOR NUMBER 4 Use therapy relationship to teach the Pt. new ways of relating to other people.

4.26 Tell Pt. that I think therapy is going well.
4.03 Try to tell Pt. about my experiences outside of therapy.
3.31 Get Pt. to purge himself of feelings trapped inside.
2.96 Try to point out an interpretation as a possible view of the situation and then "wonder" about it.

FACTOR NUMBER 5 Get Pt. to express his feelings and reactions openly and directly.

4.11 Get Pt. to express feelings more openly and freely.
3.68 Relate Pt's present actions to what he learned how to do in previous situations and let the Pt. know how they seem to be related.
3.25 Raise doubts in Pt's mind concerning the unexamined assumptions on which he bases his behavior.

TABLE 6A Continued

2.39 Try to figure out what feelings the Pt. is expressing but not verbalizing.

FACTOR NUMBER 6 Help Pt. to see that his actions are reasonable and understandable given his present circumstances and past learning.

3.91 Get Pt. to continue talking about difficult subjects.
3.62 Get Pt. to feel that his problems are not hopeless.
3.37 Make my skills and abilities as available to Pt. as possible.
3.32 Try to answer Pt's questions about me.
2.98 Get Pt. to understand behavior of others.
2.98 Present Pt. with an understandable description of his behavior.

FACTOR NUMBER 7 Let Pt. know how I react to him.

5.05 Tell Pt. that a person's feelings often change when his actions change the situation he is in.
4.58 Try to use tentative prefacing remarks such as: "in a sense," "I guess," and "maybe."
3.90 Get Pt. to understand and accept most or all of the functions of his behavior.
3.25 If behavior of anyone around Pt. changes, raise question of how the Pt. contributed to the change.
2.75 Smile or laugh with the Pt.
2.63 If given a compliment, try to accept it, don't analyze it.

FACTOR NUMBER 8 Get Pt. to adopt a speculative approach to his own behavior.

4.41 Tell Pt. that although his behavior may seem mysterious and be hard to understand, his behavior is understandable and reasonable.
4.29 Try to remind Pt. of past behavior, feelings, reactions, etc.
3.07 Remain silent when I think it is appropriate.
2.91 Try to tell Pt. when I think he is more successful than he says he is (i.e. like when he effectively argues with me about how incompetent he is).

FACTOR NUMBER 9 Get Pt. to see the funny side of himself and others.

7.21 Show Pt. the funny things he and other people do.
5.18 Get Pt. to use language that I understand.
3.20 Be at ease with the Pt.
2.89 Frown at the Pt. or something he has said.

TABLE 6A Continued

FACTOR NUMBER 10 Get Pt. to focus his difficulties down to specific situations.

4.48 Let the Pt. know that I will support him in whatever he wants to try to do.
3.93 Ask the Pt. to describe significant others.
3.33 Let Pt. know me as a person.

FACTOR NUMBER 11 Get the Pt. to be involved in therapy.

3.86 Let the Pt. know that his behavior could have many functions which he is usually not aware of.
3.84 Discover as much of what the Pt. is communicating as possible.
3.58 Ask the Pt. to tell me what he thinks of me.
3.49 End a silence.
3.02 Reduce Pt's initial guilt about his problems.

FACTOR NUMBER 12 Set up situations in which Pt. can practice interpersonal skills.

5.05 Try to tell Pt. when I think he is more successful than he says he is (i.e. like when he effectively argues with me about how incompetent he is).
4.58 Try to use tentative prefacing remarks such as "in a sense," "I guess," and "maybe."
3.90 Give Pt. an opportunity to practice interpersonal skills in therapy.
3.25 If behavior of anyone around Pt. changes, raise question of how Pt. contributed to the change.

FACTOR NUMBER 13 Get Pt. to feel reasonably comfortable with others around him.

5.07 Get Pt. to be fairly comfortable in interpersonal situations.
3.19 Offer the Pt. a cigarette.
3.17 Try to slightly misstate what the Pt. has said.

FACTOR NUMBER 14 Maintain an objective relationship with the Pt.

4.47 Get Pt. to see me as a person who is strong enough to help him.
4.16 Become aware of my own actions in therapy.

FACTOR NUMBER 15 Get Pt. to be less dependent on me and others.

3.71 Tell Pt. that I have confidence in his ability to do something.
3.55 Keep my emotional reactions out of therapy.
3.42 Get Pt. to look for what he does to others and what they in turn do to him.
2.95 Get Pt. to be aware of and to accept his feelings.

representations that are in accord with what would be expected on the basis of general knowledge about the practice of psychotherapy. In this connection, the following points may be noted: (a) There is a high degree of conceptual unity within the ends factors and no anomalous relationships are found. The greatest difficulty in this connection is provided by factors II-1[9] and II-2 in Table 5. There are a relatively large number of ends with substantial (i.e. .400 or greater) projections on these two factors, and they are less cohesive than the other ends factors. (b) The means listed under each factor appear to be generally appropriate to the type of end represented by that factor. (c) Although the geometric models developed in the present study appear to be coherent and interpretable representations, they do not reflect in any simple way a well-structured hierarchy of means and ends.

Although there is a high degree of conceptual unity within the ends factors, there is no readily identifiable hierarchy of means-end relationships among the ends with substantial projections on a factor. Since the ends factors represent configurations of ends rather than means, this result does not seem surprising. It might have been expected, however, that the means listed under each factor would be arranged in a structured hierarchy. In fact, this is not the case.

---

[9]The notation II-1 is used to refer to the first factor for the Group II or Rogerian therapists summarized in Table 5. The notation I-1 would refer to the first factor for the Group I or psychoanalytic therapists in Table 4 and III-1 would refer to the first factor for the Group III or "otherwise" oriented therapists. This notation will be used throughout the present report to refer to the factors summarized in Tables 4, 5 and 6.

For most of the ends factors, there are several means with relatively low (i.e. 3.0 or slightly higher) coordinate values but few if any means with moderate or high coordinate values. This finding will be considered in somewhat greater detail in the Discussion section.

2. Hypothesis. It was suggested earlier that if the ends in Table 1 do represent some of the general sub-goals in psychotherapy (i.e. if they are some of the general subdivisions in the framework of ends within which therapists operate), then the ends in Table 1 should define at least some of the general subdivisions in a geometric Ends Space. Since the general subdivisions in a geometric Ends Space are marked out by the reference axes or factors, it was predicted that the ends in Table 1 would define at least some of the ends factors in the geometric Ends Spaces constructed in the present study.

In order to test the above hypothesis, the list of ends in Table 1 were compared to the factor matrices summarized in Tables 4, 5 and 6. The comparisons were made by the investigator and two independent judges.[10] The judges were instructed to compare the list of ends in Table 1 with the factor matrices in Tables 4, 5 and 6 and to determine if any of the factors seemed to represent ends in Table 1. All of the judges agreed that six of the ends in Table 1 are represented in the Group I analysis, four in the Group II analysis and eight in the Group III analysis. It appears that factors II-1 and II-2 include several ends from Table 1 (i.e. Ends II, III and VII that appear as separate factors in the Group I and Group III

---

[10]Two graduate students in clinical psychology served as judges.

analyses). The ends from Table 1 accounted for 65 per cent of the common variance in the Group I analysis, 81 per cent in the Group II analysis and 73 per cent in the Group III analysis. The hypothesis that the ends listed in Table 1 represent some of the general subgoals that provide the framework or further end in view for many of therapists' activities was, therefore, strongly supported by the results obtained for each of the three groups of therapists.

3. Group Comparisons. An examination of Tables 4, 5 and 6 shows that there is a high degree of congruity across the three analyses. For example, factors I-1, II-1 and III-1 appear to be generally similar factors. There are, however, differences in the rank order and factor loadings of the ends among the generally similar factors, and a numerical estimate of the degree of similarity between factors was needed in order to compare the results of the three analyses. Tucker (1951) has developed a proportionality criterion, the coefficient of congruence, for estimating the degree of similarity between two factors obtained by means of separate factor analyses of a set of variables which have been administered to two distinct groups of subjects.

Coefficients of congruence were computed for those pairs of factors in Tables 4, 5 and 6 which on the basis of inspection appeared to be generally similar factors (See Harmon, 1960 for the computational formula used to compute coefficients of congruity.). The results are presented in Table 7 by listing the pairs of factors in the column on the left and the corresponding coefficients of congruence in the column on the right. In general, a coefficient value greater than .90 is regarded as providing an adequate basis for accepting the

correspondence of factors (Harmon, 1960). Three pairs of factors were selected at random, and coefficients of congruence were also computed for these pairs of factors. These coefficients are listed at the end of Table 7 and marked by an asterisk for purposes of comparison.

- - - - - - - - - - - - - -
Insert Table 7 about here
- - - - - - - - - - - - - -

An examination of the factor matrices summarized in Tables 4, 5 and 6 and the coefficients of congruence presented in Table 7 shows that while there is a fairly high degree of congruence across the three analyses there are also appreciable differences in the configuration of ends obtained in each of the three analyses. The major similarities and differences between the three analyses are the following:

a. There is a high degree of congruence between the major factors obtained in the Group I analysis and the major factors obtained in the Group III analysis. An examination of Table 7 shows that 9 of the factors in the Group I and Group III analyses are corresponding factors. All of the coefficients of congruence comparing the Group I and Group III factors are .90 or greater.

b. The results of the Group II analysis are, however, only moderately congruent with the results of the Group I and Group III analyses. The major difference is that factors II-1 and II-2 are associated with a large number of ends which split into separate factors in the Group I and Group III analyses. As a result, there are only six factors in the Group II analysis that are similar to factors in the Group I and Group III analyses, and factor II-2 is

TABLE 7

COEFFICIENTS OF CONGRUENCE

Pairs of Factors			Coefficient of Congruence
I-1	II-1	=	.981
II-1	II-1	=	.924
I-1	III-1	=	.901
I-2	II-2	=	.840
II-2	III-2	=	.882
I-2	III-2	=	.996
I-3	III-3	=	.951
I-4	III-4	=	.903
I-5	III-5	=	.994
I-6	II-3	=	.942
II-3	III-6	=	.951
I-6	III-6	=	.964
I-7	II-4	=	.916
II-4	III-7	=	.969
I-7	III-7	=	.977
I-8	II-5	=	.987
II-5	III-8	=	.992
I-8	III-8	=	.937
I-9	II-6	=	.994
II-6	III-9	=	.995
I-9	III-9	=	.999
*I-5	II-3	=	.417
*II-4	III-2	=	.232
*I-3	III-2	=	.399

only moderately similar to factors I-2 and III-2 (i.e. Coefficient values are less than .90.).

