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Non-participant observers utilization of the 16PF source traits as role construct repertory test constructs in relation to therapist preference patterns.

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NON-PARTICIPANT OBSERVERS UTILIZATION OF THE 16PF SOURCE TRAITS AS ROLE CONSTRUCT REPERTORY TEST CONSTRUCTS IN RELATION TO THERAPIST PREFERENCE PATTERNS

by

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ABSTRACT

The purpose of the present research was to investigate the utilization of provided constructs by 39 female and 13 male subjects in relation to a series of films of three famous therapists interviewing the same client. The study focused on the following hypotheses: (1) whether naive observers would be able to utilize Cattell's Sixteen Personality Factor source traits as constructs in a Role Repertory Construct Test format to differentiate the therapists from other significant role figures; (2) whether subjects' responses on a Therapy Rating Form, developed for the present research, would show specific therapist preference groups and; (3) whether those preference groups would show differential patterns of Role Rep Test construct utilization, specifically in relation to the three therapists. A number of univariate and multivariate analyses were performed. The results of those analyses failed to confirm hypotheses one and three; hypothesis two was confirmed. The marginal evidence supporting hypothesis one and three was discussed in terms of the relative inadequacy of the 16PF source traits as differentiating constructs for the assessment of observable personality characteristics. Future research was suggested, focusing on the development of more useful construct dimensions before the Role Construct Repertory Test can be further investigated as a tool for maximizing therapeutic interactions.

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CHAPTER I

INTRODUCTION

A complex process begins when two individuals meet in the unique encounter we label psychotherapy. It is a complicated and little-understood process. Many researchers have attempted to delineate the critical dimensions or variables that exist in the therapeutic interaction. Usually they have begun their investigations from a theoretical position and then attempted to show that one or more of the variables postulated by the particular theory were actually present in the psychotherapeutic encounter. Often the assessments of therapy in these studies have been made by "experts"--specially trained observers or other psychotherapists.

The focus of this study, however, was how the naive observer, that is, a person we may think of as the potential consumer of psychotherapy, approaches and understands an actual therapeutic interaction. The present research investigated how naive observers utilized particular psychological dimensions to organize and understand their own personal worlds, how those same dimensions were utilized by the subjects in understanding a complex therapeutic interaction and, finally, how the observers' utilization of those dimensions was related to their evaluations of that same therapeutic interaction.

Specifically, the study consisted of having individuals view videotapes of three famous therapists conducting sessions with the

same client. After viewing the therapy sessions, the subjects were asked to respond to a 55 item questionnaire developed to assess their reactions to the client, the therapists and the therapeutic process. These ratings provided a comprehensive measure of the observers' reactions to the videotaped sessions. Because the research was also intended to develop a way of understanding how the individual related to the film, another major instrument, the Role Construct Repertory Test (Kelly, 1955) was administered. This test permitted the subjects to make important comparisons among the therapists and the client in the film, and significant others in their interpersonal spheres. The questionnaire and the Role Construct Repertory Test were first analyzed individually and then a comparative analysis was made in order to identify the underlying similarities of the two techniques.

A. Review of Relevant Psychotherapy Research

Typically, a person seeking psychotherapy has very little information about the process that will occur. The client is usually ignorant, not only of the variety of therapeutic techniques but also of the specific roles required of a client and therapist within the psychotherapeutic framework. The assumptions that the client does have may be based on spurious or stereotyped notions communicated through the popular media. In short, the typical consumer of therapeutic services is ill-informed and ill-equipped to make what may indeed be a very important decision. In spite of the development of an electronic technology that makes such items as videotape recorders readily

accessible, they have seldom been utilized to help educate or prepare the potential client.

It has long been recognized by researchers that the characteristics of clients and their attitudes toward therapy have a significant effect on the treatment outcome. This makes the relative absence of applied clinical methods for assessing these factors even more remarkable. Variables that have been studied as they relate to the success or failure of treatment are the following: 1) general personality qualities such as anxiety tolerance (Siegel & Rosen, 1962), ego strength (Kernberg et al. 1972), suggestibility (Imber et al. 1956); 2) expectations (J. D. Frank, 1973); 3) social class and race (Holingshead & Redlich, 1958; E. E. Jones, 1974); 4) psychosocial characteristics such as age, sex, intelligence (Spiegel, 1967); 5) degree and type of disturbance (Luborsky, 1959; Luborsky et al. 1971; Nash & Imber, 1961; Barron, 1953; and Stepens & Astrup, 1965); and finally, 6) qualities relevant to patient role such as motivation for therapy, readiness to communicate feelings or openness to therapeutic influences (Strupp, 1971), and likeability of client (Heller & Goldstein, 1961).

While these studies have demonstrated that the variables in question effect the outcome of treatment, few, if any, have elicited the reactions of clients to actual therapy sessions. The studies have classified individuals along certain standardized dimensions and then used that categorization to predict the success of treatment. For example, we can state that an individual with low "motivation for

therapy" (classification) is a poor risk for success in therapy (prediction). But the more important question, from a clinical viewpoint, remains unanswered: What type of intervention might be successful with this particular client? How can we move beyond simply sorting people according to certain constructs and begin matching clients with appropriate treatment on an individual basis?

One way to attain this goal might be to assess an individual's specific reactions to a real treatment situation and then to investigate the relevant dimensions used by the individual in forming those reactions. This would, of course, require the development of a method for obtaining the needed data, but once obtained, the information could serve a number of purposes. Prior to treatment, the assessment could aid in matching the potential client with a preferred form of treatment and also with an individual therapist. If the assessment continued during therapy, it would provide a framework for assessing the process of therapy and for making selective changes in that process according to the changing needs of both the therapist and client.

While the program outlined above may be only a fantasy at the present time, these are the ideas which provided a model for the present exploratory study. To move toward actualization of the dream it was first necessary to develop a method for obtaining and analyzing the data--data which would represent the reactions of potential clients exposed to actual therapy sessions.

The therapeutic interview films, to be used as stimulus materials in this study, were developed by E. L. Shostrom (1966). They consist

of three famous therapists, each representing a particular therapeutic approach, interviewing the same client. The therapists are Carl Rogers; Client-Centred Therapy, Fritz Perls; Gestalt Therapy and, Albert Ellis; Rational-Emotive Therapy. The three interviews are alleged to represent their typical clinical methods for treating a client such as the one in the film, Gloria. In other words, it is stated by each that the encounter depicted on the film is a typical therapeutic encounter and similar to one a client could expect if he or she were interviewed by each therapist.

This film has, of course, been utilized in previous studies. For example, Shostrom and Riley (1968) in their research had professionals observe and analyze the techniques of the therapists shown in the film. A comparison of two sample groups showed that Rogers, Perls, and Ellis had unique patterns of ratings on the dimensions studied but also each had some rating on all of the 10 dimensions. Shostrom and Riley's conclusions is that each therapist is an "emerging eclectic" and the method can be used in future by students or supervisors in psychotherapy to describe a pattern of parameters which will give a clear picture of his "emerging style."

The films were also utilized by Barak and LaCrosse (1975) when they investigated Strong's prediction of the existence of three dimensions of perceived counselor behavior--expertness, attractiveness and trustworthiness (Strong, et al., 1968, 1970, 1971). Their subjects rated each counselor on thirty-six bipolar scales and the factor analysis of the ratings supported the existence of the hypothesized

dimensions for Rogers and Perls but only two dimensions for Ellis.

The films were used quite differently in the current research, however, than in either of the above studies. The observers were naive subjects; their assessment of the film was in response to the 55 question rating form developed for this study and the Role Rep Test devised by George Kelly (1955). To elucidate the focus and direction of this study, it is first necessary to introduce the reader to the work of George A. Kelly and his Personal Construct Theory.

B. General Review of Personal Construct Theory

The Psychology of Personal Constructs is primarily the work of one man, George A. Kelly (1905-1967). As a comprehensive system of general psychology, it represents one of the few attempts to formulate an integrated appreciation of the human condition. In addition, it provides a framework for the understanding of psychotherapy. Kelly's approach is embodied in two volumes entitled, The Psychology of Personal Constructs (1955). This work, which began as a handbook of clinical procedures generated from Kelly's interest and skills as a psychotherapist, gradually was expanded to include what can legitimately be called a metapsychological theory.

Kelly's style of theorizing departed from traditional psychological theorizing in many respects. Most obviously, it differed from contemporary psychological theories in its conceptual structure. Familiar terms such as learning, ego, motivation, reinforcement, drive,

need, unconscious, etc., do not even appear in the theory. In order to convey new ideas Kelly felt the necessity of developing new terms which conveyed his intended meanings, terms such as: "foci of convenience," "propositionality," "fixed-role therapy," and "transitive diagnosis." This utilization of theory-related language to convey unique meanings has, of course, been met with significant resistance on the part of many psychologists.

Another distinction between Kelly and other more traditional personality theorists, was his development of an integrated system of principles and theorems rather than depending upon a more inductive and experimental approach. Kelly, in a systematic fashion, set down his basic assumptions, a fundamental postulate with a series of corresponding corollaries, and finally, generated a therapeutic technique called "fixed-role therapy" which represented the application of the principles to the therapeutic encounter.

Most relevant to the present research, however, are the empirical methods and techniques which Kelly developed for assessing what he considered to be the primary channels through which an individual experiences and organizes his or her world. These channels, a term loosely taken from his basic postulate, and which has much more significance than a single word can convey, are called "constructs," hence, the name, "Personal Construct Theory." The instrument that Kelly devised for assessing an individual's construct system is traditionally called the "Role Construct Repertory Test" (Role Rep Test). Not a traditional "test," it is, rather, a method for assessing the dimensions

along which people experience their physical and interpersonal world.

It would require an extensive volume to adequately do justice to personal construct theory. Excellent reviews can be found in Bannister (1968), and Landfield (1971). This review will focus on the meaning of the term, "constructs" and the techniques which have been developed for construct assessment.

From Kelly's point of view, the most important characteristic of any individual is how he or she makes sense of the world. He assumes that there is a characteristic manner in which every individual interprets or construes the wealth of information which is generated by contact with the environment. Therefore, it is more important for a psychologist to understand how an individual construes the forces that influence him or her, rather than to focus on the objective nature of those forces. Kelly's philosophical base, constructive alternativism, assumes that all present interpretations of the universe are subject to revision and replacement. This means that the world can be construed in various ways at different points in time and that one basically deals with the world by choosing alternative constructions.

In order to understand fully the meaning of the term, construct, a primary distinction must be made between constructs and concepts--a construct is not a concept. Bruner (1956) in his review of Kelly, labelled him a "cognitive theorist" because he seemingly interpreted the word construct to be equivalent to the word concept. The term "construct" defines the active and vital way in which a person channelizes his or her world. In the most general sense, it refers to a

manner of processing. Therefore, constructs are not necessarily symbolized by words, nor are they always capable of being verbalized. The individual is unable to express the whole of his or her construction system. Within Kelly's theoretical framework, every construct must have two aspects or poles although both poles may not be accessible to conscious awareness. Thus, a construct may be thought of as a bi-polar dimension along which new information is evaluated and given meaning.

Kelly believed that it is the task of the therapist to gain insight into the client's construal process in order to form clinical hypotheses and facilitate change. While a perceptive therapist could hopefully achieve this insight by personal observation over time, Kelly attempted to remove this function from the purely subjective, observational mode by developing techniques which would more quickly and accurately eludicate individuals' construct systems.

The first technique, labelled the Self-Characterization approach, will not be discussed here. Fundamentally an autobiographical character sketch, the method is of inestimable value to the clinician but is limited by its very nature as a research tool. Over time, Kelly developed the more formal Role Rep Test as it is known today. The Role Rep Test provides two versions or approaches to the measurement of constructs and these will be discussed in the next section on the Role Rep Test.

Kelly originally developed the Role Rep Test as a clinical tool to be used in assessing the construct systems of individual clients.

This original form of the test is known as the Minimum Context Card Form. A full description of its administration can be found in Kelly (1955) and a more simplified version of the administration can also be found in Bannister & Mair (1968). The second version of the Role Rep Test, the Grid Form, was utilized in this research and an explanation of its structure and administration will be provided here.

The repertory grid of the Role Rep Test should not be viewed as a separate test but rather as an extension or alternate format of Kelly's other techniques for gathering construct information. It is, however, a very important extension of the other methodologies since they are primarily ideographic and intended for clinical use. The grid form permits investigation of the relationships and hierarchy of constructs and is, therefore, a much more useful research tool. The basic procedures for administration are as follows.

The subject is first given a list of role titles which are selected to represent the significant individuals and relationships in any person's life. Kelly originally developed 24 role titles and the convention in subsequent research has been to use 18-24 titles. In the present study subjects were provided with 22 role titles. Some were taken from Kelly's original list, some were specifically chosen by the author for this research and, in addition, the three therapists and the client from the film were included (See Appendix A). It is also possible to create unique role titles for assessing specific populations or to meet specific research needs.

The subject is next required to supply individuals from his or

her personal experience to fit each role. These individuals become the elements of the grid and their names are written across the top of the grid form (See Appendix B). In the usual situation, triads of elements are imbedded in the grid form for each row. These are usually indicated by circles beneath the role titles. The subject is then asked to consider each element triad and suggest some way in which two of the people are alike and different from the third. So, for example, the subject may respond that her mother and best friend are "warm" while her father is "stern." These dimensions then represent the emergent and implicit poles of the first construct. The subject then goes on to consider the triads embedded in each of the subsequent rows until all relevant combinations have been considered.

A variation on this grid technique is to provide construct labels rather than eliciting them from the subjects. In the present research sixteen construct-contrast pairs were provided. These pairs were bi-polar descriptions of Cattell's primary source traits (See Appendix C and the discussion of Cattell's work on pages 24 to 27). While utilization of this technique necessarily implies the loss of information about the construal process of the individual subject, the variation offers certain advantages. It provides the potential for comparison across subjects given the rational assumption that there is greater homogeneity of construct utilization when each subject is provided with the same labels. Thus it is especially useful when, as in the present study, the focus of research is the structural organization of constructs rather than their unique meanings

to individual subjects.