c. Major factors I-1 and III-1 are moderately congruent factors (i.e. coefficient value of .901) but factor I-1 seems on inspection to represent the end of getting the patient to be less dependent on the therapist and others while factor III-1 seems to represent the end of getting the patient to become aware of and accept responsibility for the consequences of his actions (i.e. to see and accept himself as acting in terms of what he wants, is aware of and knows how to do). The latter end does not seem to be represented by any of the factors in the Group I analysis.

d. Major factors I-6 and III-6 are similar factors which seem to represent the end of helping the patient to achieve insight into his own behavior, but factor I-6 is associated with a substantially larger number of ends than factor III-6.

e. Major factor I-1 seems to represent the end of getting the patient to be less dependent on the therapists and others. This end seems to be represented by minor factor III-15 in the Group III analysis although the factor is not well defined.

f. Factor III-10 is associated with ends numbered 4, 8 and 10, but the ends numbered 4 and 8 appear as singleton factors in the Group I and Group III analyses.

g. Factor III-11 is associated with the ends numbered 1, 11, 12 and 20 but ends 11, 12 and 20 appear on separate factors in the Group I and Group II analyses.

h. Minor factors I-13, I-14, I-15 and I-16 do not appear in the Group II and Group III analyses.

i. Minor factors II-10, II-11, II-12, II-13 and II-14 do not appear in the Group I and Group III analyses.

j. Minor factors III-12, III-13 and III-14 do not appear in the Group I and Group II analyses.

In the Discussion section, a general formulation for interpreting the major differences between the results of the three analyses will be presented.

4. Group-Individual Comparisons. A geometric Ends Space was also constructed for each of the therapist-informants in the present study. The individual Ends Spaces were constructed by the same procedures used in the group analyses except that the estimates of means-end relationships were those of a single therapist rather than mean estimates obtained by averaging across therapists in each of the three groups. The 70 ends were intercorrelated for each of the therapists, and the resulting correlation matrices were factor analyzed by the minimum residual method of factoring. The factors extracted by this method were rotated in accordance with the varimax criterion. The results of three of the individual analyses (i.e. one from each group of therapists) are summarized in Appendix D.

In general, the factors obtained in the individual analyses appear to be similar to the factors obtained in the corresponding group analysis. That is, generally similar factors were obtained in the group and individual analyses for each group of therapists. The major difference between the results of the individual analyses and the results of the group analyses is that the factors in the individual analyses are not as clearly defined as the factors in the group analyses. More specifically, the factors in the individual

analyses tend to be associated with a smaller number of ends. There is also considerable variation across therapists within each of the groups in the ends that have substantial projections on generally similar factors. On the face of it, these results suggest that there is at least a moderate lack of agreement among the therapists within each of the groups. A general formulation of the differences between the judgments of individual therapists will be developed in the Discussion section.

Before proceeding to a discussion of the above results it should be noted that the Ends Space for Subject Number 15 (See Appendix D.) was constructed by having five psychoanalytic therapists rate 1/5 of the means-end matrix and combining the judgments of the five therapists to obtain a matrix of 130x70 means-end judgments. By inspection the Ends Space for Subject Number 15 appears to be a coherent and interpretable representation. Moreover, the Ends Space for Subject Number 15 did not appear to differ in any identifiable way from the Ends Spaces constructed for the four psychoanalytic therapists who rated the total means-end matrix. In general, this result seems to indicate that having therapists rate a part of a large means-end matrix and combining their judgments is an effective data collection procedure.

E. Discussion

A major goal of the present study was to achieve a coherent and interpretable geometric representation of means-end relationships in psychotherapy. In general, it appears that the geometric Ends Spaces summarized in Tables 4, 5 and 6 are coherent and interpretable

representations that are in accord with what would be expected on the basis of general knowledge about psychotherapy. These results are both positive and encouraging inasmuch as they provide specific empirical evidence with regard to the general feasibility of achieving a functional geometric model of means-end relationships in psychotherapy. Certainly, the difference between a substantive technical solution and a feasibility study should be kept in mind, but the results of the present study do indicate that such a solution is both practical and possible. Later on in this section, some of the technical and methodological problems that might be encountered in attempts to develop a functional geometric model of means-end relationships in psychotherapy will be presented. But first, the specific findings of the present study will be discussed.

1. Current state of the art. Although the geometric representations summarized in Tables 4, 5 and 6 appear to be valid representations of means-end relationships in psychotherapy, they do not reflect, in any simple way, a structured hierarchy of means and ends. There is a high degree of conceptual unity within the ends factors, but there are no means-end hierarchies that can be readily identified among the ends with substantial loadings on a factor. Moreover, the means listed under the ends factors do not seem to represent well structured hierarchies of means by which the general ends which define the ends factors could be reliably achieved. The means listed under each factor are arranged in order of their effectiveness as means to the general end which seems to be represented by that factor. For most of the ends factors, there are several means with substantial but relatively low (i.e. 3.0 or slightly higher) coordinate values

but few if any means with moderate or high coordinate values. Well structured hierarchies of means to the general ends represented as factors in the present study were, therefore, not identified. In general, these results seem to suggest that although therapists can do a number of things in order to achieve the general ends represented as factors in the present study they do not seem to have a structured hierarchy of means (i.e. a process) by which they are able to reliably achieve those ends.

A possible alternative explanation for the above results is that the therapist-informants in the present study were not given the usual context of a patient and his particular circumstances as a basis for their means-end judgments. The ends therapists try to achieve as well as the means by which they try to achieve those ends do, of course, depend to some degree on the patient. It may be the case that a structured hierarchy of means and ends would have been obtained if the therapists-informants had been asked to make means-end judgments about a particular patient. This is an empirical question that will not be adequately answered in the present paper. There is, however, some preliminary data regarding this question that is available.

A case study was undertaken[11] in an attempt to validate the results of the present psychometric study. In the case study, one of the therapist-informants from the psychometric study was asked to describe in a series of interviews the ends he was trying to achieve

---

[11] This is the unpublished case study undertaken by Mr. Larry Brittain of the University of Colorado mentioned earlier.

and the means by which he was trying to achieve those ends with a patient he was seeing in individual psychotherapy. The results of the case do not reflect a structured hierarchy of means and ends. That is to say, the means-end graphs obtained in the case study include a few general ends which the therapist hoped to achieve during the course of psychotherapy and a number of very specific means to those ends, but a hierarchical structure of means and ends by which the therapist could expect to reliably achieve those ends was not identified. The results of the case study can only be regarded as preliminary since the patient left therapy after 12 interviews but they do at least suggest that a structured hierarchy of means and ends would not have been identified if the therapist-informants in the psychometric study had been given the context of a patient and his particular circumstances.

On the face of it, the above results seem to suggest that a process of psychotherapy may have to be developed rather than identified. That is, in view of the above results, it appears that psychotherapists have not as yet developed hierarchies of means (i.e. processes) by which they are able to reliably achieve general ends in psychotherapy. This finding in turn suggests that future research on the "process" of psychotherapy might consist of attempts to develop or discover new means of achieving ends in psychotherapy rather than attempts to describe the means that therapists now have.

At this point, it might be mentioned that the geometric Ends Spaces constructed in the present study provide a framework within which such attempts might be carried out.

In general, the geometric Ends Spaces constructed in the present study represent a first attempt to map the means-end relationships in psychotherapy. These Ends Spaces can, for heuristic purposes, be compared to the first maps of the area that is now the western United States. The first maps of the area west of the Missouri River were crude representations that did little more than mark out a few of the major rivers and the general boundaries of broad geographical subregions in the area such as the Rocky Mountains, Great American Desert and Oregon Territory.[12] However crude or limited these early maps may have been, they did mark out some of the general subdivisions in what had previously been regarded as a vast unexplored wilderness. That is to say, the first maps of the West laid down a structure or framework within which further attempts to explore and develop the area could be carried out. Once the general subdivisions in the West had been marked out, each of these subdivisions could be systematically explored and mapped. As new and more reliable routes through each subregion were discovered or developed, they could be systematically charted. Eventually, new towns were established and roads connecting those towns were constructed and mapped. As maps of the western United States became more detailed, "closeup" maps of subregions within each of the subregions had to be constructed. Today there are maps which would enable anyone with a few relatively low-level abilities (e.g. the ability to read a map or drive a car) to cross the western United States with a high degree of reliability.

---

[12] See Walter Prescott Webb, The Great Plains, Grosset and Dunlap, 1931 for an interesting and well documented account of the first attempts to explore and map the area west of the Missouri River.

In general, it appears that the geometric Ends Spaces constructed in the present study are roughly similar to the early maps of the western United States inasmuch as they mark out some of the general subdivisions in psychotherapy and provide a framework within which further mapping and exploration might be carried out. The ends factors seem to be analogous to geographical subregions such as the Rocky Mountains, Great American Desert and Oregon Territory. That is to say, each of the ends factors represents a range of achievements and occupies a specific subregion within the Ends Space. It seems clear that each of the ends factors or subdivisions would provide a number of avenues for further exploration and development. For example, a possible direction for future research would be to try to develop or identify hierarchies of means by which therapists could reliably achieve the general ends represented as factors in the three Ends Spaces. It may be necessary to divide each of these general ends into more specific sub-achievements and each of these sub-achievements into still more specific sub-achievements in order to identify hierarchies of means and ends by which these general ends can be reliably achieved. It seems likely that such efforts would require the development of methods for constructing "closeups" of subregions within the Ends Space and for coordinating the closeup with the larger structure but certainly the ends represented in the three Ends Spaces provide a framework within which considerable exploration and development could be carried out.

At this point someone might well ask, "But how do we know that these ends are the only or even the most important ends that therapists try to achieve?" or "How do we know that therapists will be better able

to 'cure the patient' if they know how to achieve these ends?" No claim is being made here that the framework of ends identified in the present study include all or even the most important ends that therapists try to achieve in psychotherapy. It should, however, be noted that the general ends represented as major factors in the present study seem to be ends that are defined by one or more of the theories of psychotherapy represented in the present study as being equivalent to or prerequisites for "curing the patient."