When construct labels are provided, or after they have been elicited as described above, it is possible to employ another variation of the grid technique, the rating form method. In this context, the subject is required to rate each element on the particular construct dimension, for example, from "extremely attractive" to "extremely unattractive." This method was used in the present study and a 7-point scale was utilized.

Other modifications of the grid form have also been utilized by researchers. Bannister (1959) suggested a format which requires the subject to place half the elements at the emergent pole of each construct and later, (1963) proposed a rank order form. In addition, content modifications have been suggested and elements other than people have been utilized, for example, emotions (Fransella and Adams, 1965), paintings (Mair, 1966a) and films (Carver, 1967).

Many different types of statistical analyses have been used with the different methods including matching scores, correlation techniques and factor analysis. A principal components analysis program has been developed by Slater (1965, 1967) which provides the significant orthogonal structure of both constructs in relationship to elements and elements in relationship to constructs. This type of program gives a clear mathematical overview of the subject's psychological space. A review of person perception studies using the Role Rep Test will perhaps further elucidate its usefulness in the present research effort.

C. General Review of Person Perception Research and The Role Rep Test

Person perception research focuses on how one individual judges the emotions, motivation, personality, or other characteristics of other individuals. The majority of these researchers use "naive observers," that is, psychologically untrained persons such as teachers, employment interviewers, students, etc. Thorough reviews of the particular types of rating and the methods of assessment can be found in such books as Cronbach (1970), and Anastasi (1961). Certain theories of what constituted the personality or basic features of the individual have determined the various methods and techniques that have been used. Personality was seen in the early studies as more of a static phenomenon which could be divided into various factors or traits and researchers were mainly concerned with determining how reliable people were or how valid their observations were in specifying the existence of these traits in other individuals. Subjects were exposed to photographs or other modes of expression such as voices, handwriting, literary style, drawings, projective materials, etc., and attempted to match personality descriptions to various characteristics of these productions (Allport & Cantril, 1934; Vernon, 1935). All of these methods, to one extent or another depended upon the perceptive ability of the particular judges and, to a large extent, on the heterogeneity of the persons being judged. As Cronbach (1948) points out there are many difficulties with this type of judgemental approach and in a later book, Cronbach (1970) reviews all of the pitfalls and methodological issues in making judgements

about other people.

It has been pointed out by Vernon (1961) that the methods of obtaining reliable ratings of peoples' traits are well-established and little has been done since the early fifties to radically improve these techniques. Ordinarily judges are trained in some systematic way to observe certain traits in other individuals and are then provided with reliable and valid scales through which they assess certain known characteristics of the individuals being observed. In their training the judges can be made aware of difficulties and instructed in interpreting the traits under consideration uniformly. Even with all of the precautions and with carefully developed and prepared scales, researchers have obtained only moderate correlations between independent raters and, in addition, there is excessive overlapping of ratings on different traits known as 'halo effects' (Bayroff et al., 1954). Subjective rater components such as this, even with all of the refinement in the rating procedures, remain one of the major determinants of a person's perceptions or, at least, rated perceptions of other individuals. These components have been known as generalized bias, projection (Sears, 1951), halo effect, social desirability, response tendencies, or faking. No matter what label has been given to this personal interpretation by the researcher, it has influenced the rating process so significantly that Cronbach (1970) doubts whether there is any consistent rating ability apart from response sets and similar artifacts.

The work of Osgood and his associates (1957) has raised another

important issue. People not only have biased methods of rating other people, but they also tend to use very few dimensions when ranking others. In other words, they collapse their ratings or self-reports into very few dimensions which correspond, according to Norman and Goldberg (1966) to the very nature of our language. They assert that nearly every trait name implies either a level of goodness, activity or strength. Thus, while people have many trait descriptors available to them, they usually use only three dimensions of meaning to sort out most of their observations. Much of this work has been examined and reviewed by Osgood (1957) in the development of the Semantic Differential technique. This technique systematically illustrates how information provided by raters can be captured in three dimensions: good vs. bad; strong vs. weak and; active vs. passive. Osgood found this to be true of ratings of patients by their therapists and of normals by their acquaintances so consistently that he claims these three dimensions account for the major impressions we have of others.

Another issue to be considered when discussing person perception is the subjective or personal contribution of the observer. In 1928, Wickman showed that teachers tend to associate maladjustment and withdrawal or aloofness. Thus, the judgements that these individuals make of children would be bound to differ and, according to the nature of the criterion, the teachers' or psychiatrists' accuracy scores would suffer. Wickman was saying essentially that any judgement of a person on two or more traits or items implies a set of correlations in the judges' minds between these traits. This hypothetical set of

correlations or personal meanings which the viewer imposes upon the situation must be taken into account if we are to understand the idiosyncratic methods wereby the person is viewing their world.

This leads us from a brief general introduction of person perception into the work of George Kelly and his associates who have attempted to apply Personal Construct Theory and the Role Rep Test in the area of person perception. Early studies by Bieri (1955) and Bieri & Blacker (1956) produced evidence that the cognitive complexity of judges was positively related to their ability to assess various characteristics in other people. This cognitive complexity component is basically a measure of the number of distinct constructs or dimensions a person uses, as expressed in the Role Rep Test, in describing other people. Cognitively complex individuals use more dimensions than people who are more cognitively simple. What Bieri and Blacker were trying to tap was a rater variable or a cognitive state variable of the rater which related to the rating task.

This cognitive structure approach to person perception began with studies by Asche (1946) and Kelly (1955) and continued through the work of other researchers such as Bruner (1957), Cronbach (1958) and Wishner (1960), to mention a few. While the common theme, cognitive complexity, went through many of these studies, Kelly's model of person perception (1955, 1969, and 1970) which was summarized by Addams-Webber (1970a) is much more inclusive. He proposes that each individual in the course of his or her social development evolves a unique system of cognitive dimensions or personal constructs for

predicting and interpreting his or her behaviour. Bieri (1966) pointed out that "personal constructs are inferred on the basis of the individual's behaviour, usually verbal in nature, as a response to the persons in his or her environment." Research within the framework of Kelly's theory has been concerned primarily with the way in which an individual characterizes himself and others in terms of his own personal constructs (Bannister & Mair, 1968). However, according to Kelly, interpersonal perception also involves making inferences about the personal constructs of others. Specifically, Kelly's (1955) social corollary asserts "to the extent that one person construes the construction processes of another, he may play a role in the social process involving the other where the term role is defined explicitly as a course of activity which is played out in the light of one's own construction of one or more persons' construct systems" (Addams-Webber et al., 1972). As Addams-Webber et al., (1972) emphasize, it follows within the context of Kelly's theory that individuals' social development involves the acquisition of increasing skill in a) inferring the personal constructs of other persons in social situations and, by implication, b) in discrimination between persons on the basis of individual differences with respect to their personal constructs. In other words, the perceiver utilizes his or her own personal construct system in understanding observations and, secondly, often attempts to apply this understanding by projecting what the personal constructs of others are in the immediate environment. In as much as these two functions are successful, Addams-Webber

(1969) claims that people will be more likely to make a variety of distinctions among their associates and respond to them differentially.

These studies, especially those of Addams-Webber (1973), have provided a variety of techniques for tapping the relevant construct dimensions a person utilizes in person perception studies. Few of these studies, however, have focused on how observers perceive a psychotherapeutic transaction. No study, to this author's knowledge, has systematically tapped the perception of psychotherapeutic transaction as a whole by non-participant observers. Landfield (1971) in a most extensive research project, did, however, employ the Role Rep Test and Personal Construct Theory in the investigation of psychotherapy. In this landmark investigation he focused on seven hypotheses concerning the congruency of the client and his or her therapist as measured by the content and organization of their personal construct systems. As described by Landfield, this was an attempt to explain how therapists understand their clients and how this understanding is related to conceptual congruence in the therapy dyad. He went on to say that it highlights the relationship between client-therapist congruence, the content and structure of their conceptual systems and premature termination and improvement.

Although the design of this study is far too complex to describe here in detail, Landfield attempted to relate the concept of congruence to premature termination of therapy, improvement in therapy and attributed pathology. Under each of these headings he developed sub-hypotheses which illustrated the import of patient-therapist

congruence as assessed by the Role Rep Test. He also did extensive work in delineating specific scoring techniques and developing an extremely useful rating scale which applies to the constructs elicited from the clients. This work is an excellent example of a clinical application of Personal Construct Theory.

To summarize for a moment, we have thus far reviewed the general area of person perception as approached from the Personal Construct Theory point of view and we have discussed one major work which illustrates its utility in psychotherapy research. The concept of cognitive complexity was the major variable used in many of the studies. Landfield, however, brought out many other methods of sorting the data and reliably relating these facets of the Role Rep Test to psychotherapeutic transactions. An excellent example of a continuation of this work was done by Space (1976). In this research, Space was interested in examining the differences between normal and depressed patients on such measures as cognitive complexity, self-ideal congruency, negative self-construing, identification (self-other distances), degree of positive and negative content within factor dimensions, and factor linkage (overlap). This study opened up many new dimensions whereby a person's construct system could be related to his or her behaviour, namely, depression. Space's identification scores, which were correlations between the subject's description of self and another role figure on the Role Rep Test, were used to predict how he or she would relate to other people in his or her world. In other words, various hypotheses were generated

based on the distance or closeness felt in relation to other individuals and to his or her subsequent behaviour pattern. He found that the Role Rep Test provided abundant data for making these comparisons and this identification index will be one of the major methods used in this study.

There has been an increased awareness for some time that the individual therapist and not theoretical persuasion is the major element influencing successful outcome in treatment. Realizing this, researchers have attempted to define either specific characteristics of therapists or types of therapists that facilitated the therapeutic process. A basic assumption of this research has been that these variables resided in the therapist and were constants which existed across different clients. Rarely, if ever, was the perception of the client considered or were these therapist variables considered from the perspective of the client.

The purpose of the present research was to investigate how non-participant observers perceived and understood the three therapists in the film in relation to other important figures in their personal worlds. These relationships were assessed by the Role Repertory Construct Test responses. It was then hypothesized that the pattern of relationships which emerged would be related to the subjects' preferences for the therapists. These preferences were measured by the second instrument utilized, the Therapist Rating Form. Based on the above, the following hypotheses were made:

The purpose of the present study was to investigate how non-participant observers utilized the 16PF source traits as provided constructs in a Role Construct Repertory Test format to construe therapists in relation to other important role figures in their interpersonal world. Once this relationship was defined it was posited that there would be a relationship between the patterns of construct ratings of therapists and role figures which emerged, and subjects preference for the therapists as measured by another instrument, the Therapy Rating Form. From the above considerations three specific hypotheses were generated:

(1) The first hypothesis was that subjects' responses on the Role Construct Repertory Test would produce distinctive patterns of construct-element relationships which would have at least two distinct dimensions. The first dimension would define their evaluation of important role figures in their lives and the second dimension would be a therapist specific dimension. In other words, it was predicted that subjects would generate constructs which define and distinguish important persons in their interpersonal worlds and which would also differentiate the three therapists from this group.

(2) The second hypothesis stated that the subjects' reponses to the Therapy Rating Form would define subsets of individuals who exhibit statistically different patterns of preferences for the three therapists.

(3) The third hypothesis stated that the therapist preference patterns which the subjects presented on the Therapy Rating Form

would be related to differential construct ratings on the Role Construct Repertory Test grid, specifically in terms of the three therapists under consideration.

CHAPTER II

METHOD AND APPARATUS

Selection of Subjects

The subjects for this study were drawn from the population of students at the University of Windsor. Fifty-two subjects were tested. Although an attempt was made to have equal numbers of males and females, this was not possible because of a limited subject pool. This factor was considered important since previous studies have shown that person perception is influenced by sex differences. The subjects ranged in age from 18 years to a maximum of 61 years of age with a mean age of approximately 25 years. There were a total of 39 females and 13 males. The subjects were acquired by approaching their class instructors and asking for volunteers from undergraduate psychology and social work courses. These volunteers were then contacted by the experimenter and a time period of approximately 7 hours was scheduled with each participant.[1] Subjects were generally run in groups of 6-10 people. Course credit points were given for participation. Twelve of the subjects had been in therapy and six had some counselling experience but were not considered professional psychotherapists.

Psychometric Instruments

Materials to be used in the present investigation were a dependent variable rating form devised by the author called the Therapy

[1] A seven hour period was required because subjects completed a second Role Rep Grid as well as Cattell's instruments, the 16PF and the C.A.Q. This data was not included, however, in the present analysis.

Rating Form and Kelly's Role Construct Repertory Test (Role Rep Test). The Role Rep Test has been discussed in the introduction and will be further explicated in the procedure section; however, it is necessary to explain how and why the provided construct labels were chosen.

Role Rep Test--Provided Constructs

Constructs were provided on the Role Rep grids rather than elicited from the subjects because the focus of the present research was on structural properties of the Role Construct Repertory Test and not the particular construct systems of individual subjects. While Kelly's theory implies that individuals will construe even these construct labels in their own unique fashions, it is reasonable to assume that there is greater homogeneity of usage of clearly described, provided constructs than in the elicited construct situation. This also serves to make data move easily interpretable.

To maximize the Role Rep Test methodology it was necessary to provide a fairly large number of construct labels which represent relatively independent dimensions. It was also critical that the dimensions chosen should be relevant for assessing the personality characteristics of individuals and that they be adaptable for use with a rating scale.

The dimensions which met these criteria and were utilized in the present research were the 16 basic personality factors taken from the Sixteen Personality Factor Questionnaire developed by

R. B. Cattell (1957). Cattell's major assumption in developing the 16PF centered upon his conception of a source trait. A source trait is that major causal entity derived from factor analysis which lies behind the more superficial clusters of associated personality variables. In other words, the innumerable dimensions of personality alluded to by theorists of different persuasions (i.e., Freudian, Jungian, etc.) with their organization and complexity which determine behaviour, should be revealed in these factors of source traits. The method for discovering these invariant and stable source traits is blind rotation of the obtained factors to oblique simple structure. Thus, Cattell relied basically upon the internal evidence of consistent clustering rather than on correlations with an external criterion.

Cattell's basic personality factors were extracted from data provided by successively reducing the complete list of personality trait-names given by Allport and Odbert (1936). By this method he hoped to ensure comprehensive coverage of the whole 'sphere' of personality. The first half-dozen in the following list have been established repeatedly, and the other nine, though possessing smaller variance, have been replicated in several studies either by Cattell or other factorists. Neologistic names have been assigned to many of the latter, since they necessarily represent qualities which have not been widely recognized in clinical or lay usage, however, these names were not utilized in the present research and instead descriptions of the traits were provided (See Appendix C).

a) Schizothyme-cyclothyme (easygoing, warm-hearted, frank vs. reserved, obstructive).

b) Intelligence, not simply the cognitive ability but the complex of associated intellectual and personality qualities.

c) Ego-strength vs. neuroticism (stable, mature vs. emotional, undependable).

d) Excitability vs. security (nervous, demanding vs. self-controlled). This does not always separate off clearly.

e) Dominance vs. submissiveness (forceful, assertive vs. timid).

f) Surgency-desurgency (cheerful vs. depressed). Note that this is distinguished from cyclothyme-schizothyme.

g) Super-ego strength (conscientious, persevering vs. frivolous, indolent).

h) Parmia vs. harria (dependent, feminine, hysterical vs. hard, practical, self-sufficient).

i) Coasthenia vs. zeppia (neurasthenic, obsessional vs. vigorous).

j) Comention vs. abcultion (refined, cultured vs. philistine).

k) Protension vs. inner relaxation (paranoid vs. trustful).

l) Autia vs. praxernia (unconventional, ideational vs. conformist, sensational).

m) Shrewdness vs. naivete.

n) Guilt proneness vs. confidence.

The 16PF purportedly assesses 16 normal personality dimensions.

As stated before, these factors are claimed by the authors to be source traits as opposed to surface traits as typically measured by other tests. In addition, the dimensions are presented in the bi-polar format appropriate to the present effort.

Therapy Rating Form

The questionnaire designed by the author for the purposes of the present investigation will be referred to as the Therapy Rating Form. The fifty-five (55) statements which make up the Rating Form were developed by the investigator to tap a number of areas relevant to the participant's reactions to the film segments to be presented. More specifically, our interest was in having the subject make judgements regarding: (a) the three therapists in the film to be viewed, (b) the client interviewed by the therapists in the film, (c) the effectiveness of the three therapists in treating a variety of problems, and (d) the participants general attitudes towards psychotherapy.

A rating scale consisting of the numbers 1 through 7 accompanied each statement on the form. A value of 1 denoted the least preferred aspect of the variable being assessed and the number 7 denoted the most preferred aspect of that variable. For example, the following item was presented: "Rate how similar you feel you are to each of the therapists." The subject then assigned a value for each of the three therapists in relation to this statement. An assigned value of 1 indicated that the subject felt extremely dissimilar from the particular therapist being evaluated; a value of 2 indicated a moderate

degree of dissimilarity; and a value of 7 indicated that the subject felt extremely similar to the therapist in question. Other values, of course, indicated ratings between the extremes. (See Appendix D for a complete description of the Therapy Rating Form).

A personal information sheet was also devised by the author which each subject was required to complete. The purpose of the questionnaire was to obtain demographic information about the subjects which was used in describing the subject population. The following general variables were: sex, age, marital status, religion (optional), race, occupation, educational and socioeconomic level, and psychotherapy experience (as therapist and/or patient) (See Appendix E).

Apparatus

A series of films titled "Three Approaches to Psychotherapy" (Shostrom, 1966) were utilized in this research. Three therapists are presented in the films, each of whom has founded his own "school" of psychotherapy; a) Carl Rogers - Client-Centered Therapy; b) Frederick Perls - Gestalt Therapy; and c) Albert Ellis - Rational-Emotive Therapy. Each therapist works individually with the same client, Gloria, on the same afternoon. In the original film the segments are presented in the order listed above. For the purposes of this study, however, the segments were recorded on individual video cassettes so that the order of presentation could be varied. This randomization balanced for order effects. Hopefully, this

avoided any bias in the subjects due to fatigue toward the end of viewing and the varying lengths of the film segments.

Each film segment represents an initial therapy session and typifies the three therapists' styles of therapy. The segment on Carl Rogers interviewing the client, Gloria, lasted approximately 32 minutes, the Perls segment lasted approximately 23 minutes and Ellis' segment lasted approximately 17 minutes. The film also includes introductions and summations by the therapists, and a summation by the client, Gloria. These segments were not shown to the subjects, however, in order to avoid any bias in their ratings of the therapists.

The film segments were reproduced on individual KCA 60 Sony Video cassettes and were presented to the subjects using a Sony Video Player and an RCA 21 inch colour television set.

Procedure

The subjects were tested in small groups by the experimenter. For our purposes a small group is defined as between 6 and 10 individuals. Each subject viewed the three segments of the psychotherapy film in the initial phase of testing. The total time required for viewing the tapes was approximately 74 minutes. The order of presentation of each of the therapists was varied randomly with each of the groups in order to control for any order effects. After viewing the tapes, each of the subjects was given the Therapy Rating Form which is found in Appendix D. As previously described this

form was an attempt to assess how the viewer perceived the tapes along various dimensions. Seven-point rating scales were utilized by the subject to indicate how well or how poorly that particular statement agreed with the subject's opinion about that topic. This form required approximately 15 - 20 minutes to complete. Attached to the Therapy Rating Form was the Personal Information Sheet. The completion of this form required approximately another 10 minutes.

After completing the above described forms, the subjects were given a set of instructions for the Role Rep Test procedures. These instructions are printed in Appendix F. The first step in this process required the subject to list the names of the people who corresponded to the role titles listed on the Role Specification Sheet (See Appendix A). In all there were 22 names which the subject listed on this form before he or she could proceed to the next step. These 22 names were then transferred to the Role Rep grid form itself. The experimenter assisted the subject in listing the names in the appropriate slots on the top of the Role Response Sheet (See Appendix B for this form). The instructions then required that the subject rate each person (element) in each row on either the construct or the contrast provided, depending on which described the person better. These provided constructs and contrasts, are descriptions of Cattell's primary source traits (See Appendix C and the discussion of Cattell's work on pages). Utilization of these dimensions also provides the potential for future comparison and analyses of the data.

In completing this form, the first element to be considered was the self. The subject decided whether the construct or the contrast applied to himself/herself and once decided upon, his or her task was to judge how well that polarity described the self. The rating was done on a seven point scale; three of the points (5, 6, and 7) referred to the construct, three of the points (1, 2, and 3) referred to the contrast and one point (4) indicated that neither was applicable. Thus, if the subject chose the construct, "reserved" as applying to himself/herself he or she would then have to decide if it applied definitely (7), moderately (6) or mildly (5). If on the other hand, the subject chose the contrast "warm-hearted" as applying to himself/herself he would then have to decide if it applied definitely (1), moderately (2) or mildly (3). In some cases, the subject decided that neither the construct nor the contrast adequately described the element in question and would have then assign a value of 4, indicating that neither applied. The subject proceeded across the row and assigned a rating for each of the elements. The subject then followed the same procedure for each of the 22 rows in the grid. Completion of the Role Rep grid was the last step in the testing procedure.

Statistical Analyses

Part A. Grid Analyses

I. Technique For Comparison of Grid Data. Each subject completed an individual grid of 22 elements by 16 bi-polar constructs.

To compare the data from the 52 individual grids, a group grid was derived by entering a mean score for all 52 subjects for each element-construct cell. The combined group grid formed a new 16 by 22 grid of means scores for all subjects. This type of analysis assumes that there are structural properties i.e., mathematical relationships between the elements and constructs which reflect the psychological processes of the group, irrespective of the specific data generated by an individual in the total sample (Slater, 1977).

II. Univariate Statistics for Constructs. (1) A mean score was derived for each construct across all elements in each of the 16 rows of the grid. (2) A variance estimate was calculated for the constructs using the standard variance formula. (3) The total variance about the construct means was calculated. (4) The variance estimates were used to calculate the percentage of the total variance accounted for by each construct. (5) A variability estimate of the tendency for subjects to use ratings at both ends of the scale while not utilizing the middle ratings was calculated according to a formula provided by Slater (1977). (6) A bias estimate of the tendency for subjects to use ratings at one end of the scale was calculated according to a formula provided by Slater (1977).

III. Univariate Statistics for Elements. (1) A mean score was derived for each element across all constructs in each of the 22 columns of the grid. (2) A variance estimate was calculated for the elements using the standard variance formula. (3) The total variance about the element means was calculated. (4) The

variance estimates were used to calculate the percentage of the total variance accounted for by each element. (5) A variability estimate was calculated as previously described. (6) A bias estimate was calculated as previously described.

IV. Construct Intercorrelations. The intercorrelations of each construct by all other constructs were calculated using the mean scores of all subjects. These scores resulted in a 16 by 16 matrix of construct intercorrelations.

V. Element Intercorrelations. The intercorrelations of each element by all other elements were calculated using the mean scores of all subjects. These scores resulted in a 22 by 22 matrix of element intercorrelations.

These correlation matrices provide the researcher with considerable information regarding the nature and composition of the constructs or elements under investigation. However, since the focus of the present investigation was on the structural properties of the group grid rather than a content analysis of individual grids, the correlation matrices were calculated to allow a principal components analysis of the group grid data.

VI. Principal Components Analysis of Construct Variables. (1) All construct variables were intercorrelated and factored across all elements using a principal component analysis without rotation. (2) Graphical plots of the loadings of the elements on the first three construct factors were provided for visual inspection.

VII. Principal Components Analysis of Element Variables. (1)

All element variables were intercorrelated and factored across all constructs using a principal components analysis without rotation. (2) Graphical plots of the loadings of the constructs on the first three factors were provided for visual inspection.

These analyses were performed to extract the minimum number of independent dimensions that account for the variance in the original set of variables. The PCA provided a number of other measures with which to describe the data e.g., the number of factors, factor scores, eigen values and factor loadings.

Part B. Therapy Rating Form Analyses

I. Principal Component Analysis with Varimax Rotation of TRF Items. All items of the TRF were intercorrelated and factored to obtain information about the basic structure of the TRF. The resultant factor pattern was then reviewed to determine whether the factors represented interpretable dimensions of preference for a particular therapist or combination of therapists.

II. Factor Scores. Factor scores were calculated for all subjects on the first three factors. Therefore, each subject had a set of three scores for all 55 items of the TRF across the three factors. These scores indicated the subjects' preferences for the therapists as represented by the factors.

III. Cluster Analysis of Factor Scores. A cluster analysis of the above factor scores was performed in order to identify groups of subjects who responded similarly in their therapist preferences.

IV. Analysis of Variance of Clusters and Factors. An analysis of variance provided the following information: (1) Whether the mean scores of the subjects in each cluster showed statistically significant differences and; (2) Whether the groups were identifiable along preference dimensions as represented by the factors.

Part C. Analysis of Relationship Between Grid and TRF

I. Multivariate Analysis of Variance. A multivariate analysis of variance was performed in order to determine: (1) Whether subjects utilized the sixteen Role Rep constructs to differentially rate the three therapists and, if so, which constructs were thus employed; (2) whether the defined preference groups utilized the constructs differentially in rating the three therapists and, if so, which constructs and; (3) what was the nature of the relationship between the overall differential ratings of therapists and preference group differences.

CHAPTER III

RESULTS

The results of this study will be presented in three sections. Under the heading, Grid Analyses, Part A will focus on the analysis of the Role Construct Repertory Test grids completed by 52 subjects. This section describes the transformation of the 52 individual grids into a group grid and then the utilization of both univariate and multivariate procedures in the analyses of this derived group grid. Part B will focus on the analyses of the second instrument utilized in this research, the Therapy Rating Form. This section includes a structural analysis of the questionnaire, itself, and the specification of therapist(s) preference groups among the 51 subjects who completed the form. In Part C of the results section an attempt is made to integrate the individual subjects' grid data with their responses on the Therapy Rating Form. This involves utilizing the groups of subjects determined in Part B who had preferences for one or more of the therapists and then determining what structural properties of their individual grids are associated with those therapist preferences.

Part A. Grid Analyses

I. Technique for Comparison of Grid Data. The primary analysis of the Role Rep Test grid data required combining the 52 individual grids into a group grid in order to obtain an overall representation of the group data. Prior to the study it was impossible to anticipate

what pattern of relationships would emerge from the grid data. Therefore, it seemed important to first utilize a nomothetic analysis which would provide an overall appreciation of these relationships, or structural variables, as well as reference parameters for any further analyses of the individual grids.

The raw data used for the formation of the group grid consisted of the 52 individual grids completed by the subjects. Each grid had 22 element columns and 16 construct rows. The element variables represented the 22 role titles (Appendix A) and the construct variables were the 16 bi-polar personality dimensions taken from the 16PF (Appendix C). The raw scores consisted of whole integers ranging from 1 to 7 taken from the provided rating scale (Appendix G). To collapse the data for analysis of the structural properties, a group grid was derived by calculating the mean score of all subjects for each construct-element cell (Table 1). For example, in Table 1, the mean score of 2.58 in cell one (the intersect of construct 1, "Reserved/ Outgoing" and element 1, "Self" in the upper left hand corner) represents the scores of all subjects in that cell divided by N=52. As seen in Table 1, there were a total of 352 construct-element pairings. This grid and its transpose provided the matrices used in further analyses.