For example, major factors I-1 and I-6, "Get the Pt. to be less dependent on me and others," and "Get the Pt. to see his actions as reasonable and understandable given his present circumstances and past learning," seem to represent the general ends of helping the patient to be less dependent onthe therapist and to achieve insight into his own behavior. In classical psychoanalytic theory (Kubie, 1950), the goal of psychotherapy is to allow the patient to establish a transference neurosis in which the patient develops the same emotional conflicts in relation to the therapist that he had with parental and other figures in early life. In the transference relationship, the patient becomes dependent on the therapist and relates to the therapist in terms of his own emotional conflicts. The therapist can then use interpretations to help the patient achieve a corrective emotional experience in which he realizes the inappropriate character of his feelings and reappraises the archaic dangers from which they spring. When the patient has struggled through this stage of therapy and achieved a corrective emotional experience, he can begin to give up his dependence on the therapist or the historical figure the therapist has come to represent. When the transference

neurosis has been resolved, the patient has achieved insight into his behavior and given up his dependency on the therapist and the patient is cured (White, 1956).

Even in the extremely truncated version of psychoanalytic theory presented above it is clear that the general ends of helping the patient to achieve insight into his own behavior and become less dependent on the therapist are either equivalent to or major prerequisites for "curing the patient" in the psychoanalytic theory of psychotherapy. Other ends such as "See the Pt's world as he sees it," "Use the therapy relationship (i.e. transference) to teach the Pt. new ways of behaving," and "Get the Pt. to express feelings and reactions openly and directly" (i.e. factors I-2, I-4 and I-5) are also cited in the psychoanalytic literature as being some of the means by which therapists help the Pt. to achieve insight and become less dependent (See White, 1956.).

Rogers (1967) has defined the "necessary and sufficient" conditions for therapeutic change as being the therapist's ability to communicate empathic understanding and unconditional positive regard and his being a congruent or genuine person in the relationship. Empathy, warmth and genuiness are therefore ends that are clearly equivalent to or prerequisites for "curing the patient" in Rogers' theory of psychotherapy. It appears that major factors II-2 and II-4 "See Pt's world as he sees it," and "Let Pt. know how I react to him" represent the ends of the therapist communicating empathy, warmth and genuiness.

Finally, it appears that the major goal of a therapist with a pragmatic orientation to psychotherapy would be to help the patient

to become aware of and accept responsibility for the consequences of his actions. Major factor III-1 seems to represent the end of helping the patient to see himself as acting in terms of what he wants, is aware of and knows how to do.

On the face of it, it appears that the ends represented as major factors in the present study are defined as equivalent to or pre-requisites for "curing the patient" in one or more of the theories of psychotherapy represented in the present study. These findings seem to suggest that the geometric Ends Spaces constructed in the present study provide a general framework within which future mapping and development operations might be carried out.

2. Hypothesis testing. It was stated earlier that a geometric model of means-end relationships could be used to test hypotheses about the way in which psychotherapy works. In the present study, an attempt was made to illustrate the hypothesis testing feature of a geometric Ends Space in a simple though not entirely trivial way by testing certain hypotheses regarding the ends therapists try to achieve. Specifically, it was suggested that the ends in Table 1 represent at least part of the general framework of ends within which therapists operate. If these ends are some of the general goals therapists try to achieve in psychotherapy, they should be at least part of the general framework of a geometric Ends Space. It was, therefore, predicted that the ends in Table 1 would be represented as factors in each of the three Ends Spaces to be constructed in the present study. Six of the ends from Table 1 were represented in the Group I analysis, four in the Group II analysis and eight in the Group III analysis. It appears that factors II-1 and II-2 include

several ends from Table 1 (i.e. Ends II, III and VII) that appear as separate factors in the Group I and Group III analyses. The ends from Table 1 accounted for 65 per cent of the common variance in the Group I analysis, 81 per cent in the Group II analysis and 73 per cent in the Group III analysis. The hypothesis that the ends from Table 1 are some of the general sub-goals in psychotherapy was, therefore, strongly supported by the results obtained for each of the three groups of therapists.

In general, the above results seem to suggest that therapists with different theoretical orientations ma try to achieve very similar goals in psychotherapy. This finding is consistent with the results of the Fiedler studies (1950a, 1950b, 1951) which indicated in part that experienced therapists with different theoretical orientations try to achieve similar relationships in psychotherapy. In the earliest Fiedler study (1950a), Q-sort statements were used by therapists to describe the ideal relationship that therapists said they tried to achieve and in later studies (1950b, 1951) the same statements were used to describe the relationship actually achieved by psychoanalytic, Rogerian and Adlerian therapists. In the present study, therapists were compared in terms of a number of other ends as well as certain aspects of the relationship that they try to achieve. It therefore appears that therapists with different theoretical orientations may well try to achieve a range of generally similar ends in psychotherapy.

3. Group comparisons. A third goal of the present study was to compare the Ends Spaces constructed for three relatively distinct groups of therapists (i.e. psychoanalytic, Rogerian and otherwise or

pragmatically oriented therapists). In general, a similar configuration of ends was identified for each of the groups of therapists. There are, however, a number of subtle differences between the Ends Spaces constructed for the three groups of therapists. In this section some of the differences in the Ends Spaces will be discussed and a general formulation of these differences will be developed.

a. For example, the results of the Group II analysis are only moderately congruent with the results of the Group I and Group III analyses. The major difference is that factors II-1 and II-2 are associated with a large number of loosely related ends which split into distinct and cohesive factors in the Group I and Group III analyses. In addition there are only four major factors in the Group II analysis. These four factors account for 81 per cent of the common variance in the Group II analysis, and 86 per cent of the total variance in the Group II analysis is common variance. It appears that the Ends Spaces constructed for the Rogerian therapists is less structured than the Ends Spaces constructed for the psychoanalytic and pragmatic therapists.

An examination of the mean-estimates of the effectiveness of the means with respect to the achievement of the ends also shows that in general the Rogerian therapists tend to regard all of the means as being equally but only moderately related to the achievement of all of the ends while the psychoanalytic and other oriented therapists tend to regard the means as much more differentially related to the achievement of the ends. That is to say, the mean-estimates for the Rogerian therapists tend to occupy the middle of a scale from zero to eight with very few high or low values while the mean estimates for

the psychoanalytic and otherwise oriented therapists tend to occupy the lower end of the scale with moderate and high mean estimates occurring only for particular pairs of means and ends (See Appendix B for a description of the scale used to rate the means with respect to the ends.).

On the face of it, these results seem to suggest that psychotherapy is a less structured task for Rogerian therapists than it is for psychoanalytic and otherwise oriented therapists. This finding seems highly interpretable in view of the Rogerian (Rogers, 1965) position which states that psychotherapeutic change results from the therapist's attitude and general orientation toward the patient rather than from what the therapist decides to do or say in psychotherapy. To the extent that a therapist is an adherent of the Rogerian theory of psychotherapy, it seems unlikely that he would tend to operate in terms of a structured series of means and ends during the course of psychotherapy. It also seems understandable that although Rogerian therapists might expect a series of specific actions to be means to a series of ends, they would not expect any of the means to get the therapist very far toward achieving those ends (i.e. "One means is probably as good as the other but none of them get you very far."). In general, it seems that one of the functions of Rogers' theory of psychotherapy is to give the therapist reason enough not to do some of the things he might ordinarily know how to do; namely, to engage in specific actions in order to achieve specific effects in psychotherapy.

b. There are also a number of interpretable differences between the results of the Group I and Group III analyses. For example,

factor III-1 seems to represent the end of getting the patient to be aware of and accept responsibility for the consequences of his actions. This end does not seem to be represented in the Group I analysis. This result seems to suggest that the end of getting the patient to be aware of and accept responsibility for the consequences of his actions is regarded as a general goal of psychotherapy by the "otherwise" oriented or pragmatic therapists but not by the psychoanalytic therapists. In general, the goal of helping the patient to become aware of and accept responsibility for the consequences of his actions seems highly consistent with a pragmatic orientation to the patient and his behavior. That is, to the extent that a therapist adopts a pragmatic orientation to psychotherapy one would expect him to be concerned with helping the patient to become aware of the consequences of his actions and to explore alternative actions that may have different consequences (i.e. to help the patient to see himself as acting in terms of what he wants, is aware of and knows how to do). Since, in the psychoanalytic theory of psychotherapy, (Kubie, 1950) the major goal of psychotherapy is to help the patient to achieve insight into the historical origins of his difficulties, it also seems understandable that psychoanalytic therapists would not regard the end of helping the patient to be aware of and accept responsibility for the consequences of his actions as a general goal of psychotherapy.

There are still other differences in the results obtained for the psychoanalytic and otherwise or pragmatically oriented therapist. For example, major factor I-1 in Table 4 seems to represent the end of getting the patient to be less dependent on the therapist and others. The end of getting the patient to be less dependent seems to

be represented by factor III-15 in Table 6 but the factor is not well defined. These results seem to suggest that the end of getting the patient to be less dependent on the therapist and others is a general goal of psychotherapy for the psychoanalytic therapists but a much more specific or limited goal for the pragmatic or otherwise oriented therapists.

Factors I-6 and III-6 appear to be generally similar factors which represent the end of helping the patient to achieve insight into his own behavior. Factor I-6 is, however, associated with a large number of ends and accounts for more of the common variance (18%) in the Group I analysis than any other factor. Factor III-6 on the other hand is associated with substantially fewer ends and accounts for very little of the common variance (4 1/2%) in the Group III analysis. On the face of it, these results seem to suggest that for psychoanalytic therapists the end of helping the patient to achieve insight into his behavior is a general goal of psychotherapy. For the pragmatic or otherwise oriented therapists, however, helping the patient to achieve insight seems to be a less inclusive goal of psychotherapy.

It was stated earlier that in classical psychoanalytical theory (Kubie, 1950) the goal of psychotherapy is to help the patient to establish a transference neurosis in which the patient develops the same emotional conflicts in relation to the therapist that he had with parental and other important figures in his early life. That is, psychoanalytic psychotherapy seems to be defined as being a process in which the patient tries to treat the therapist as a parent and gradually achieves insight into the historical origins of his

behavior. To the degree that a therapist adopts the psychoanalytic theory of psychotherapy, he would clearly have reason enough to regard the ends of helping the patient to achieve insight and become less dependent as major goals of psychotherapy. It also seems understandable that a therapist with a more pragmatic orientation toward the patient and his behavior would tend to regard these ends as less inclusive or more limited goals of psychotherapy.