The univariate statistics which follow will describe the group grid in the same manner that would be used if the analyses applied to an individual grid. The rationale and assumptions, as well as selected research designs utilizing this method, can be found in

Table 1

Group Grid: Mean Scores Of Each Construct-Element Cell For All 52 Subjects

CONSTRUCTS	ELEMENTS										
	1	2	3	4	5	6	7	8	9	10	11
1	2.58	1.63	2.81	2.92	2.37	2.69	2.44	3.69	3.19	3.00	3.38
2	2.12	1.62	2.71	2.29	2.40	2.15	2.29	3.35	3.67	1.81	1.77
3	3.56	1.96	3.79	3.27	2.92	3.27	3.31	3.96	5.38	1.83	2.08
4	3.83	2.56	3.98	3.54	3.29	3.27	3.40	3.67	4.63	2.83	2.08
5	3.12	2.48	4.04	3.96	2.96	2.96	2.67	3.67	3.90	4.52	3.96
6	2.31	2.04	1.96	2.17	2.58	2.71	2.67	3.69	3.00	2.37	2.94
7	4.00	2.71	3.90	3.38	3.23	3.35	3.40	3.60	4.35	3.31	2.58
8	3.81	4.23	3.56	4.69	4.15	4.35	3.58	3.87	2.85	4.38	5.27
9	5.56	6.27	4.65	5.27	5.50	4.87	5.37	3.73	3.58	4.77	4.06
10	4.40	4.08	5.04	5.17	4.37	4.52	4.08	4.17	4.85	4.94	3.96
11	5.10	4.92	5.02	4.79	4.96	4.73	4.83	4.04	4.58	3.85	3.13
12	4.31	5.94	4.12	4.56	4.81	4.50	4.85	3.83	2.44	5.94	6.04
13	3.27	3.00	5.25	4.90	3.52	3.52	3.04	3.67	4.33	3.85	3.19
14	2.98	1.92	4.06	3.23	3.52	2.85	2.83	3.85	5.00	2.25	1.98
15	2.56	2.42	2.44	2.46	2.94	2.79	3.04	3.77	3.63	2.62	2.27
16	4.00	5.19	4.06	4.31	4.50	4.12	4.67	3.88	2.65	5.44	4.85

Table 1 Continued

ELEMENTS

CONSTRUCTS	12	13	14	15	16	17	18	19	20	21	22
I	3.21	4.50	3.73	4.52	2.44	3.94	4.50	3.35	3.08	2.13	2.23
2	1.77	3.29	3.71	2.88	2.37	3.13	3.98	2.19	1.77	1.83	1.81
3	2.00	4.37	4.94	4.44	2.92	3.69	4.79	2.44	2.56	2.33	2.21
4	2.02	2.71	4.40	2.17	3.29	2.56	2.62	2.10	2.40	3.12	2.85
5	3.98	4.19	4.17	3.79	2.67	3.88	3.83	4.48	3.71	2.25	2.75
6	2.69	4.37	3.85	3.65	3.23	3.27	4.71	1.92	2.29	2.19	2.29
7	2.63	3.35	4.44	2.98	2.81	3.31	2.58	3.40	2.79	2.83	3.00
8	5.15	4.81	3.38	5.25	3.67	4.50	5.06	5.12	5.06	3.98	3.69
9	4.15	2.73	3.46	2.94	5.19	3.58	2.48	4.52	5.06	5.52	5.56
10	4.19	4.23	3.96	3.83	3.67	4.77	3.60	4.96	4.67	4.25	4.08
11	2.75	3.15	4.29	3.21	4.65	3.42	3.27	4.08	4.13	4.83	4.67
12	5.92	4.12	2.79	4.29	5.19	4.52	3.94	5.50	5.50	5.69	5.38
13	3.06	3.63	4.31	3.83	3.25	3.75	3.54	4.71	3.58	3.21	3.33
14	1.98	3.65	4.67	3.37	3.23	2.94	3.67	2.27	2.44	2.35	2.29
15	2.96	3.85	3.81	4.13	3.13	3.44	4.81	2.21	2.52	2.21	2.60
16	4.46	3.33	3.65	3.10	4.44	4.15	2.94	4.63	4.65	5.04	4.42

Slater (1976, 1977).

II. Univariate Statistics For Constructs. Table 2 presents the descriptive statistics of the construct variables based on the group grid data for all subjects. The following statistics are presented: 1) a row mean for each construct across twenty-two elements; 2) a sum of squared deviations from the mean of each row (SS) for each construct across twenty-two elements; 3) the standard deviation for each construct across 22 elements; 4) the total sum of squared deviations around the construct means; 5) the percentage of the total SS accounted for by each construct variable; 6) a variability estimate of the total construct variable indicating a tendency for subjects to use ratings at both ends of the rating scale while not utilizing the middle ratings; and 7) a bias estimate of the total construct variable indicating a tendency for subjects' ratings to group at one pole of the rating scale.

The column labelled row mean in Table 2 presents the mean ratings of the twenty-two elements for each of the sixteen constructs. While construct labels are printed in the table, these statistics will be further clarified by referring to the construct descriptions and the rating scale utilized which are presented in Appendices C and G respectively. Construct 1, for example, refers to the construct/contrast pair, "Reserved-Outgoing." The mean rating of 3.11 indicates that, overall, the subjects rated elements toward the lower end of the seven-point scale which refers to the contrast pole, "outgoing." The mean ratings range from 2.50 to 4.74 with ten of the sixteen

Table 2

Univariate Statistics For Constructs

Derived From Group Grid

	Construct	Row Mean	Sum of Squared Deviations (SS)	Standard Deviation	Row SS As % of Total SS
1.	Reserved/Outgoing	3.11	13.38	.80	6.57
2.	Less Intelligent/More Intelligent	2.48	11.21	.73	5.51
3.	Affected by Feelings/Emotionally Stable	3.30	23.28	1.05	11.44
4.	Humble/Assertive	3.08	11.69	.75	5.74
5.	Sober/Happy-Go-Lucky	3.56	9.68	.68	4.76
6.	Expedient/Conscientious	2.82	13.01	.79	6.40
7.	Shy/Venturesome	3.32	6.17	.54	3.03
8.	Tough-minded/Tender-minded	4.29	10.19	.70	5.01
9.	Trusting/Suspicious	4.51	23.13	1.05	11.36
10.	Practical/Imaginative	4.39	4.35	.45	2.14
11.	Forthright/Shrewd	4.22	11.56	.74	5.68
12.	Placid/Apprehensive	4.69	20.54	.99	10.09
13.	Conservative/Experimenting	3.72	8.14	.62	3.99
14.	Group Dependent/Self-Sufficient	3.05	15.58	.86	7.66
15.	Undisciplined/Controlled	3.00	10.63	.71	5.22
16.	Relaxed/Tense	4.18	10.97	.72	5.39

Total SS About Construct Means = 203.509

Bias Estimate = .219011

Variability Estimate = .221233

constructs receiving average ratings less than 4.00. This indicates that, overall, the contrast poles of the sixteen dimensions tended to be more salient for evaluating the element variables.

Other research, utilizing elicited rather than provided constructs, has shown that the construct poles are usually more salient for describing element variables and tend to represent posivitvely-valenced characteristics. This is consistent with other personality research, for instance, Osgood (1957), who in the development of the Semantic Differential found that the primary dimension which consistently emerged from factor analyses was an evaluative dimension. A quick scan of the construct-contrast descriptions utilized in the present study (Appendix C) indicates that, in general, more positively valued characteristics tend to be found among the contrast descriptions, however, explaining the apparent reversal of expected results.

The means of the ten dimensions which were less than 3.0 and their associated contrast labels can be rank-ordered as follows: 2) More Intelligent (2.50), 6) Conscientious (2.86), 15) Controlled (3.03), 4) Assertive (3.06), 14) Self-sufficient (3.06), 1) Outgoing (3.11), 7) Venturesome (3.27), 3) Emotionally Stable (3.28), 5) Happy-Go-Lucky (3.54) and 13) Experimenting (3.72).

While none of the mean ratings fell in the 5-7 range denoting a clear construct preference, those which exceeded 4.0 can be interpreted to show a tendency toward ratings in that direction. Those means, hierarchically arranged with their associated construct labels are as follows: 11) Forthright (4.20), 16) Relaxed (4.20), 8)

Tough-minded (4.29), 10) Practical (4.35), 9) Trusting (4.49) and 12) Placid (4.74). This shift toward the construct pole can perhaps be partially explained as a shift away from negatively valenced or less valued qualities. Three of the contrasts which were rejected were: 9) Suspicious, 12) Apprehensive and 16) Tense. These are probably the three most clearly negative descriptors among the total thirty-two. Two of the contrasts (8) Tender-minded and 10) Imaginative) have clearly feminine connotations and research has generally found feminine traits to be less valued than masculine qualities, again, supporting a shift in construct usage away from the negative. These results are important since they appear to indicate an almost unilateral approach to construct utilization.

The second and third columns in Table 2 present the sum of squared deviations about the mean (SS) and the standard deviation for each construct. In the present context these statistics represent the degree to which the 1-7 range was utilized in rating the elements along each dimension. Thus, a construct with a relatively low SS was applied in a similar manner across elements or, in Kelly's terms, had a narrow range of convenience. The opposite is true, however, of a construct with a relatively large variance estimate. This type of construct enabled the subject to appreciate the elements differentially and, in most instances, this indicates a more useful dimensions. The last column in Table 2 presents an estimate of the percent ratio contribution of each construct SS to the total SS about the construct means.

The results presented in Table 2 indicate that Construct 10, Practical/Imaginative, had the most limited variance component, 4.35, with a standard deviation of .45. This means that the construct was used in a relatively narrow fashion. From the subject's perspective, the elements were appreciated very similarly in terms of this construct. Element ratings varied minimally around a mean of 4.39 with 68% of the responses falling within $\pm$.45 of the mean. This can be interpreted to indicate that most elements were rated slightly more along the Practical dimensions but that few elements were seen as extreme in either direction.

The constructs which accounted for the largest percentage of the total variance and had the largest standard deviations were Construct 3 (Affected By Feelings/Emotionally Stable) and Construct 9 (Trusting/Suspicious), both of which had standard deviations of 1.05. Thus, both of these dimensions had relatively broader ranges of convenience and were more useful to the subjects in discriminating the element variables.

The above discussion illustrates briefly how the statistics in Table 2 can be interpreted. Overall, it appears that the more positively-valenced construct poles were the preferred descriptors and, as reflected in the variance estimates, most had intermediate ranges of convenience for the appreciation of the element variables.

III. Univariate Statistics for Elements. Table 3 presents the descriptive statistics of the element variables for all subjects. The following statistics were computed: 1) a column mean for each

element across 16 constructs; 2) the sum of squared deviations from the mean (SS) for each element across 16 constructs; 3) the standard deviation for each element across 16 constructs; 4) the total SS about the element means; 5) the percentage of the total SS accounted for by each element variable; 6) a variability estimate of the total element variable (as described above).

Overall, the means are extremely similar ranging only from 3.31 (Ellis) to 3.97 (Pitied Person). It should be noted that the means of all of the more positive role figures are closer to 3.0 or the contrast pole of the provided dimensions. As mentioned in the preceding section, other research utilizing the Role Rep Test with elicited constructs seems to indicate that the construct pole is usually more positively valenced while the contrasting qualities are associated with more negative characteristics. Since more positively valenced characteristics tended to be associated with the contrast descriptions in the present research, however, the mean ratings of positive role figures close to 3.0 are rational and expected results.

If the means are hierarchically arranged, Ellis (3.31) and Perls (3.41) both fall into the lowest, or apparently most positively valenced, quadrant while Rogers (3.61) is just below the median. This indicates that the therapists, especially Ellis and Perls, were rated in the same manner as other positively valenced important role figures in the subjects' lives. The tendency to move from neutral to positive evaluations as mean ratings approach 3.0 can be observed by ordering the means: self (3.59), spouse (3.54), friend (3.53),

Table 3

Univariate Statistics For Elements

Derived from Group Grid

	Element	Row Mean	Sum of Squared Deviations (SS)	Standard Deviations	Row SS As % Of Total SS
1	Self	3.59	14.35	.95	4.18
2	Ideal Self	3.31	36.79	1.52	10.71
3	Mother	3.84	13.63	.92	3.97
4	Father	3.81	16.24	1.01	4.73
5	Bro/Sis	3.63	14.16	.94	4.13
6	Spouse	3.54	10.96	.83	3.19
7	Friend	3.53	13.68	.92	3.98
8	X Friend	3.78	.55	.19	.16
9	Gloria	3.88	12.02	.87	3.50
10	Rogers	3.61	25.09	1.25	7.31
11	Perls	3.41	22.81	1.19	6.64
12	Ellis	3.31	22.33	1.18	6.50
13	Rejecting	3.77	6.08	.62	1.77
14	Pitied	3.97	4.36	.52	1.27
15	Threatening	3.65	8.98	.75	2.61
16	Attractive	3.51	12.27	.88	3.57
17	Uncomfortable	3.68	5.44	.58	1.59
18	Harmful	3.77	10.71	.82	3.12
19	Authority	3.62	24.12	1.23	7.02
20	Successful	3.51	21.31	1.15	6.21
21	Normal	3.36	26.47	1.29	7.71
22	Helpful	3.32	20.99	1.15	6.12

Total SS About Element Means = 343.358

Bias Estimate = .169745

Variability Estimate = .398701

successful (3.51), attractive (3.51), normal (3.36), helpful (3.32), ideal self (3.31). Since the mean rating for Ellis is equivalent to the ideal self, he appears to be the most positively rated across constructs while Rogers seems more neutral coming near the median between self (3.59) and authority (3.62).

Consistent with the above, it can be seen that role figures seem to be more negative as ratings increase and move toward the construct pole: authority (3.62), threatening (3.65), uncomfortable (3.68), rejecting (3.77), harmful (3.77), X-friend (3.78), pitied (3.97). Interestingly, Gloria (3.88), the patient in all three segments is rated very close to the pitied person as are mother (3.84) and father (3.81). This particularly negative rating of parental figures may be more meaningful if it is remembered that most of the undergraduates who participated in the study were entering young adulthood and, perhaps it could be assumed, were in the process ~~of~~ differentiation from the natal family.

The sum of squared deviations from the mean (SS), the standard deviation and the SS as percentage of total SS are three methods of expressing the dispersion of construct scores around the element means. The standard deviations for Ellis (1.18), Perls (1.19) and Rogers (1.25) indicate that a very similar range of constructs was utilized in describing the three therapists. In comparison with the standard deviations of the other role figures, however, the range of usage was quite broad. The measures of dispersion also indicate that, along with the therapists, other valued, desirable

figures were given more diverse ratings; for example, helpful (S.D. = 1.15), successful (1.15), authority (1.23), normal (1.29), and ideal self (1.52). In contrast, the more negative figures were defined in a much narrower manner as the six lowest standard deviations reveal: X-friend (S.D.=0.16), pitied (S.D.=0.52), uncomfortable (S.D.=0.58), rejecting (S.D.=0.62), threatening (S.D.=0.75) and harmful (S.D.=0.82). These six figures account for only 10.5% of the total SS. These findings demonstrate that negatively valenced figures tend to be defined in a much narrower, more stereotyped way than positive figures, including the therapists, who elicited a broader range of construct utilization.

These findings, of course, offer a myriad of possibilities for making hypotheses, in addition to the relatively few offered above concerning the relationships among the 22 elements. While the group grid in Table 1, the initial simplification of the raw data, reduced the data to 352 bits of information. Tables 2 and 3 further reduced the complexity of the matrices by summarizing the data in the statistics presented above. A principal components analysis was next undertaken in order to bring further precision to the findings. A principal components analysis allowed consideration of the relationships between constructs, between elements and between constructs and elements. It should be kept in mind that the same data base is being utilized, however, and that the PCA simply involves a further revision of the data presented in Tables 2 and 3.

IV. Construct Intercorrelations. Table 4 presents the matrix of construct correlations (matrix a) which was the first step necessary to allow a PCA of the constructs. These Pearson Product Moment correlations represent the degree of similarity between any two construct variables. Correlations ranging from +.40 to +1.00 represent an increasing degree of correspondence while negative correlations decreasing from -.40 to -1.00 indicate a decrease in correspondence or an increase in dissimilarity in the ratings of the two constructs as applied to the 22 element variables. The intermediate correlations from -.39 to +.39 can be interpreted as showing no significant pattern of correspondence in the construct ratings. The 16 X 22 grid produced 352 correlation coefficients.

V. Element Intercorrelations. The matrix of element intercorrelations is presented in Table 5. As described above for the construct variables, this table presents the correlations between elements which portray the degree of relationship between any two of the 22 element variables. The 22 X 16 grid used in generating these correlations also produced 352 correlation coefficients which can be interpreted in the manner described above.

VI. PCA of Construct Variables. Principal components analyses (PCA) were performed on the two major matrices (A and B) in order to further simplify this vast amount of data. These analyses serve to identify the minimum number of independent dimensions needed to account for the major sources of variance in both construct variables and element variables.

Table 4

Matrix of Construct Intercorrelations For All 52 Subjects

Constructs	1	2	3	4	5	6	7	8
1	1.00	.69	.61	-.20	.71	.78	.08	.45
2	.69	1.00	.93	.43	.37	.79	.48	-.23
3	.61	.93	1.00	.55	.28	.67	.60	.31
4	-.21	.43	.55	1.00	-.11	.01	.82	-.87
5	.71	.37	.28	-.11	1.00	.26	.28	.37
6	.78	.79	.67	.01	.26	1.00	.01	.13
7	.08	.48	.60	.82	.28	.01	1.00	-.66
8	.45	-.23	-.31	-.87	.37	.13	-.66	1.00
9	-.96	.78	-.68	.09	-.65	-.84	-.13	-.28
10	-.14	-.15	-.10	.20	.40	-.58	.42	-.06
11	-.78	-.23	-.07	.64	-.59	-.58	.39	-.69
12	-.44	-.88	-.96	-.73	-.25	-.53	-.76	.49
13	.26	.36	.38	.37	.61	-.13	.57	-.11
14	.39	.86	.91	.75	.25	.51	.72	-.53
15	.74	.86	.78	.12	.24	.92	.13	.00
16	-.67	-.85	-.92	-.34	-.30	-.69	-.40	.12

Constructs	9	10	11	12	13	14	15	16
1	-.96	-.14	-.78	-.44	.26	.39	.74	-.67
2	-.78	-.15	-.23	-.88	.36	.86	.86	-.85
3	-.68	-.10	-.07	-.96	.38	.91	.78	-.92
4	.09	.20	.64	-.73	.37	.75	.12	-.34
5	-.65	.40	-.59	-.25	.61	.25	.24	-.30
6	-.84	-.58	-.58	-.53	-.13	.51	.92	-.69
7	-.13	.42	.39	-.76	.57	.72	.13	-.40
8	-.28	-.06	-.69	.49	-.11	-.53	.00	.12
9	1.00	.21	.75	.54	-.23	-.50	-.81	.74
10	.21	1.00	.27	-.03	.67	.03	.47	.18
11	.75	.27	1.00	-.10	.15	.14	-.46	.24
12	.54	-.03	-.10	1.00	-.45	-.95	-.66	.85
13	-.23	.67	.15	-.45	1.00	.51	.02	-.29
14	-.50	.03	.14	-.95	.51	1.00	.63	-.79
15	-.81	-.47	-.46	-.66	-.02	.63	1.00	-.80
16	.74	.18	.24	.85	-.29	-.79	-.80	1.00

Table 5

Matrix of Element Intercorrelations For All 52 Subjects

Elements	1	2	3	4	5	6	7	8	9	10	11
1	1.00	.84	.75	.83	.91	.93	.92	.53	.10	.65	.46
2	.85	1.00	.55	.80	.96	.93	.95	.43	-.37	.85	.76
3	.75	.55	1.00	.88	.69	.70	.59	.48	.41	.55	.28
4	.83	.80	.88	1.00	.85	.90	.75	.54	.02	.80	.64
5	.91	.96	.70	.85	1.00	.95	.95	.55	-.13	.76	.62
6	.93	.93	.70	.90	.95	1.00	.93	.65	-.11	.78	.68
7	.92	.95	.59	.75	.95	.93	1.00	.53	-.16	.72	.58
8	.53	.43	.48	.54	.55	.65	.53	1.00	.25	.39	.34
9	.10	-.37	.41	.02	-.13	-.11	-.16	.25	1.00	-.45	-.67
10	.65	.85	.55	.80	.76	.78	.72	.39	-.45	1.00	.91
11	.46	.76	.28	.64	.62	.68	.58	.34	-.67	.91	1.00
12	.44	.75	.25	.62	.61	.66	.57	.34	-.65	.90	.98
13	-.40	-.26	-.34	-.14	-.33	-.15	-.37	.26	-.23	.01	.31
14	-.13	-.58	.18	-.22	-.37	-.35	-.37	.09	.88	-.60	-.75
15	-.19	-.03	-.18	.06	-.09	.07	-.15	.33	.27	.13	.42
16	.80	.95	.49	.69	.94	.87	.95	.47	-.31	.72	.64
17	.28	.50	.27	.56	.40	.54	.36	.51	-.39	.72	.81
18	-.59	-.40	-.59	-.42	-.47	-.36	-.49	-.08	-.21	-.33	.02
19	.61	.76	.64	.87	.70	.77	.61	.39	.34	.92	.88
20	.72	.90	.56	.86	.85	.89	.79	.52	-.41	.94	.92
21	.86	.98	.61	.82	.96	.94	.96	.49	-.31	.84	.74
22	.87	.99	.62	.83	.96	.94	.95	.45	-.31	.86	.74

Elements	12	13	14	15	16	17	18	19	20	21	22
1	.44	-.40	-.13	-.19	.80	.28	-.59	.61	.73	.86	.87
2	.75	-.26	-.57	-.03	.95	.50	-.40	.76	.90	.98	.99
3	.25	-.34	.18	-.18	.49	.27	-.59	.64	.56	.61	.62
4	.63	-.14	-.22	.06	.69	.56	-.42	.87	.86	.82	.83
5	.61	-.33	-.37	-.09	.94	.40	-.47	.70	.85	.96	.96
6	.66	-.15	-.35	-.07	.87	.54	-.36	.77	.89	.94	.94
7	.57	-.37	-.37	-.15	.95	.36	-.49	.61	.79	.96	.95
8	.34	.26	.09	.33	.47	.51	.08	.39	.52	.49	.45
9	-.65	-.23	.88	-.27	-.31	-.39	-.21	-.34	-.41	-.31	-.31
10	.90	.01	-.60	.13	.72	.72	-.33	.92	.94	.84	.86
11	.98	.31	-.75	.42	.64	.81	.02	.88	.92	.74	.74
12	1.00	.33	-.77	.46	.62	.84	.05	.86	.91	.71	.73
13	.33	1.00	-.16	.90	-.30	.59	.85	.16	.10	-.27	-.27
14	-.77	-.16	1.00	-.27	-.50	-.53	-.13	-.51	-.60	-.52	-.53
15	.46	.90	-.27	1.00	-.08	.67	.82	.33	.30	-.06	-.05
16	.62	-.30	-.50	-.08	1.00	.34	-.37	.59	.79	.95	.94
17	.84	.59	.53	.67	.34	1.00	.28	.81	.77	.49	.49
18	.05	.85	-.13	.82	-.37	.28	1.00	-.19	-.18	-.44	-.45
19	.86	.15	-.51	.33	.59	.81	-.19	1.00	.93	.75	.77
20	.91	.10	-.60	.30	.79	.77	-.18	.93	1.00	.89	.90
21	.71	-.27	-.52	-.06	.95	.49	-.44	.75	.89	1.00	.98
22	.73	-.28	-.53	-.05	.94	.49	-.45	.77	.90	.98	1.00

Table 6 presents the three factor solutions obtained from the PCA of construct variables. The plots of Factor I versus Factor II, Factor I versus Factor III and Factor II versus Factor III are found in Figures 1, 2 and 3 respectively.

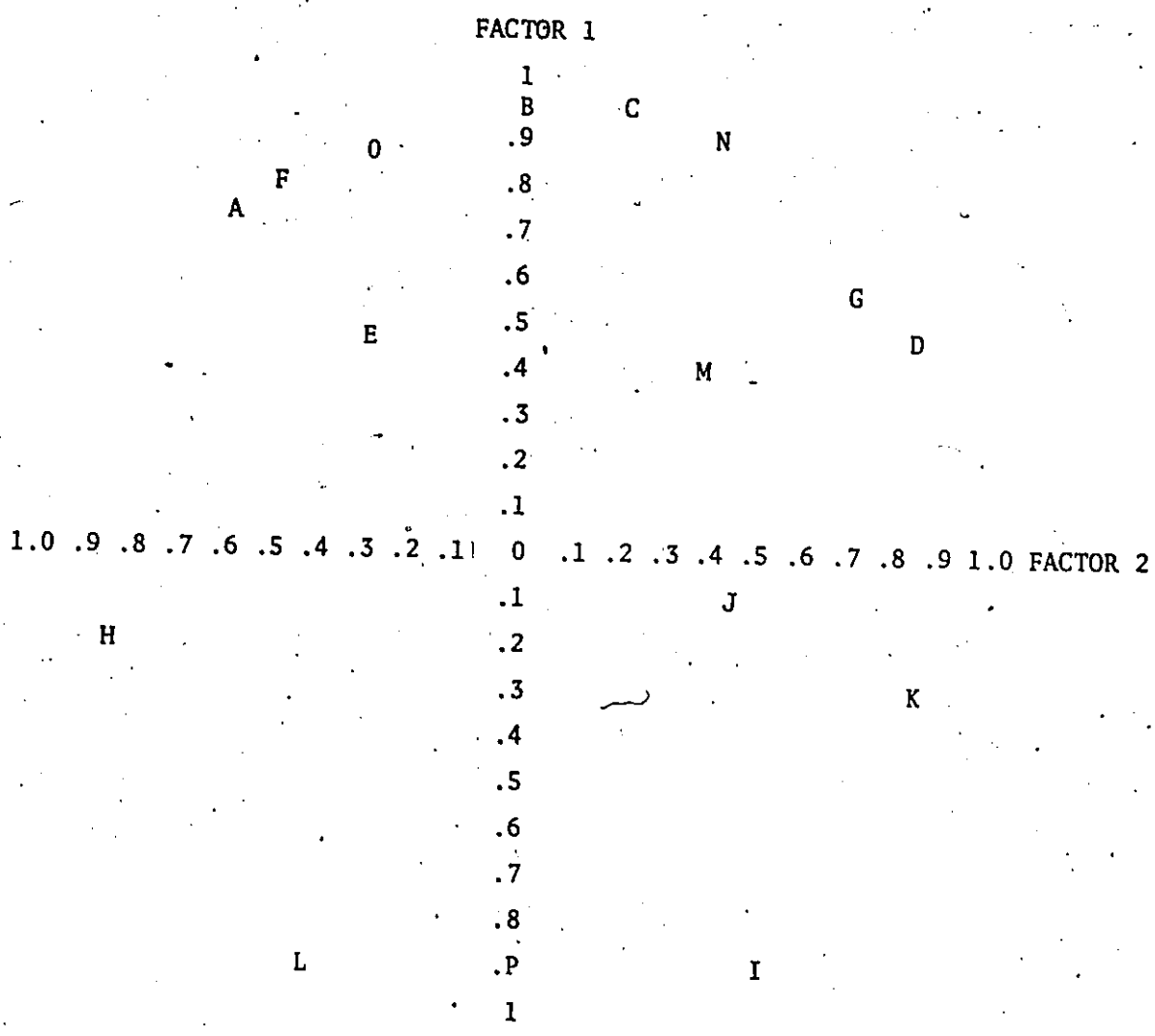
Inspection of the three factor solution reveals that Factor I had high positive loadings for constructs 1, 2, 3, 4, 5, 6, 7, 13, 14 and 15, and high negative loadings for constructs 9, 12 and 16. Factor II had high positive loadings for constructs 4, 7, 9, 10, 11 and 14, and high negative loadings for constructs 1, 6 and 8. Factor III had high positive loadings for constructs 5, 10 and 13 and no high negative loadings. Factor I accounted for 49% of the common variance, Factor II accounted for 28% of the variance and Factor III accounted for 15% of the variance. As indicated in Table 6, the three factors together accounted for 92% of the construct variance. The number of factors to be retained was determined by the Kaiser criterion of eigenvalues > 1.00.