To summarize, the principal differences between the three groups of therapists in the present study seem to be relatively subtle differences in the degree of emphasis placed on particular ends by each group of therapists. Specifically, what is a general or major goal of psychotherapy for one group of therapists may be a specific or relatively minor goal of psychotherapy for another group of therapists. As we have seen, these differences seem highly interpretable in terms of the differences in theoretical orientation across the three groups of therapists. It is, of course, encouraging to discover that the present means-end methodology has sufficient representational power to detect such subtle yet highly interpretable differences in emphasis between groups of therapists.

In general, the above results suggest that each group of therapists has a somewhat different view of how psychotherapy works. This finding in turn seems to suggest that one of the general branches in the branching tree graph mentioned earlier would be the therapist's view of the nature of psychotherapy (i.e. his theory). More specifically, a therapist with a particular theory of the ends that therapists try to achieve in psychotherapy and the means by which they try to achieve those ends will tend to follow certain paths and exercise

certain contingencies while therapists with a different theoretical orientation may follow other branches and exercise other contingencies. On the basis of the results presented above it appears that a means-end system would have the capability to permit the charting of even relatively subtle differences in the emphasis placed on certain means or ends by particular groups of therapists.

4. Individual-group comparisons. An Ends Space was also constructed for each of the 15 therapist-informants in the present study in order to compare each of the therapists in a group with the total group. Three of the individual analyses, one from each group of therapists, are presented in Appendix D. In general, a similar configuration of ends was obtained in individual analyses and in the corresponding group analysis. The major differences seem to be that the factors in the individual analyses are not as well-defined or well-structured as the factors in the corresponding group analysis. There are fewer ends with substantial (i.e. .400 or greater) factor loadings on the factors in the individual analyses, and there is considerable variation in the ends that have substantial loadings on generally similar factors. There are also several factors that are difficult to interpret in two of the individual analyses.

In general, the above results suggest a marked lack of agreement even among therapists who have a similar theoretical orientation. It appears that each therapist has a particular view of his own theory of psychotherapy (i.e. a theory of a theory). Each therapist will therefore tend to operate in certain areas of a branching tree graph and the ends he will try to achieve as well as the means by which he tries to achieve those ends will in part depend on his theory of

psychotherapy but they will also depend on the therapists own particular view of that theory.

5. Therapist reactions. Before proceeding to a discussion of possible directions for future research and further attempts to develop a functional geometric model of means-end relationships in psychotherapy, some consideration should be given to the reactions of the therapists who served as informants in the present study. The reactions of therapists to the task of making means-end judgments of the sort required in the present study constitute empirical data with regard to the practicality of using geometric procedures to construct a geometric model of means-end relationships in psychotherapy. If the task of making means-end judgments requires an excessive amount of time and effort from practicing clinicians or if the clinicians regard the task as trivial and irrelevant, it will be highly impractical to try to use these psychometric procedures in constructing a functional geometric model of means-end relationships in psychotherapy. The reactions of the therapists to the task of making means-end judgments were obtained after they had completed the task in a loosely structured interview conducted by the investigator with each therapist.

In general, most of the therapist-informants agreed that making the means-end judgments was a meaningful though difficult and arduous task that sustained their interest over the substantial period of time (i.e. from 14 to 27 hours) required to complete the task. It should be noted, however, that the psychoanalytically oriented therapists took twice as long as any of the other therapists to complete the task and they reported a great deal of difficulty in completing

the task. The major difficulty reported by the psychoanalytic therapists was that they felt they could not make meaningful judgments about means-end relationships without being given the context of a particular case since the ends they try to achieve as well as the means by which they try to achieve those ends vary with the patient and his particular circumstances. The psychoanalytic therapists were therefore particularly concerned about the possibility that the results of the present study would be uninterpretable or incoherent and be regarded as representative of the practice of psychoanalytic psychotherapy. It seems rather apparent that the effects therapists try to achieve and the means by which they try to achieve those effects will depend to a great extent, if not entirely, on the individual patient and his particular circumstances. However, it is equally apparent that the results of the present study, including the results for the psychoanalytic therapists, are highly interpretable, coherent and in accordance with what would be expected on the basis of general knowledge about psychotherapy and the psychoanalytic theory of psychotherapy. This finding indicates that the psychoanalytic therapists are able to make meaningful and intelligible judgments about means-end relationships without having the context of a particular patient and his circumstances.

Most of the therapists said that one of the things that made the experimental task particularly difficult was the fact that the means and ends were presented to the therapists in a series of 26 page booklets with the means and ends arranged so that a different end and a different set of means appeared on each page. This meant that the therapists had to rapidly change their frame of reference as they made

the means-end judgments and this made the task both difficult and time-consuming. It might have simplified the task considerably if the therapists had been asked to rate all of the means with respect to one end and then all of the means with respect to a second end, etc. However, it is clear that rating the present matrix of 130 means and 70 ends required an inordinate amount of time from the already crowded schedules of practicing clinicians. In this connection, the procedure of having therapists rate a part of a means-end matrix and combining their judgments to form a total matrix may be a useful procedure for data collection purposes.

F. Summary

The major contributions of the empirical study presented in the present paper are the following:

1. The construction of a coherent and highly interpretable geometric representation of means-end relationships in psychotherapy that is in accord with what would be expected on the basis of general knowledge about psychotherapy. This finding clearly suggests that the achievement of a functional geometric model of means-end relationships in psychotherapy would be both practical and possible.
2. An illustration of the application of a geometric model means-end relationships to research problems in psychotherapy by using such a model to (a) test certain hypotheses regarding the ends that therapists try to achieve and (b) investigate some of the differences in the ends which three relatively distinct groups of therapists try to achieve in

psychotherapy. The above illustrations demonstrated that a geometric model of means-end relationships can be used to test hypotheses concerning the way psychotherapy works and that such a model is a highly sensitive instrument for detecting subtle differences between individual therapists as well as between groups of therapists.

3. The demonstration that the psychometric procedures described above are efficient and effective data collection procedures in the study of means-end relationships in psychotherapy.

4. Certain empirical findings with regard to the current state of the art in psychotherapy and other empirical questions that have been the subject of some research and considerable discussion in psychotherapy. Specifically, the major empirical findings of the present study include:

   (a) The finding that therapists do not seem to have a well-structured hierarchy of means (i.e. a process) by which they can achieve general ends in psychotherapy. This finding suggests that future research on the process of psychotherapy may well consist of attempts to develop a hierarchy of means by which therapists can achieve general ends rather than attempts to describe the means that therapists now have. It was suggested that the ends identified as factors in the present study might provide a framework within which further attempts to describe or develop means-end relationships in psychotherapy might be carried out.

(b) The finding that experienced therapists seem to be trying to achieve generally similar ends.

(c) The discovery of a number of relatively subtle yet generally interpretable differences in the emphasis which groups of therapists with different theoretical orientation place on particular ends.

(d) The finding that there are substantial areas of disagreement even among therapists with a similar theoretical orientation. This finding was interpreted in terms of each therapist having a particular view of his theory of psychotherapy (i.e. a theory of a theory) and it was noted that the sum of the judgments of the therapists within each of the groups provided a coherent and interpretable representation.

It seems clear that the means-end methodology presented in the present study shows sufficient promise to warrant a good deal of further exploration and development. At a minimum it does not suffer by comparison with other methods of studying psychotherapy in respect to opening up further areas for investigation and contributing to our understanding of psychotherapy.

There are several directions that further work might take. One area for further research consists of attempts to explore and develop the geometric Ends Spaces constructed in the present study. For example, the scope of the ends included in the present Ends Space is relatively limited and the expansion of the scope and elaboration of sampling within the scope of the present Ends Space would be desirable and straightforward procedures.

If the means-end methodology presented and illustrated in the present study is to make a difference in the practices of psychotherapists it will probably require the introduction of a functional geometric model of means-end relationships into actual clinical settings. In such a setting, a geometric model could be used by therapists as a sort of supervisor who points out various alternatives the therapist might adopt at particular points in therapy or tells the therapist what ends he is likely to achieve given his present course of action with a particular type of patient (It might even replace supervisors!). Thus, a therapist who was trying to deal with a particular type of problem with a particular patient might be able to identify a range of alternative ways of trying to deal with that particular type of problem. Similarly, a therapist could identify ahead of time where a particular course of action was likely to lead him. A geometric model of means-end relationships would in effect be a road map which identified at least some of the ways of getting from one point to another, some of the options at particular points on the map, some of the points where detours are advisable and, hopefully, some of the routes that are dead ends. In a clinical setting with practicing clinicians as users, it would be possible to quickly identify the limitations of currently developed models of means-end relationships and to make the necessary modifications or additions.

Initially, however, a variety of problems would be encountered in the introduction of a Means-End system into actual clinical settings. Some of these problems would have to do with adapting a geometric model to the needs of particular users within particular types of clinical settings while others would have to do with making

the model readily available to practicing clinicians who have busy schedules and often have little interest in or time for computers, factor analytic techniques. There would also be other problems not peculiar to a Means-End system that would be encountered in any attempt to introduce a Means-End system into a clinical setting in which each clinician functions independently and often with good reason is skeptical of the value of research on psychotherapy.

For example, one criticism is likely to be that a functional Means-End system would legislate the practices of therapists and force them to try to achieve only those ends and utilize only those means that are included in the scope of the currently constructed geometric model. Certainly, with any map, the user always has the option of trying to discover new routes from one point to the next or trying to explore areas that are uncharted. Moreover, procedures will have to be developed for updating the content of the system in the light of changes occurring in either the ends therapists are able to achieve or the means by which they achieve ends indexed within the system. However, it is also the case that we will never be able to determine what therapists do or do not know how to do or be able to try to systematically improve the current state of the art unless and until we at least begin to try to develop a functional system for mapping what it is that therapists have the ability to do and the means by which they do it.

A second general direction for further research would involve a rigorous means-end analysis of cases in which the therapist was able to "cure the patient." The goal of a case study would be to graph or chart the hierarchy of means and ends by which the therapist was able

to "cure the patient." The therapist would be asked to specify the sub-goals that had to be achieved in order for a particular patient to be "cured." Considering each of these sub-goals as a separate achievement, the therapist would then be asked to specify what had to be done in order for each of these sub-goals to be achieved. In general, a case analysis would delineate a hierarchy of means and ends by which the patient was cured. At some point, such an analysis would identify means that are "doable" in the sense that they can be reliably accomplished by the therapist. We would then have identified what the therapist knows how to do in order to cure the patient and what it was that he was merely able to do on a given occasion with a particular patient. It would then be possible to try to discover or develop means by which the therapist could reliably achieve those sub-goals he does not know how to achieve but was merely able to achieve with that particular patient. At a minimum, a means-end analysis of cases in which the therapist was able to "cure the patient" would allow us to begin to identify what we know how to do and what we would need to know how to do in order to be able to reliably cure the patient.

In order to be able to describe the hierarchy of means and ends by which the therapist was able to "cure the patient," we need to be able to decide when the patient was cured. There has been a great deal of discussion and disagreement regarding the outcome of psychotherapy. Most of the disagreement seems to center on the criterion for a "cure." In general, what a clinical psychologist will accept as a "cure" may not be what a psychiatrist, the patient's family, other people in the community or the patient himself will accept as a

"cure." The psychologist may accept the fact that the patient is happier as criterion for a cure while the patient's family may expect him to be able to hold down a job or not disrupt the family's social life. If we can specify the criteria for a cure accepted by various relevant groups of people, it would then be possible to evaluate a Means-End system in terms of its success with regard to achieving each set of criteria. For example, it might be possible to say of a Means-End system that it functions well with regard to achieving the criteria expected by psychologists and the patient but only moderately well in achieving the criteria expected by the family and only minimally well in achieving the criteria expected by psychoanalysts. An intermediate step would be to conduct studies to identify what outcomes the relevant groups of people would accept as a "cure" (See Simmons, 1964.).

If we can identify a set of outcomes that would be accepted as a cure by one or more of the relevant groups of people mentioned above and develop a means-end system that is "doable" (i.e. in the sense that all of the actions in the system can be done by someone) for achieving those outcomes, psychotherapy could then become a social practice. We would have a set of "givable" descriptions of people, a set of doable procedures for treating people in terms of those descriptions and a set of specifiable outcomes. That is to say, psychotherapy would include a set of specifiable procedures (the done thing) for achieving particular effects with particular types of people. In any event, the means-end methodology presented in the present study seems to open up a variety of opportunities for further attempts to study and develop the art of psychotherapy.

REFERENCES

Anderson, R.P. Physiological and verbal behavior during client-centered counseling. Journal of Counseling Psychology, 1956, 3, 174-184.

Ashby, J.D., Ford, D.H., Guerney, B.G., Jr., and Guerney, L.F. Effects on clients of a reflective and leading type of psychotherapy. Psychological Monographs, 1957, 71, No. 453.

Astin, A.W. The functional autonomy of psychotherapy. American Psychologist, 1961, 16, 75-78.

Auld, F., Jr. and Murray, E.J. Content-analysis studies of psychotherapy. Psychological Bulletin, 1955, 52, 377-395.

Auld, F., Jr., and White, A. Sequential dependencies in psychotherapy. Journal of Abnormal and Social Psychology, 1959, 58, 100-104.

Bales, R.F. Interaction process analysis. Cambridge: Addison-Wesley, 1950.

Barrett-Lennard, G.T. Dimensions of the client's experience of his therapist associated with personality change. Genetic Psychology Monograph, 1962, 76, No. 43.

Berelson, B. Content analysis in communication research. Glencoe, Ill.: Free Press, 1952.

Bloom, Bernard L. The community mental health movement and the American social revolution. Keynote address delivered at the Third Rocky Mountain Psychological Association Professional Development Institute, "Community Mental Health: Theory, Practice and Training," Albuquerque, New Mexico, May 11, 1966.

Bordin, E.S. Inside the therapeutic hour. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in psychotherapy. Washington, D.C.: American Psychological Association, 1959.

Brittain, L. Three parameters of therapeutic effectiveness: degree of disturbance, theoretical proficiency, therapeutic experience. Unpublished Master's Thesis, University of Colorado, 1965.

Cavell, Stanley Aesthetic problems of modern philosophy. In Max Black (Ed.), Philosophy in America. Ithaca: Cornell University Press, 1965.

Chapple, E.D. The interaction chronograph: its evaluation and present application. Personnel, 1949, 25, 295-307.

Colby, K.M. Research problems relating to the psychotherapist's contribution to the treatment process, Discussant. In H.H. Strupp and L. Luborsky (Eds.), Research in psychotherapy. Vol. II. Washington, D.C.: American Psychological Association, 1962.

Coleman, R., Greenblatt, M. and Solomon, H.C. Physiological evidence of rapport during psychotherapeutic interviews. Diseases of the Nervous System, 1956, 17, 71-77.

Conant, James B. On understanding science. New York: Yale University Press, 1951.

Dittes, J.E. Galvanic skin response as a measure of patient's reaction to therapist's permissiveness. Journal of Abnormal and Social Psychology, 1957, 55, 295-303.

Dittman, A.F., and Wynne, L.C. Linguistic techniques and the analysis of emotionality in interviews. Journal of Abnormal and Social Psychology, 1961, 63, 201-209.

Dollard, J. and Auld, F., Jr. Scoring human motives: A manual. New Haven: Yale University Press, 1959.

Eldred, S.H. and Price, D.B. The linguistic evaluation of feeling states in psychotherapy. Psychiatry, 1958, 21, 115-121.

Felknor, Jerry E. Activity analysis. In Peter G. Ossorio, Attribute space development and evaluation. (RADC-TR-67-640) Rome, New York: Rome Air Development Center, 1968.

Fiedler, F.E. The concept of an ideal therapeutic relationship. Journal of Consulting Psychology, 1950, 14, 239-245. a

Fiedler, F.E. A comparison of therapeutic relationships in psychoanalytic, nondirective and Adlerian therapy. Journal of Consulting Psychology, 1950, 14, 436-445. b

Fiedler, F.E. Factor analysis of psychoanalytic, nondirective and Adlerian therapeutic relationships. Journal of Consulting Psychology, 1951, 15, 32-38.

Freud, S. New introductory lectures on psycho-analysis. New York: Norton, 1933.

Fromm-Reichman, F. Principles of intensive psychotherapy. Chicago: University of Chicago Press, 1950.

Gottschalk, L.A., Springer, K.J. and Gleser, G.C. Experiments with a method of assessing the variations in intensity of certain psychologic states occurring during two psychotherapeutic interviews. In L.A. Gottschalk (Ed.), Comparative psycholinguistic analysis of two psychotherapeutic interviews. New York: International Universities Press, 1961.

Guthrie, E.R. The status of systematic psychology. American Psychologist, 1950, 5, 97-101.

Halkides, G. An investigation of therapeutic success as a function of four variables. Unpublished doctoral dissertation, University of Chicago, 1958.

Hall, C.S. and Lindsey, G. Theories of personality. N.Y., John Wiley, 1957.

Harman, H.H. Modern factor analysis. Chicago: University of Chicago Press, 1965.

Harper, R.A. Psychoanalysis and psychotherapy: 36 systems. Englewood Cliffs, N.J.: Prentice-Hall, 1959.

Jung, C.G. Psychology of the unconscious. New York: Dodd, 1925.

Kanfer, F.H., Phillips, J.S. and Matarazzo, J.D. Experimental modifications of interviewer content in standardized interviews. Journal of Consulting Psychology, 1960, 24, 528-536.

Krasner, L. The therapist as a social reinforcement machine. In Strupp, H.H. and Luborsky, L. (Eds.), Research in psychotherapy. Vol. II. Washington, D.C.: American Psychological Association, 1962.

Kubie, L.S. Practical and theoretical aspects of psychoanalysis. New York: International Universities Press, 1950.

Lacey, J.S. Physiological approaches to the evaluation of psychotherapeutic process and outcome. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in psychotherapy. Washington, D.C.: American Psychological Association, 1959, 160-208.

Laffal, J. Changes in the language of the schizophrenic patient during psychotherapy. Journal of Abnormal and Social Psychology, 1961, 63, 422-427.

Laffal, J. Linguistic field theory and studies of word association. Journal of General Psychology, 1964, 71, 145-155.

Leary, T. and Gill, M. The dimensions and a measure of the process of psychotherapy. A system for the analysis of the content of clinical evaluations and patient-therapist verbalizations. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in psychotherapy. Washington, D.C.: American Psychological Association, 1959.

Lennard, H.L. Some aspects of the psychotherapeutic system. In H.H. Strupp and L. Luborsky (Eds.), Research in psychotherapy, Vol. II. Washington, D.C.: American Psychological Association, 1962.

Lennard, H.L. and Bernstein, A. The anatomy of psychotherapy. New York: Columbia University Press, 1960.

McQuown, N.A. Cultural implications of linguistic science. Monograph series on language and linguistics (No. 7) Washington, D.C.: Georgetown University Press, 1954.

Malmo, R.B., Boag, T.J. and Smith, A.A. Physiological study of personal interaction. Psychosomatic Medicine, 1957, 19, 105-119.

Malmo, R.B., Smith, A.A. and Kohlmeyer, W.A. Motor manifestation of conflict in interview: a case study. Journal of Abnormal and Social Psychology, 1956, 52, 268-271.

Marcolin, S.G. The behavior of the stomach during psychoanalysis: a contribution to a method of verifying psychoanalytic data. Psychoanalytic Quarterly, 1951, 20, 349-373.

Marsden, G. Content-analysis studies of therapeutic interviews. Psychological Bulletin, 1965, 63, 298-321.

Matarazzo, J.D., Saslow, G. and Matarazzo, R.G. The interaction chronograph as an instrument for objective measurement of interaction patterns during interviews. Journal of Psychology, 1956, 41, 347-367.

Matarazzo, J.D., Saslow, G. and Mare, A.P. Factor-analysis of interview interaction behavior. Journal of Consulting Psychology, 1958, 22, 419-429.

Murray, E.J. A content-analysis method for studying psychotherapy. Psychological Monographs, 1956, 70, No. 13.

Osgood, C.E. The representational model and relevant research methods. In J. Pool (Ed.), Trends in content-analysis. Urbana: University of Illinois Press, 1959.

Ossorio, Peter G. Persons. Los Angeles: Linguistic Research Institute, 1966.

Ossorio, Peter G. Attribute space development and evaluation. (RADC-TR-67-640) Rome, New York: Rome Air Development Center, 1968.

Parloff, M.B. and Rubinstein, E.A. Research problems in psychotherapy. In M.B. Parloff and E.A. Rubinstein (Eds.), Research in psychotherapy. Washington, D.C.: American Psychological Association, 1959.

Pittenger, R.E. and Smith, H.L. A basis for some contributions of linguistics to psychiatry. Psychiatry, 1957, 20, 61-78.

Rapaport, D. The conceptual model of psychoanalysis. Journal of Personality, 1951, 20, 56-81.