Figure 1 graphically illustrates that a rather large number of construct variables clustered at one pole of Factor I while three constructs, 9, 12 and 16 grouped at the negative pole. The labels of the constructs at the positive pole are as follows: outgoing, more intelligent, emotionally stable, assertive, happy-go-lucky, conscientious, venturesome, experimenting, self-sufficient and controlled. It would be tempting to interpret the negative pole of this factor in terms of the contrast labels of constructs 9, 12 and 16, that is, suspicious, apprehensive and tense. This would then

Table 6

Three Derived Dimensions from Principal Components Analysis of Construct Variables

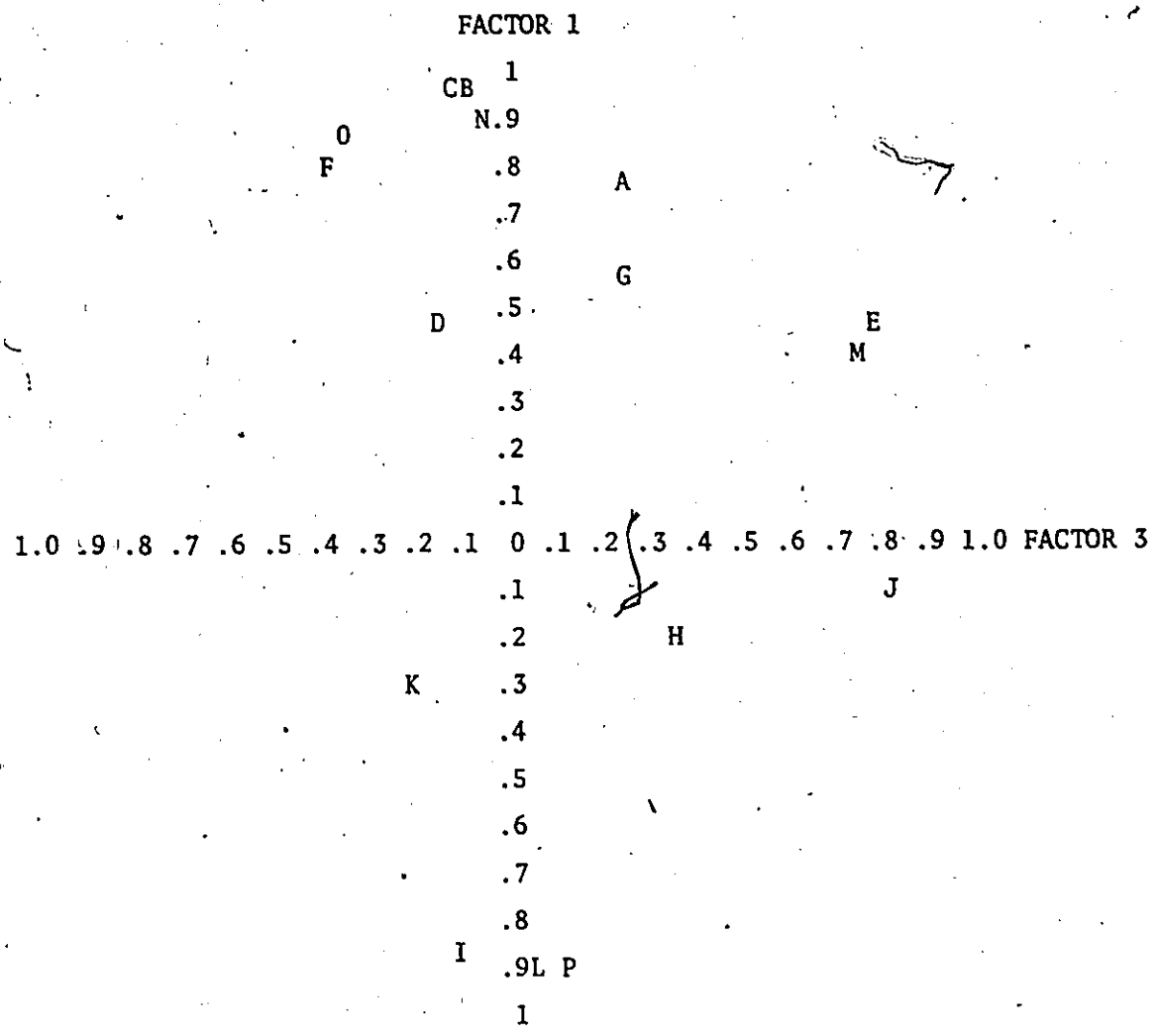
Variables (Constructs)	Factor 1	Factor 2	Factor 3
1	.76	-.58	.25
2	.97	.02	-.08
3	.96	.17	-.10
4	.43	.86	-.14
5	.47	-.29	.77
6	.78	-.47	-.35
7	.54	.71	.24
8	-.18	-.85	.34
9	-.83	.51	-.13
10	-.11	.44	.82
11	-.29	.89	-.19
12	-.91	-.39	.06
13	.40	.38	.74
14	.88	.42	-.05
15	.85	-.32	-.33
16	-.91	.03	.11
Eigen Values	7.85	4.47	2.39
Cumulative % Of Variance	.49	.77	.92



C1 = A C2 = B C3 = C C4 = D C5 = E
C6 = F C7 = G C8 = H C9 = I C10 = J
C11 = K C12 = L C13 = M C14 = N C15 = O
C16 = P

Note: C = Construct

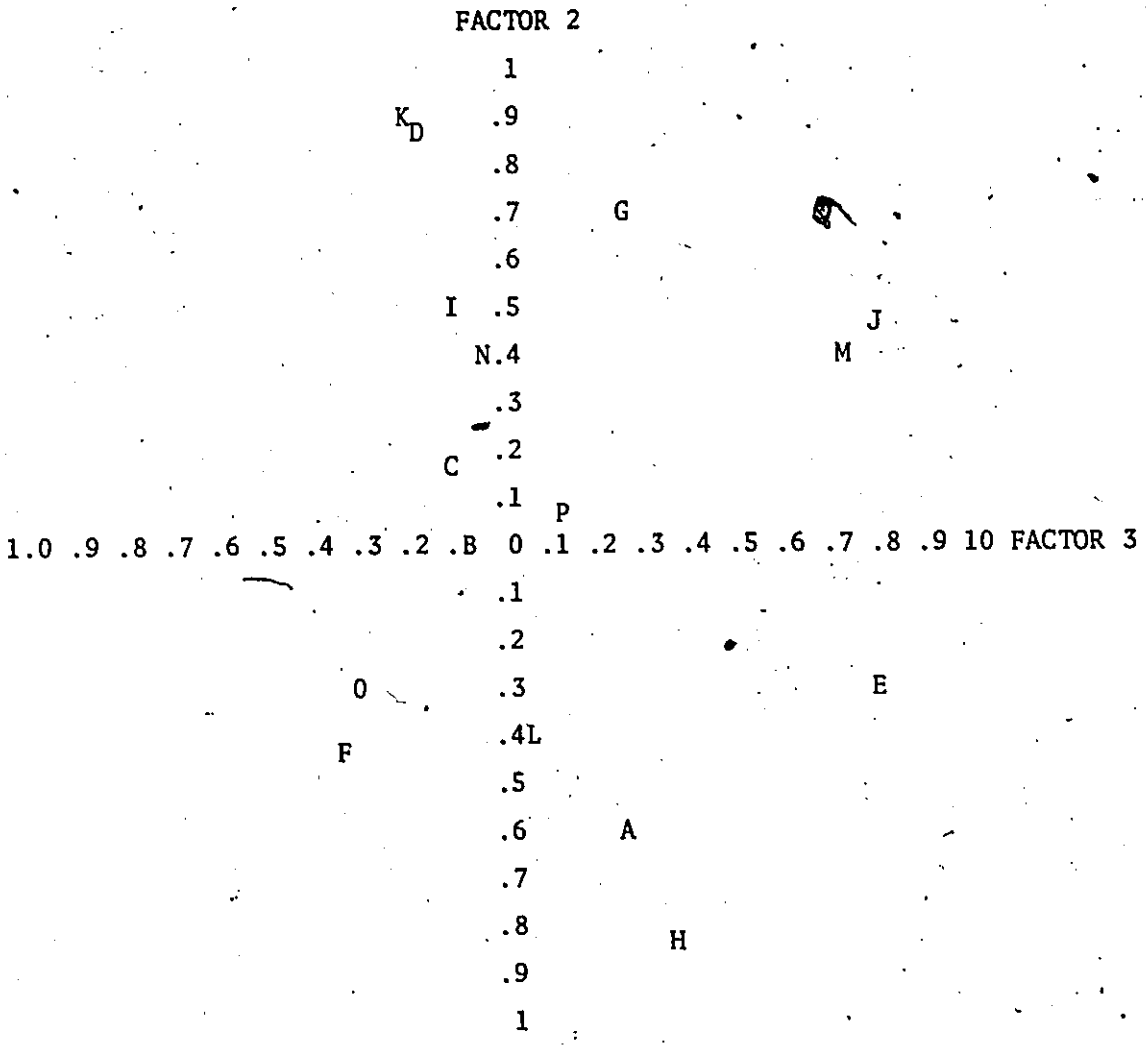
Figure 1: Plot of Factor I with Factor 2: Loadings of Constructs On Factors 1 and 2 From Construct PCA.



C1 = A C2 = B C3 = C C4 = D C5 = E
C6 = F C7 = G C8 = H C9 = I C10 = J
C11 = K C12 = L C13 = M C14 = N C15 = O
C16 = P

Note: C = Construct

Figure 2. Plot of Factor 1 With Factor 3: Loading of Constructs on Factors 1 and 3 From Construct PCA.



C1 = A C2 = B C3 = C C4 = D C5 = E
C6 = F C7 = G C8 = H C9 = I C10 = J
C11 = K C12 = L C13 = M C14 = N C15 = 0
C16 = P

Note: C = Construct

Figure 3. Plot of Factor 2 with Factor 3: Loadings of Constructs On Factors 2 and 3 From Construct PCA.

lead to an interpretation of Factor I as a bi-polar evaluative factor with "good" constructs clustered at the positive pole and "bad" constructs at the negative. However, it is important to keep in mind that these are bi-polar constructs which are not uniformly valenced; that is, more positive characteristics tend to be found in the contrast column but this is not always the case. Specifically, in constructs 9, 12 and 16, the more socially desirable traits are described in the construct column and, as discussed in the previous sections, subjects tended to shift their ratings in that direction for these constructs. Thus, the bi-polar nature of this factor is purely a mathematical phenomenon, an artifact of the particular rating scale and construct placement. In actuality, Factor I is probably best interpreted as a unipolar evaluative dimension with construct 9 (trusting), construct 12 (placid), and construct 16 (relaxed) defining one pole of Factor I statistically, but in actuality, grouping with the positively-loaded constructs for purposes of interpretation. Since none of the three constructs were clearly rated in the construct direction (that is, 5-7), even this interpretation is tenuous.

Factor II is again difficult to interpret for the same reasons discussed above. It appears that the construct labels associated with high positive loadings are assertive, venturesome, trusting, practical, forthright and self-sufficient. The two highest positive loadings are .89 for construct 11 (Forthright/Shrewd) and .86 for construct 4 (Humble/Assertive). The labels associated with the high

negative loadings are outgoing, conscientious, and tough-minded with the highest negative loading of -.85 for construct 8 (Tough-minded/Tender-minded). While it appears that this factor may be interpretable as an assertiveness or intrusiveness factor, the factor pattern is far from distinct and any analysis can only be offered tentatively.

Factor III is a unipolar factor with only three high positive loadings. They are as follows: construct 5 (Sober/Happy-Go-Lucky) .77, construct 10 (Practical/Imaginative) .82 and construct 13 (Conservative/Experimenting) .74. It appears that this factor taps a conservative-liberal dimension.

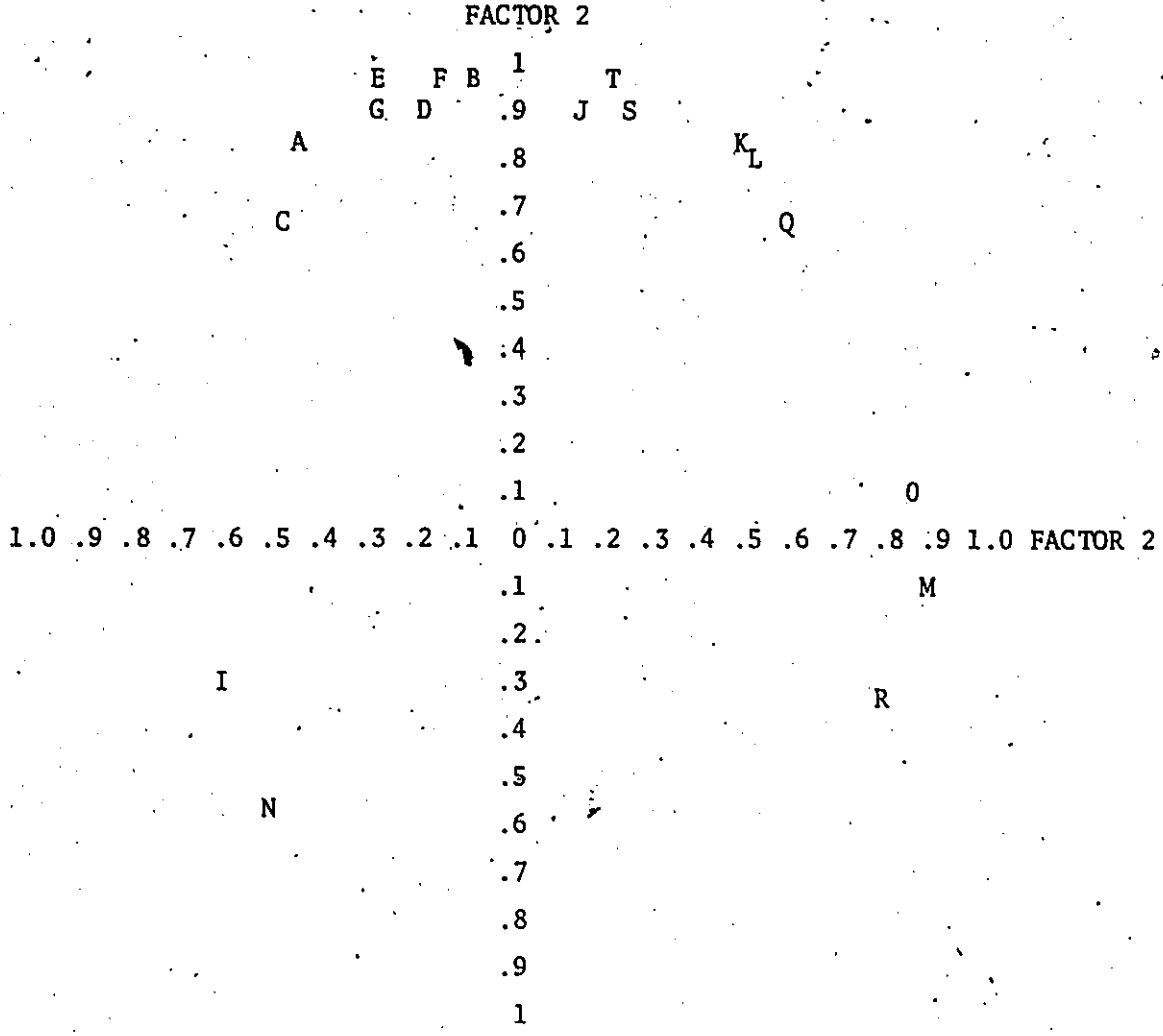
VII. PCA of Element Variables. The four factor solution obtained from a Principal Components Analysis of the element sample is presented in Table 7. The plots of Factor I versus Factor II, Factor I versus Factor III and Factor II versus Factor III are presented in Figures 4, 5 and 6 respectively.