Rioch, J.M. The transference phenomenon in psychoanalytic therapy. Psychiatry, 1943, 6, 147-153.

Rogers, C.R. Client-centered therapy. Boston, Houghton-Miffin, 1951.

Rogers, C.R. The necessary and sufficient conditions of therapeutic change. Journal of Consulting Psychology, 1957, 21, 95-103.

Rogers, C.R. A process conception of psychotherapy. American Psychologist, 1958, 13, 142-149.

Rogers, C.R. A tentative scale for the measurement of process in psychotherapy. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in Psychotherapy. Washington, D.C.: American Psychological Association, 1959, 96-107.

Rogers, C.R. On becoming a person. Boston: Houghton-Miffin, 1961.

Rosenberg, P.P. Methodology for an objective analysis of the content of a group protocol. International Journal of Group Psychotherapy, 1962, 12, 467-475.

Rubinstein, E.A. and Parloff, M.B. Research problems in psychotherapy. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in Psychotherapy. Washington, D.C.: American Psychological Association, 1959, 276-293.

Rychlak, J.F. Clinical psychology and the nature of evidence. American Psychologist, 1959, 14, 642-648.

Saslow, G. and Matarazzo, J.D. A technique for studying changes in interview behavior. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in psychotherapy. Washington, D.C.: American Psychological Association, 1959.

Saslow, G., Matarazzo, J.D. and Guze, S.B. The stability of interaction chronograph patterns in psychiatric interviews. Journal of Consulting Psychology, 1955, 19, 417-430.

Scott, W.A. and Wertheimer, M. Introduction to psychological research. New York: John Wiley, 1962.

Shagass, C. and Malmo, R.B. Psychodynamic themes and localized muscular tension during psychotherapy. Psychosomatic Medicine, 1954, 16, 295-313.

Shakow, D. Methods for assessment of change, Discussant. In E.A. Rubinstein and M.B. Parloff (Eds.), Research in psychotherapy. Washington, D.C.: American Psychological Association, 1959.

Simmons, Ozzie G. After hospitalization: the mental patient and his family. Austin: The Hogg Foundation for Mental Health, 1960.

Sklansky, M.A., Isaacs, K.S. and Haggard, E.A. A method for the study of verbal interaction and levels of meaning in psychotherapy. In J.S. Gottlieb and G. Tourney (Eds.), Scientific papers and discussion. Washington, D.C.: American Psychiatric Association, 1960.

Snyder, W.U. The psychotherapy relationship. New York: Macmillan, 1961.

Strupp, H.H. An objective comparison of Rogerian psychoanalytic techniques. Journal of Consulting Psychology, 1955, 19, 1-7. a

Strupp, H.H. Psychotherapeutic technique, professional affiliation and experience level. Journal of Consulting Psychology, 1955, 19, 97-102. b

Strupp, H.H. A multidimensional system for analyzing psychotherapeutic techniques. Psychiatry, 1957, 20, 293-306.

Strupp, H.H. The psychotherapists' contribution to the treatment process: an experimental investigation. Behavioral Science, 1958, 3, 34-67. a

Strupp, H.H. The performance of psychiatrists and psychologists in a therapeutic interview. Journal of Clinical Psychology, 1958, 14, 219-226. b

Strupp, H.H. The performance of psychoanalytic and client-centered therapists in an initial interview. Journal of Consulting Psychology, 1958, 22, 265-274. c

Strupp, H.H. Psychotherapists in action: explorations of the therapist's contribution to the treatment process. New York: Grune and Stratton, 1960.

Strupp, H.H. and Luborsky, L. (Eds.), Research in psychotherapy. Vol. II, Washington, D.C.: American Psychological Association, 1962.

Sullivan, H.S. The interpersonal theory of psychiatry. New York: Norton, 1953.

Traeger, G.L. and Smith, H.L. An outline of English structure. Norman, Oklahoma: Battenberg Press, 1951.

Truax, C.B. Symposium: A program of psychotherapy with hospitalized schizophrenics. American Psychological Association convention, New York, 1961.

Truax, C.B. Reinforcement and non-reinforcement in Rogerian psychotherapy. Journal of Abnormal and Social Psychology, 1966, 71, 1-9.

Truax, C.B. and Carkhuff, R.R. For better or for worse: The process of psychotherapeutic change. Recent advance in the study of behavior change. Montreal: McGill University Press, 1963.

Truax, C.B. and Carkhuff, R.R. Significant developments in psychotherapy research. In Abt and Riess (Eds.), Progress in clinical psychology. New York: Grune and Stratton, 1964.

Truax, C.B. and Carkhuff, R.R. Towards effective counseling and psychotherapy. Chicago: Aldine, 1967.

Tucker, L.R. A method for synthesis of factor analysis studies. Personnel research section, No. 284. Washington, D.C.: Department of the Army, 1951.

Vargas, M.J. Changes in self-awareness during client-centered therapy. In C.R. Rogers and R.F. Dymond (Eds.), Psychotherapy and personality change. Chicago: University of Chicago Press, 1954.

White, Robert W. The abnormal personality. (2nd ed.) New York: The Ronald Press Company, 1956.

Whitehorn, J.C. and Betz, B.J. A study of psychotherapeutic relationships between physicians and schizophrenic patients. American Journal of Psychiatry, 1954, 3, 321-331.

APPENDICES

APPENDIX A

Identification of Performances and Achievements

1. Performances

Please try to list all of the things you do in psychotherapy. The list should be as complete as possible. It does not have to be in any particular order. Please do not use technical language. It may help if you think of things you have or will try to do with cases you are now seeing. Please try to spend at least 30 minutes on this task.

2. Achievements

Please try to list all of the things that you try to accomplish during psychotherapy. The list should be as complete as possible. It does not have to be in any particular order. Do not use technical language. It may help if you think of things you have or will try to accomplish with cases you are now seeing. Please try to spend at least 30 minutes on this task.

APPENDIX B

Instructions for Means-End Ratings

This study is an attempt to achieve a means-ends analysis of individual psychotherapy. In this section, you will be asked to make judgments about means-end relationships based upon your knowledge and experience as a therapist and a person.

The ends will be things a therapist might want to achieve during psychotherapy while the means will be actions or achievements which might contribute toward those ends. (For the sake of convenience the means will often be referred to as items.) For each end, you will be given a set of items, and your task is to decide whether you would expect each item to be a means of achieving the end. For example, the end might be "letting the patient know you are interested in him" and the means item might be "listening attentively." Here you would judge whether you would expect "listen attentively" to be a means to achieving the end of "letting the patient know you are interested in him." In all of your judgments you are to assume a reasonably competent therapist.

You would express your judgments by making a mark on a scale like this: listening attentively _____
0 1 2 3 4 5 6 7 8

In general, the more you would expect the item to be a means to achieving the end, the higher should be the number that you check on the scale. Keeping this general principle in mind, use the following as a guide in making your ratings.

1. Check "0" when you would not under any circumstances expect an item to be a means of achieving the end. For example, the item might be a means of not achieving the end or it might be completely irrelevant to the end in question. In general you would be very surprised if this means got a therapist closer to achieving the end.

2. Check either "1" or "2" if you would not really expect the item to be a means to the end, but you would not want to say outright that it was not a means to that end. For example, you might be able to imagine a special situation in which you would expect this item to be a means to this end, but even then it would be an incidental or trivial part of achieving this end. If you are inclined to say "Yes it might be a means, but . . .," then "1" or "2" is an appropriate rating.

3. Check either "3" or "4" if you would expect the item to be a means to achieving the end, but either you would not expect it to get the therapist very far toward achieving the end or you would expect it to be a means only in a minority of the cases where the therapist wanted to achieve that end.

4. Check either "5" or "6" if you ordinarily would expect the item to be an important means of achieving the end. For example you might expect it to be a generally useful means or you might expect it to be a particularly useful means in a few particular situations.

5. Check either "7" or "8" if you would expect an item to be the most important means to an end. For example, you might expect an item checked "7" or "8" to be a necessary and/or a sufficient means of achieving the end. In general, you would be very surprised

if this item did not get a therapist significantly closer to achieving the end in question.

In deciding between "1" or "2", "3" or "4", "5" or "6", "7" or "8", use the general rule that the more you would expect an item to be a means of achieving an end, the higher the number you should check on the scale.

On each page of the booklet you will find one end at the top of the page and below ten scales with the means items given alongside. Take each of the items and relate it to the end, making your checkmark on the appropriate scale each time.

Important:

1. Rate each item in turn. Do not skip any.
2. Make your checkmark in the middle of the scale sections, not on the divisions.

3. Make each judgment independently. Do not try to remember how you rated other means or ends. Take each page in order. Do not skip back and forth in the booklet.
4. Remember in all your judgments you are to assume a reasonably competent therapist.

APPENDIX C

The formula used to compute factor scores is:

$$S = XF(F^{T}F)^{-1}$$

where S is the factor score matrix, X the raw data matrix and F the factor loading matrix.

APPENDIX D

INDIVIDUAL ANALYSES: SUBJECTS # 15, 2 & 5

TABLE A

SUBJECT NO. 15*

PSYCHOANALYTICALLY ORIENTED THERAPIST

FACTOR NUMBER 1		Get Pt. to be aware of how the past influences his present behavior, thoughts and feelings.
0.721	51	Get Pt. to be aware of how the past influences his present behavior, thoughts and feelings.
0.679	21	Get Pt. to be aware of alternative descriptions of his behavior.
0.601	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).
0.467	36	Interpret Pt's reactions to others as reactions to the therapist.
0.451	49	Get Pt. to view his behavior in terms of economics--he gets something but it costs him something.
0.432	66	Get Pt. to be able to analyze and understand his own actions.
0.417	38	Show the Pt. how his present behavior is related to what he learned how to do in earlier situations.
FACTOR NUMBER 2		Get some sense of the Pt. as a person.
0.814	15	Become sensitive to emotions Pt. expresses but does not verbalize.
0.809	14	Get some sense of the Pt. as a person.
0.731	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.680	13	Understand Pt's view of his present situation.
0.676	43	Understand all that the Pt. is trying to say.
0.644	65	See Pt's world as he sees it.
0.594	17	Become sensitive to what I am doing to the Pt.
0.467	24	React to Pt. in terms of feelings he expresses and his circumstances rather than his verbalized feelings.
0.435	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.

*The data for "Subject No. 15" was obtained by having five therapists rate 1/5 of the total means-end matrix and combining their judgments to form a 130 x 70 matrix of means-end judgments.

TABLE A Continued

FACTOR NUMBER 3 Let Pt. know that I am with him.

0.773	39	Let Pt. know that I am with him.
0.746	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.528	6	Get Pt. to feel that I am interested in and concerned with his problems.
0.488	25	Establish a relationship in which I am on the Pt's side.
0.472	8	Get Pt. to stay on difficult subject matter.

FACTOR NUMBER 4 Let Pt. know how I react to him.

0.633	19	Let Pt. know how I react to him.
0.617	37	Get Pt. to use my language.
0.402	50	Communicate my values and style of life.

FACTOR NUMBER 5 Be as real as I can be with the Pt.

0.692	30	Be as real as I can be with the Pt.
0.610	29	Be one whom the Pt. can trust with intimate thoughts and feelings.

FACTOR NUMBER 6 Interpret Pt's request for help or advice as examples of transference.

0.641	18	Interpret Pt's requests for help or advice as examples of transference.
0.378	61	Use therapy relationship as an example of how the Pt. can relate differently to other people.

FACTOR NUMBER 7 Talk about the results of the Pt's actions rather than his motives.

0.490	22	Talk about the results of Pt's actions rather than his motives.

FACTOR NUMBER 8 Get Pt. to see his behavior as reasonable though ineffective or costly.

0.680	42	Get Pt. to see the funny side of himself and others.
0.604	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.542	41	Tie Pt's experiences together to show how he constantly gets into the same sort of difficulty time after time.
0.549	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.531	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.

TABLE A Continued

0.452 12 Formulate some tentative goals with the Pt.
0.408 58 Get Pt. to be able to interpret actions of others.

FACTOR NUMBER 9 Set up situations in which Pt. can practice interpersonal skills.

0.615 60 Set up situations in which Pt. can practice interpersonal skills.
0.396 58 Get Pt. to be able to interpret actions of others.

FACTOR NUMBER 10 Get Pt. to be less dependent on me and others.

0.725 52 Get Pt. to be less dependent on me and others.
0.514 53 Get Pt. to try some new ways of behaving no matter how awkward they may be.

FACTOR NUMBER 11 Get Pt. to think about therapy sessions outside the therapy hour.

0.620 11 Get Pt. to think about therapy sessions outside the therapy hour.

FACTOR NUMBER 12 Get Pt. to express his feelings toward me.

0.683 40 Get Pt. to express his feelings toward me.
0.532 9 Get Pt. to talk about his feelings.
0.482 55 Allow the Pt. to make decisions about how or whether he will change.
0.411 10 Get Pt. to focus his difficulties down to specific situations.

FACTOR NUMBER 13 Maintain an objective relationship with the Pt.

0.591 26 Maintain an objective relationship with the Pt.

FACTOR NUMBER 14 Get Pt. to express ignoble motives.

0.615 32 Get Pt. to express ignoble motives.
0.407 33 Utilize transference appropriately to point out way in which Pt. relates to people.

FACTOR NUMBER 15 Act out for the Pt. what he is saying or the feelings he is expressing.

0.676 35 Act out for the Pt. what he is saying or the feelings he is expressing.

TABLE A Continued

FACTOR NUMBER 16		Show Pt. how his present behavior is related to what he learned how to do in earlier situations.
0.467	38	Show Pt. how his present behavior is related to what he learned how to do in earlier situations.
FACTOR NUMBER 17		Let Pt. know that I am not repulsed or horrified by what he tells me.
0.577	2	Let Pt. know that I am not repulsed or horrified by what he tells me.
FACTOR NUMBER 18		Get Pt. to feel reasonably comfortable with others around him.
0.508	70	Get Pt. to feel reasonably comfortable with others around him.
0.483	23	Let Pt. know that I think his actions are reasonable and understandable given his circumstances.
FACTOR NUMBER 19		Promote catharsis.
0.690	28	Promote catharsis.
0.612	27	Get Pt. to express his feelings more spontaneously.
FACTOR NUMBER 20		Treat Pt. as a competent and responsible person.
0.640	62	Treat Pt. as a competent and responsible person.
0.611	16	Get Pt. to feel that I am strong enough to help him.
0.414	63	Get Pt. to be aware of and accept all or most of the results of his actions.

TABLE B

SUBJECT NO. 2

ROGERIAN ORIENTED THERAPIST

FACTOR NUMBER 1 Get Pt. to express his feelings more spontaneously.

0.822	27	Get Pt. to express his feelings more spontaneously.
0.804	29	Be one whom Pt. can trust with intimate thoughts and feelings.
0.787	32	Get Pt. to express ignoble motives.
0.785	2	Let Pt. know that I am not repulsed or horrified by what he tells me.
0.751	28	Promote catharsis.
0.741	42	Get Pt. to see the funny side of himself and others.
0.739	40	Get Pt. to express his feelings toward me.
0.709	9	Get Pt. to talk about his feelings.
0.661	70	Get Pt. to feel reasonably comfortable with others around him.
0.660	25	Establish a relationship in which I am on the Pt's side.
0.656	39	Let Pt. know that I am with him.
0.653	6	Get Pt. to feel that I am interested in and concerned with his problems.
0.650	68	Get Pt. to live closer to his feelings and impulses (i.e. etc.).
0.589	8	Get Pt. to stay on difficult subject matter.
0.588	5	Reflect Pt's feelings.
0.581	69	Get Pt. to have some feeling of success as a human being.
0.562	62	Treat Pt. as a competent and responsible person.
0.547	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.545	1	Get Pt. to feel that he can be helped.
0.526	16	Get Pt. to feel that I am strong enough to help him.
0.520	7	Be comfortable with Pt.
0.513	37	Get Pt. to use my language.
0.468	4	Get Pt. to talk about what brought him to therapy and his present life situation.
0.466	67	Get Pt. to see and accept himself as fallible but reasonably competent person who will continue to have problems.
0.447	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.432	30	Be as real as I can be with the Pt.
0.419	50	Communicate my values and style of life.
0.413	14	Get some sense of the Pt. as a person.

TABLE B Continued

FACTOR NUMBER 2 Use Psychoanalytic concepts to provide the Pt. with an explanation for past behavior.

0.854	47	Use Psychoanalytic concepts to provide the Pt. with an explanation for past behavior.
0.763	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.
0.746	38	Show Pt. how present behavior is related to what he learned how to do in earlier situations.
0.743	3	Get Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.706	51	Get Pt. to be aware of how his past experiences influences present behavior thoughts and feelings.
0.702	33	Utilize transference appropriately to point out the ways in which the Pt. relates to people.
0.686	18	Interpret Pt's requests for help or advice as examples of transference.
0.607	41	Tie Pt's experiences together to show how he constantly gets into the same sort of difficulty time after time.
0.536	48	Get Pt. to question his present convictions and beliefs which lead to ineffective behavior.
0.489	66	Get Pt. to be able to analyze and understand his own actions.
0.474	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.457	21	Get Pt. to be aware of alternative descriptions of his behavior.
0.411	4	Get Pt. to talk about what brought him to therapy and his present life situation.
0.408	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.

FACTOR NUMBER 3 Get Pt. to see himself and others in action terms.

0.773	31	Get Pt. to adopt the attitude that action is required in order to solve problems as opposed to the resolution of an intrapsychic conflict.
0.739	53	Get Pt. to try some new ways of behaving no matter how awkward they may be.
0.713	45	Get Pt. to see himself and others in action terms.
0.711	64	Teach Pt. new ways of behaving.
0.703	52	Get Pt. to be less dependent on me and others.
0.670	69	Get Pt. to accept responsibility for his actions.
0.636	55	Allow the Pt. to make decisions about how or whether he will change.
0.629	1	Get Pt. to feel that he can be helped.
0.605	62	Treat Pt. as a competent and responsible person.

TABLE B Continued

0.595	49	Get Pt. to view his behavior in terms of economics--he gets something but it costs him something.
0.585	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.
0.566	11	Get Pt. to think about therapy sessions outside the therapy hour.
0.548	22	Talk about the results of the Pt's actions rather than his motives.
0.526	60	Set up situations in which the Pt. can practice interpersonal skills.
0.501	66	Get Pt. to be able to analyze and understand his own actions.
0.498	59	Get Pt. to have some feeling of success as a human being.
0.497	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.487	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.475	12	Formulate some tentative goals with the Pt.
0.423	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but rather to hold decisions in abeyance until the information is adequate).
0.405	61	Use therapy relationship as an example of how the Pt. can relate differently to other people.

FACTOR NUMBER 4 Use therapy relationship as an example of how the Pt. can relate differently to other people.

0.469	61	Use therapy relationship as an example of how the Pt. can relate differently to other people.
0.459	60	Set up situations in which the Pt. can practice interpersonal skills.

FACTOR NUMBER 5 See Pt's world as he sees it.

0.733	65	See Pt's world as he sees it.
0.728	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.701	43	Understand all that the Pt. is trying to say.
0.675	13	Understand Pt's view of his present situation.
0.596	15	Become sensitive to emotions the Pt. expresses but does not verbalize.
0.584	14	Get some sense of the Pt. as a person.
0.544	24	React to Pt. in terms of feelings he expresses and his circumstances rather than to his verbalized feelings.

TABLE B Continued

0.488	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.458	17	Become sensitive to what I am doing to the Pt.
0.419	35	Act out for the Pt. what he is saying or the feelings he is expressing.

FACTOR NUMBER 6 Be as real as I can be with the Pt.

0.719	30	Be as real as I can be with the Pt.
0.654	19	Let Pt. know how I react to him.
0.648	50	Communicate my values and style of life.
0.500	7	Be comfortable with Pt.

FACTOR NUMBER 7 Get Pt. to adopt a speculative approach to his own behavior.

0.509	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his behavior but to hold decisions in abeyance until the information is adequate).
0.453	21	Get Pt. to be aware of alternative descriptions of his behavior.

FACTOR NUMBER 8 Get Pt. to focus his difficulties down to specific situations.

0.527	10	Get Pt. to focus his difficulties down to specific situations.
0.505	8	Get Pt. to stay on difficult subject matter.

FACTOR NUMBER 9 Get Pt. to be able to interpret actions of others.

0.616	58	Get Pt. to be able to interpret actions of others.
0.477	36	Interpret Pt's reactions to others as reactions to the therapist.

FACTOR NUMBER 10 Get Pt. to use my language.

0.487	37	Get Pt. to use my language.