Inspection of the factor pattern produced in Table 7 reveals the following. Factor I had high positive loadings on seventeen of the twenty-two elements, elements 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 16, 17, 19, 20, 21 and 22, and a high negative loading only on element 14. Factor II had high positive loadings on elements 11, 12, 13, 15, 17 and 18, and high negative loadings on elements 1, 3, 9 and 14. Factor III had high positive loadings on elements 3, 8, 9, 14 and 15 and no significant negative loadings. Factor IV, although meeting the Kaiser criterion for retention with an eigenvalue = 1.01, had no significant factor loadings and will not be discussed.

Table 7

Four Derived Dimensions from Principal Component Analysis of Element Variables

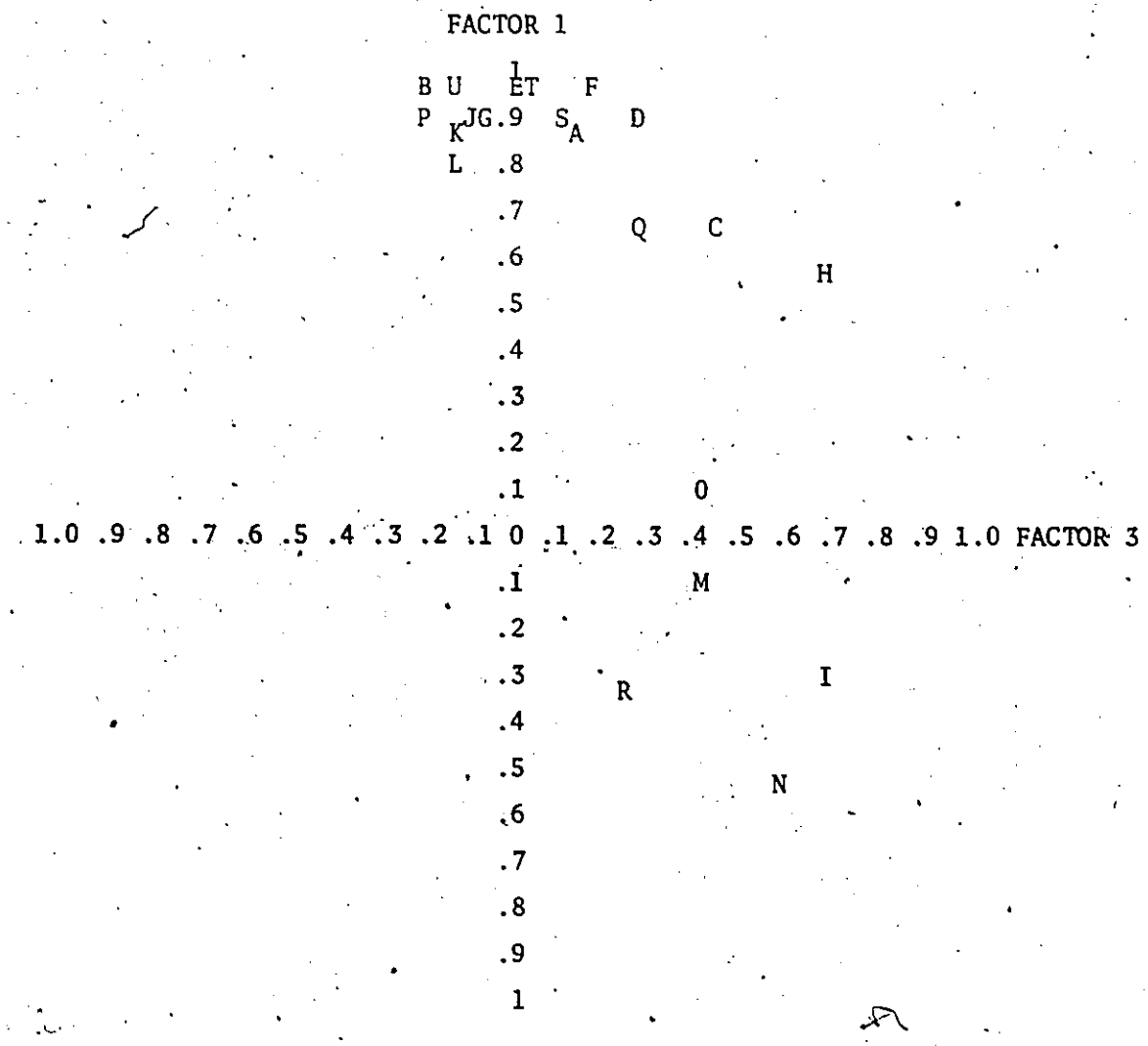
Variables (Elements)	Factor 1	Factor 2	Factor 3	Factor 4
1 Self	.84	- .44	.14	.10
2 Ideal Self	.97	- .10	- .17	.13
3 Mother	.64	- .49	.44	- .34
4 Father	.89	- .17	.29	- .24
5 Bro/Sis	.93	- .27	.02	.16
6 Spouse	.95	- .15	.17	.14
7 CLS Friend	.90	- .29	- .06	.27
8 X Friend	.53	.03	.68	.38
9 Gloria	- .32	- .61	.70	- .03
10 Rogers	.92	.16	- .09	- .27
11 Perls	.84	.49	- .13	- .13
12 Ellis	.82	.52	- .12	- .12
13 Rejecting	- .40	.89	.41	.04
14 Pitied	.54	- .53	.60	- .06
15 Threatening	.11	.85	.41	.11
16 Attractive	.89	- .18	- .17	.34
17 Uncomfortable	.65	.63	.27	- .16
18 Harmful	- .35	.81	.24	.33
19 Authority	.88	.25	.12	- .38
20 Successful	.97	.21	.05	- .07
21 Normal	.97	- .15	- .12	.13
22 Helpful	.97	- .14	- .12	.09
Eigen Values	13.27	4.58	2.24	1.01
Cumulative % Of Variance	.60	.81	.91	.96



E1 = A	E2 = B	E3 = C	E4 = D	E5 = E
E6 = F	E7 = G	E8 = H	E9 = I	E10 = J
E11 = K	E12 = L	E13 = M	E14 = N	E15 = 0
E16 = D	E17 = Q	E18 = R	E19 = S	E20 = T
E21 = F	E22 = F			

Note: E = Elements

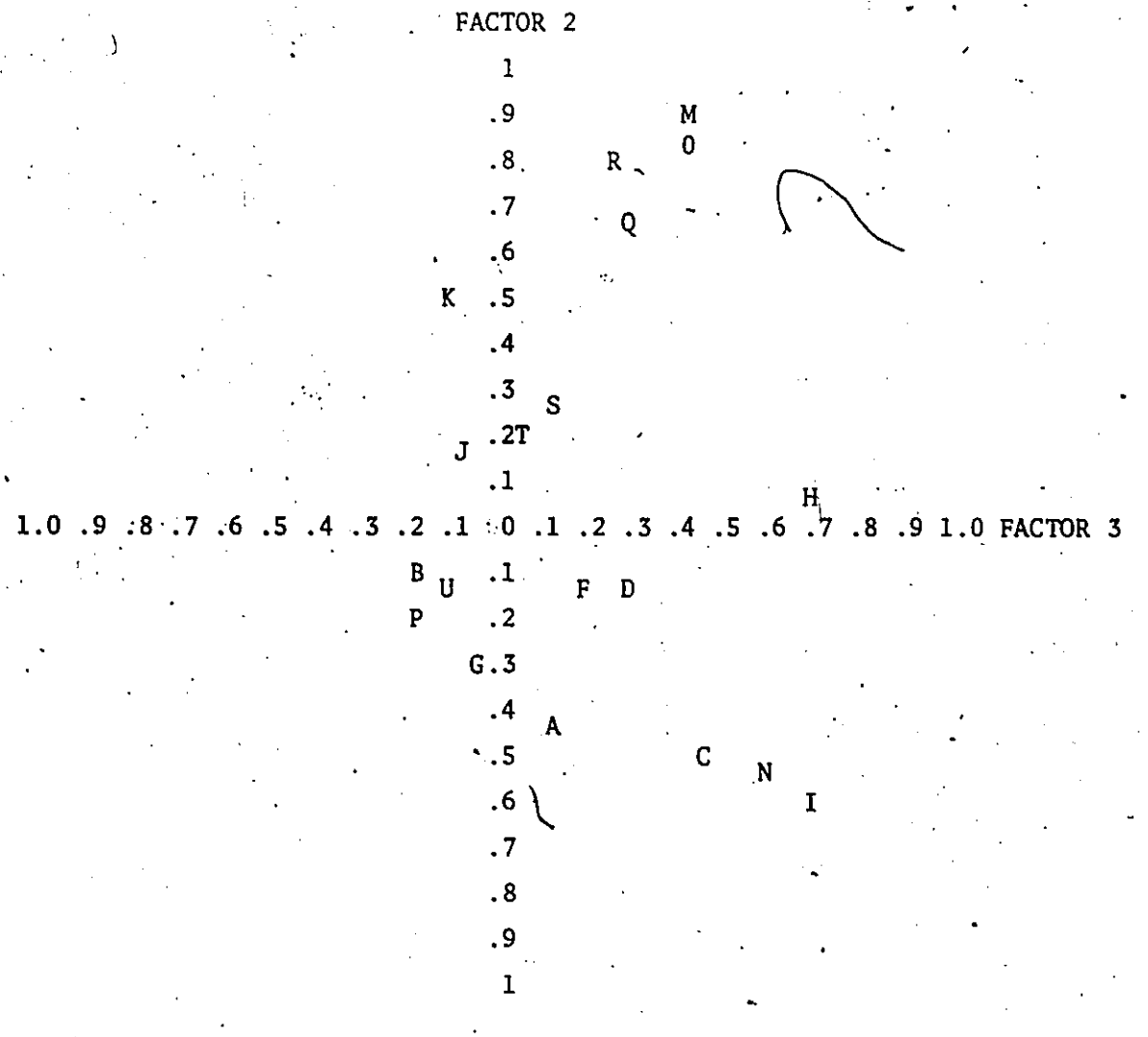
Figure 4: Plot of Factor 1 and Factor 2: Loadings of Elements on Factors 1 and 2 From Element PCA.



E1 = A	E2 = B	E3 = C	E4 = D	E5 = E
E6 = F	E7 = G	E8 = H	E9 = I	E10 = J
E11 = K	E12 = L	E13 = M	E14 = N	E15 = 0
E16 = P	E17 = Q	E18 = R.	E19 = S	E20 = T
M21 = U	E22 = U			

Note: E = Element

Figure 5. Plot of Factor 1 With Factor 3: Loadings of Elements on Factors 1 and 3 From Element PCA.



E1 = A	E2 = B	E3 = C	E4 = D	E5 = E
E6 = F	E7 = G	E8 = H	E9 = I	E10 = J
E11 = K	E12 = K	E13 = M	E14 = N	E15 = O
E16 = P	E17 = Q	E18 = R	E19 = S	E20 = T
E21 = U	E22 = U			

Note: E = Element

Figure 6. Plot of Factor 2 With 3: Loadings of Elements on Factors 2 and 3 From Element PCA.

Factor I accounted for approximately 60% of the total variance, Factor II accounted for 21% of the variance, Factor III accounted for 10% of the variance and Factor IV accounted for 5% of the total variance. As indicated by the cumulative percentage of variance figures in Table 7, the four factors together accounted for 96% of the total variance.