FACTOR NUMBER 11 Get Pt. to feel that I will support him in what he wants to try to do.

0.497	54	Get Pt. to feel that I will support him in what he wants to try to do.

TABLE B Continued

FACTOR NUMBER 12 Act out for the Pt. what he is saying or the feelings he is expressing.

0.516 35 Act out for the Pt. what he is saying or the feelings he is expressing.

FACTOR NUMBER 13 Talk about the results of Pt's actions rather than his motives.

0.425 22 Talk about the results of Pt's actions rather than his motives.

FACTOR NUMBER 14 Formulate some tentative goals with the Pt.

0.541 12 Formulate some tentative goals with the Pt.
0.440 20 Get Pt. to be committed to therapy.

FACTOR NUMBER 15 Maintain an objective relationship with the Pt.

0.537 26 Maintain an objective relationship with the Pt.
0.436 57 Get Pt. to see his behavior as reasonable though ineffective or costly.

FACTOR NUMBER 16 Let Pt. know that I think his actions are reasonable and understandable given his circumstances.

0.602 23 Let Pt. know that I think his actions are reasonable and understandable given his circumstances.

TABLE C

SUBJECT NO. 5

OTHERWISE ORIENTED THERAPIST

FACTOR NUMBER 1 Get Pt. to see himself and others in action terms.

0.761	58	Get Pt. to be able to interpret actions of others.
0.751	57	Get Pt. to see his behavior as reasonable though ineffective or costly.
0.742	63	Get Pt. to be aware of and accept all or most of the results of his actions.
0.741	64	Teach Pt. new ways of behaving.
0.736	21	Get Pt. to be aware of alternative descriptions of his behavior.
0.736	45	Get Pt. to see himself and others in action terms.
0.734	22	Talk about the results of Pt's actions rather than his motives.
0.728	49	Get Pt. to view his behavior in terms of economics--he gets something but it costs him something.
0.723	60	Get Pt. to accept responsibility for his actions.
0.715	41	Tie the Pt's experiences together to show him how he constantly gets into the same sort of difficulty time after time.
0.703	38	Show Pt. how his present behavior is related to what he learned how to do in earlier situations.
0.701	53	Get Pt. to try some new ways of behaving no matter how awkward they may be.
0.696	11	Get Pt. to think about therapy sessions outside the therapy hour.
0.690	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.
0.687	3	Get Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.686	61	Use therapy relationship as an example of how Pt. can relate differently to other people.
0.685	31	Get Pt. to adopt the attitude that action required in order to solve problems as opposed to the resolution of intrapsychic conflict.
0.681	66	Get Pt. to be able to analyze and understand his own actions.
0.635	34	Get Pt. to adopt a speculative approach to his own behavior (i.e. not to arbitrarily reject or compulsively accept reasons for his actions but rather to hold decisions in abeyance until the information is adequate).

TABLE C Continued

0.627	52	Get Pt. to be less dependent on me and others.
0.621	60	Set up situations in which Pt. can practice interpersonal skills.
0.620	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).
0.599	10	Get Pt. to focus his difficulties down to specific situations.
0.593	48	Get Pt. to question convictions and beliefs which lead to ineffective behavior.
0.590	51	Get Pt. to be aware of how his past influences his present behavior, thoughts and feelings.
0.584	62	Treat Pt. as a competent and responsible person.
0.538	56	Give the Pt. a reasonably complete and coherent account of his behavior.
0.536	33	Utilize transference appropriately to point out the way in which the Pt. relates to people.
0.521	1	Get Pt. to feel that he can be helped.
0.500	36	Interpret Pt's reactions to others as reactions to the therapist.
0.490	32	Get Pt. to express ignoble motives.
0.488	59	Get Pt. to have some feeling of success as a human being.
0.470	24	React to Pt. in terms of the feelings he expresses and his circumstances rather than his verbalized feelings.
0.445	40	Get Pt. to express his feelings toward me.
0.439	37	Get Pt. to use my language.
0.437	18	Interpret Pt's requests for help or advice as examples of transference.
0.436	35	Act out for the Pt. what he is saying or the feelings he is expressing.
0.429	70	Get Pt. to feel reasonably comfortable with others around him.
0.423	9	Get Pt. to talk about his feelings.
0.418	42	Get Pt. to see the funny side of himself and others.

FACTOR NUMBER 2 Use Psychoanalytic concepts to provide the Pt. with explanation for past behavior.

0.733	47	Use psychoanalytic concepts to provide Pt. with explanation for past behavior.
0.633	18	Interpret Pt's requests for help or advice as examples of transference.
0.513	36	Interpret Pt's reactions to others as reactions to the therapist.
0.476	33	Utilize transference appropriately to point out the way in which the Pt. relates to people.
0.415	56	Give the Pt. a reasonably complete and coherent account of his behavior.

TABLE C Continued

0.398	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.
0.396	51	Get Pt. to be aware of how past influences present behavior thoughts and feelings.

FACTOR NUMBER 3 See Pt's world as he sees it.

0.839	43	Understand all that the Pt. is trying to say.
0.838	13	Understand Pt's view of his present situation.
0.833	14	Get some sense of the Pt. as a person.
0.827	65	See Pt's world as he sees it.
0.820	15	Become sensitive to emotions Pt. expresses but does not verbalize.
0.755	44	Organize my observations and descriptions into a coherent and meaningful view of the Pt.
0.667	17	Become sensitive to what I am doing to the Pt.
0.434	46	Uncover the unconscious irrational premises which are guiding the Pt's behavior.

FACTOR NUMBER 4 Let Pt. know how I react to him.

0.680	19	Let Pt. know how I react to him.

FACTOR NUMBER 5 Establish a relationship in which I am on the Pt's side.

0.801	25	Establish a relationship in which I am on the Pt's side.
0.772	54	Get Pt. to feel that I will support him in what he wants to try to do.
0.721	20	Get Pt. to be committed to therapy.
0.720	16	Get Pt. to feel that I am strong enough to help him.
0.682	2	Let Pt. know that I am not repulsed or horrified by what he tells me.
0.666	59	Get Pt. to have some feeling of success as a human being.
0.648	39	Let Pt. know that I am with him.
0.642	1	Get Pt. to feel that he can be helped.
0.629	29	Be one whom Pt. can trust with intimate thoughts and feelings.
0.595	55	Allow the Pt. to make decisions about how or whether he will change.
0.589	7	Be comfortable with Pt.
0.586	70	Get Pt. to feel reasonably comfortable with others around him.
0.573	52	Get Pt. to be less dependent on me and others.
0.513	6	Get Pt. to feel that I am interested in and concerned with his problems.

TABLE C Continued

0.503	3	Get Pt. to believe that understanding his behavior will make it possible for him to behave differently.
0.473	42	Get Pt. to see the funny side of himself and others.
0.467	12	Formulate some tentative goals with the Pt.
0.452	62	Treat Pt. as a competent and responsible person.
0.435	32	Get Pt. to express ignoble motives.
0.431	53	Get Pt. to try some new ways of behaving no matter how awkward they may be.
0.427	27	Get Pt. to express his feelings more spontaneously.
0.426	67	Get Pt. to see and accept himself as a fallible but reasonably competent person who will continue to have problems.

FACTOR NUMBER 6 Get Pt. to express his feelings more spontaneously.

0.631	28	Promote catharsis.
0.581	27	Get Pt. to express his feelings more spontaneously.
0.575	9	Get Pt. to talk about his feelings.
0.475	68	Get Pt. to live closer to his feelings and impulses (i.e. to be aware of them if not to act on them).
0.448	8	Get Pt. to stay on difficult subject matter.
0.419	70	Get Pt. to feel reasonably comfortable with others around him.

FACTOR NUMBER 7 Get Pt. to talk about what brought him to therapy and his present life situation.

0.628	4	Get Pt. to talk about what brought him to therapy and his present life situation.
0.520	12	Formulate some tentative goals with the Pt.
0.437	10	Get Pt. to focus his difficulties down to specific situations.

FACTOR NUMBER 8 Be as real as I can be with the Pt.

0.664	30	Be as real as I can be with the Pt.
0.316	7	Be comfortable with the Pt.

FACTOR NUMBER 9 Communicate my values and style of life.

0.509	50	Communicate my values and style of life.

FACTOR NUMBER 10 Reflect Pt's feelings.

0.538	5	Reflect Pt's feelings.

FACTOR NUMBER 11 Let Pt. know that I think his actions are reasonable and understandable given his circumstances.

TABLE C Continued

0.529 23 Let Pt. know that I think his actions are reasonable and understandable given his circumstances.

FACTOR NUMBER 12 Maintain an objective relationship with the Pt.

0.449 26 Maintain an objective relationship with the Pt.

FACTOR NUMBER 13 Act out for the Pt. what he is saying or the feelings he is expressing.

0.439 35 Act out for the Pt. what he is saying or the feelings he is expressing.

APPENDIX E

SPECIAL ACKNOWLEDGMENT

The author wishes to express his sincere appreciation to the following clinicians who served as informants in the present study and not only worked long and hard at completing the experimental task but also offered numerous suggestions and comments that were very helpful.

Dr. James H. Panning
Student Life Center
University of Colorado

Dr. Earl H. Young
State Department of Institutions
Denver, Colorado

Dr. Irwin H. Cohen
Veteran's Administration Hospital
Denver, Colorado

Dr. Keith G. Davis
Veteran's Administration Hospital
Denver, Colorado

Dr. Robert J. Kelley
Colorado Psychiatric Hospital
Denver, Colorado

Dr. Frank A. Knotts
Private Practice
Boulder, Colorado

Dr. Eileen Larsen
Arapahoe Mental Health Center
Denver, Colorado

Dr. Dean Lund
Student Life Center
Boulder, Colorado

Dr. Robert M. Martin
Colorado Psychiatric Hospital
Denver, Colorado

Mr. Larry Brittain
Department of Psychology
Boulder, Colorado

Dr. Mark Rudnick
Colorado Psychiatric Hospital
Denver, Colorado

Dr. Louis Rutledge
Private Practice
Denver, Colorado

Dr. Frederick J. Todd
Colorado Psychiatric Hospital
Denver, Colorado

Dr. Richard Waite
Colorado Psychiatric Hospital
Denver, Colorado

Dr. Leighton Whitaker
Colorado Psychiatric Hospital
Denver, Colorado

Dr. Peter G. Ossorio
Department of Psychology
Boulder, Colorado

Dr. John Vancini
Minnesota State Department
of Institutions