Factor I appears to define a primary evaluative dimension; however, it is unclear whether the evaluation is in terms of "good vs. bad" or "positive-strong vs. vulnerable-weak." A hierarchical arrangement of the role titles for the elements, with their significant positive loadings will further explicate this. Those are as follows: 2) ideal self (.97), 20) successful (.97), 21) normal (.97), 22) helpful (.97), 6) spouse (.95), 5) brother/sister (.93), 10) Rogers (.92), 7) friend (.90), 4) father (.89), 16) attractive (.89), 19) authority (.88), 1) self (.84), 11) Perls (.84), 11) Perls (.84), 12) Ellis (.82), 17) uncomfortable (.65), 3) mother (.64), and 8) X-friend (.53). The only significant negative loading for Factor I was on element 14, pitied person, (-.54). The other elements which loaded negatively (although not significantly) were elements 9 (Gloria), 13 (rejecting) and 18 (harmful). These results indicate that most of the role titles were rated similarly along the evaluative dimension and most were perceived positively. The three therapists were grouped with these positively valenced elements with Rogers loading most extremely. Factor II seems most reasonably interpreted as a dimension which discriminates aggressive from passive

or intrusive from non-intrusive role figures. The ranked high positive loadings are as follows: 13) rejecting (.89), 15) threatening (.85), 18) harmful (.81), 17) uncomfortable (.63), 12) Ellis (.52) and 11) Perls (.49). The negative pole was defined by: 9) Gloria (.61), 14) pitied (-.53), 3) mother (-.49) and 1) self (-.44). It is interesting that the three role figures with highest loadings on this factor (threatening, rejecting and harmful) did not load negatively on the evaluative dimension but rather clearly defined a separate dimension. Perls and Rogers also loaded on this factor which can be interpreted to mean that, although perceived as "good," they were also assessed as intrusive or dominating while Gloria was seen as quite the opposite. These relationships can be seen quite clearly in Figure 4.

The third factor does not readily lend itself to interpretation. A basically unipolar factor, Factor III had high positive loadings for elements: 9) Gloria (.70), 8) X-Friend (.68), 14) pitied (.60), 3) mother (.44) and 15) threatening (.41). While perhaps interpretable as a client factor, any other conclusions would seem highly speculative.

To summarize, a principal components analysis was performed on each of the major intercorrelation matrices (Tables 4 and 5) generated from the group grid data described in Section I of Part A. These analyses served to explicate the minimum number of independent dimensions necessary to describe the major sources of variance in both construct and element variables. The purpose of these analyses was

to gain a general understanding of the underlying structure of the group grid data. Both matrices were analyzed so that the data could be approached from alternate perspectives. It is emphasized that these are not independent, unrelated analyses; rather, they represent two approaches to the same set of intercorrelations among construct and element variables. The PCA of constructs allowed an appreciation of construct utilization across elements while the element analysis permitted this same appreciation of element variables across constructs. The information thus gained from these principal components analyses about the underlying structure of the group grid data provided the author with a general understanding of the Role Rep instrument and a means of assessing the efficacy of the 16PF constructs for this type of evaluative task.

Part B. Therapy Rating Form Analyses

I. PCA of Therapy Rating Form. Part B will present the analysis of the Therapy Rating Form (TRF) and describe the subsequent identification of groups whose responses on the TRF demonstrated clear preferences for one or more of the therapists.

The instrument itself, will first be reviewed. Briefly, the TRF consisted of 55 items measuring: 1) impressions of the three therapists; 2) impressions of the client, Gloria; 3) perceived effectiveness of the three therapists in dealing with specific problem areas and; 4) general attitudes regarding psychotherapy. Each item was rated on a seven point scale with a value of 1 indicating the most negative evaluation of the item in question and a

value of 7 indicating agreement or a positive evaluation. The rating scale was clearly described for each item. (See Appendix C) The selection of the 55 items was done on a rational basis and, therefore, a PCA with varimax rotation was performed in order to assess the relationship between the items.

In all, thirteen factors were identified but only seven will be described here because the remaining six were either too specific or did not lend themselves to interpretation. The rotated factor pattern matrix for the first seven factors, including their proportional contribution to the common variance, is presented in Table 8. Examination of this matrix indicates the following.

Factor I had high positive loadings for items 1, 4, 7, 10, 19, 22, 25, 28, 31, 34, 37, 40 and 43. There were no significant negative loadings.

Factor II had high positive loadings for items 2, 5, 8, 11, 14, 17, 21, 23, 26, 29, 32, 35, 38, 41 and 44, and again, no significant negative loadings.

Factor III had high positive loadings for items 3, 6, 9, 12, 20, 24, 27, 30, 33, 36, 39, 42 and 45. Once again, there were no significant negative loadings.

Factor IV had high positive loadings for items 46, 50 and 52 with no significant negative loadings.

Factor V had high positive loadings for items 9 and 20 while Factor VI had a significant negative loading for item 49. Finally, item 47 loaded positively on Factor VII while item 49 had a negative

Table 8

Seven Derived Dimensions From Principal Component Analysis

With Varimax Rotation of Therapy Rating Form

Rotated Factor Pattern

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
LIKER1	.80	.01	.01	-.16	-.16	.16	.25
LIKEP2	.13	.63	-.02	.01	.08	.08	-.17
LIKEE3	-.29	-.12	.51	.01	.09	-.05	-.01
HELPR4	.85	-.01	.04	-.10	.00	-.03	-.19
HELPP5	-.08	.74	.03	-.11	.22	-.10	.21
HELPFE6	.06	-.15	.36	-.01	.03	.05	-.17
CONFDR7	.83	.19	-.16	.06	.01	.09	-.09
CONFDP8	-.03	.75	.03	.23	-.33	-.01	.04
CONFDE9	-.10	-.03	.51	-.13	.70	-.01	.08
FIRSTR10	.84	.19	-.02	-.10	-.09	.25	-.01
FIRSTP11	.02	.71	-.01	-.21	.06	.08	.03
FIRSTE12	-.05	-.05	.64	.22	.09	.03	-.10
SIMLRR13	-.50	.10	.23	-.22	.00	-.02	.13
SIMLRP14	.20	.52	-.05	.01	-.05	.20	-.13
SIMLRE15	.02	.01	.34	.10	.16	-.08	.14
PHYSCR16	.29	.09	.04	-.39	.11	-.01	.06
PHYSCP17	.06	.48	.05	-.15	-.06	.04	.11
PHYSCE18	.07	.35	.13	-.06	.06	.16	.12
EFECTR19	.86	-.00	.00	.07	.07	.11	-.01
EFECTE20	.09	.04	.45	.07	.70	.09	-.03
EFECTP21	-.12	.68	.11	.14	-.38	-.02	.10
PROB8R22	.80	-.00	.01	-.14	.02	-.07	.16
PROB8P23	.11	.73	-.06	-.18	.03	.15	-.08
PROB8E24	.01	.01	.75	.06	.15	-.06	-.13
PROB7R25	.81	.15	.07	-.18	.03	-.14	.10
PROB7P26	-.03	.85	-.12	.05	.12	.13	-.05

Table 8 Continued

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
PROB7E27	-.10	-.05	.80	-.09	-.06	-.01	.14
PROB6R28	.76	.01	.04	.06	.01	.18	.08
PROB6P29	-.06	.66	.07	.04	-.00	.01	-.01
PROB6E30	.02	-.05	.76	-.01	.01	-.15	-.15
PROB5R31	.76	.01	.02	.32	-.06	-.09	-.05
PROB5P32	-.09	.70	-.20	-.02	-.09	-.01	-.00
PROB5E33	.05	-.03	.66	.09	.07	.19	.20
PROB4R34	.74	.01	-.11	-.20	.07	-.10	-.05
PROB4P35	-.04	.61	-.09	-.21	-.16	.03	-.24
PROB4E36	.02	-.06	.69	-.02	.13	.10	.06
PROB3R37	.82	.01	.08	.23	.06	.03	.11
PROB3P38	.21	.75	-.18	.23	-.04	-.08	.02
PROB3E39	.20	.04	.65	.16	.25	-.16	.17
PROB2R40	.68	.06	.01	.37	-.01	-.02	.32
PROB2P41	.24	.83	-.07	.15	.03	.12	-.03
PROB2E42	.01	-.06	.66	-.11	.05	.01	.18
PROB1R43	.66	-.12	.30	.07	.04	.14	-.15
PROB1P44	.18	.77	-.04	-.17	.02	-.15	.13
PROB1E45	.20	-.15	.83	-.01	.01	.12	.01
GSICK46	-.03	-.02	.05	.86	-.08	.03	.06
GFEELR47	.32	.04	.18	-.01	.03	.11	.71
GFEELP48	.15	.23	-.23	.04	-.18	.18	.01
GFEELE49	-.01	.10	.18	.10	.04	.48	-.42
LIKEG50	.26	.13	-.12	.41	.17	.36	.18
DIMLTG51	.15	.13	.04	.05	-.01	.85	-.01
SERPRB52	.01	.08	.14	.43	.20	.47	.23
THCONF53	.08	.35	.18	-.10	-.01	.32	-.02
SEETTH54	.30	.19	.16	-.18	-.08	.10	.06
LEVDTB55	-.18	.27	.02	.24	.08	-.18	-.08
Eigen Values	11.07	8.49	6.81	2.75	2.35	2.13	2.00
Cumulative % of Variance	.20	.35	.48	.53	.57	.61	.64

loading.

The percentage of the total variance accounted for by the first seven factors was the following: Factor I - 20.1%, Factor II - 15.4%, Factor III - 12.4%, Factor IV - 5.0%, Factor V - 4.3%, Factor VI - 3.9% and Factor VII - 3.6%. The percentage of the total variance accounted for by these 7 factors was approximately 64%.

Factor I is clearly interpretable as a "Rogers factor." All of the items with positive loadings on this factor referred to some assessment of Carl Rogers by the subjects and none of the items referring to Perls or Ellis had a significant loading. Further, all of the Rogers items with significant loadings were positive in direction implying a consistency of endorsement across items referring to Rogers. This finding supports the rational selection of these items referring to Rogers.

Factors II and III can be labelled Perls and Ellis factors, respectively. Like Factor I, these were unipolar factors with every positively loaded item referring to the particular therapist. These results indicate that the groups of items, which were selected rationally to measure observers' attitudes toward the therapists, were responded to in an internally consistent or reliable manner. This also implies that the three subsets of items estimate distinct and coherent perceptions of the three therapists. The structure of the first three factors will be discussed further but a summary of the other four factors will be presented first.

Factor IV will be labelled the "Patient Factor" since the three

items with significant positive loadings (item 46 - +.86, item 50 - +.41 and item 52 - +.43) refer to judged characteristics of Gloria. The loadings suggest that the less pathological the patient was judged to be (Item 46), the more the subjects liked her (Item 50) and the less serious they assessed her presenting problem (Item 52). Since these are the only three items with significant loadings, it is apparent that the items were again related psychometrically as well as rationally. In addition, this factor demonstrates that the subjects were able to form a clear impression of the client independent of their assessments of the therapists.

The items with the highest loadings on Factor V referred to how much confidence the subjects would have in Ellis if they sought help from him with a problem of their own (Item 9 - +.70) and how therapeutically effective they judged him to be, in general (Item 20 - +.70). This factor thus reflected a specific and general appraisal of Ellis as a psychotherapist independent of the appraisal of his effectiveness with Gloria. It should be noted that a similar evaluative dimension for Perls and Rogers did not appear in the TRF factor pattern.

Factor VI is the first bi-polar factor to emerge. The two positively loaded items refer to the subjects' perceived similarity to the client (Item 51, +.85) and the perceived seriousness of her problem (Item 52, +47); while the negative pole was delineated by a single item which referred to how Gloria felt about Ellis (Item 49, - .48). The positive pole relations appear plausible and

consistent with Factor IV; the more similar subjects felt they were to Gloria the less seriously they assessed her problems. There is no apparent reason, however, for why the subjects who paired these items also believed that Gloria evaluated Ellis in a negative fashion.

Factor VII, another bi-polar factor, is more easily interpreted. The positive loading referred to Gloria's perceived feelings about Rogers (Item 47, +.71) and the negative (Item 49, -.49) to her feelings about Ellis. Clearly, if Gloria was perceived as liking Rogers there was a tendency to view her as disliking Ellis. Perls evaluation on this question (Item 48, +.009) was neutral and he apparently did not enter into the comparison.

To summarize, the derived factor structure of the Therapy Rating Form corresponded well to the rationally-derived dimensions which the questionnaire was designed to estimate. The factors which appeared were both discrete and discriminating. Overall, the PCA findings permitted the following analyses to be undertaken with confidence.

II. Factor Scores From Therapy Rating Form. For the purposes of the present research it was necessary to determine how individual subjects scored on particular factors relating to therapist preference. Because the PCA indicated that the first three factors were almost exclusively related to evaluations of the therapists, it can be assumed that a subject who scored high on one or more of these factors was expressing a relative preference for the therapist in question. The individual subject's factor score on each of the

three factors was determined by multiplying the standard score for each subject on each variable by the loadings of the variables for each of the factors. The loadings then are being utilized essentially as beta weights and multiplied by the subject's standard score for each variable. The individual's factor score for a given factor is the sum of these products (Lawlis and Chatfield, 1974). A factor score was calculated for each subject for each of the first three factors which emerged from the PCA of the Therapy Rating Form. As stated above, the three factors were designated the Rogers factor (I), the Perls factor (II) and the Ellis factor (III).

An inspection of these factor scores revealed that a number of preference patterns existed. In other words, each subject did not show a clear preference for one and only one therapist which might have been expected if only one of the therapists were skilled and experienced. Since all three are acknowledged experts and since the questionnaire permitted a full range of assessment for each of them, the subjects' factor scores instead revealed more complicated patterns of preference. An individual example may further elucidate this. Subject 23 received the following factor scores: Rogers factor = +.54, Perls factor = -1.68 and Ellis factor = -.23. These scores indicated that the subject scored about one-half standard deviation above the group mean, indicating a moderate endorsement of Rogers. In contrast, the score of -1.68 on the Perls factor reveals a strong devaluation of Perls and -.23 on the Ellis factor indicates a slight devaluation of Ellis, relative to the group as a whole.

While there was a great deal of variability in the preference patterns of the individual subjects, the important information gleaned from this analysis is that differences in preference ratings did appear even for three renowned, expert therapists. This permitted investigation of whether groups of subjects shared the same preference patterns for the three therapists.

III. Cluster Analysis of Group Factor Scores. In order to discover which subgroups among the 51 subjects shared similar preferences, a cluster analysis of the factor scores on the three therapist factors was undertaken. The cluster procedure program from the SAS package was utilized and that program performed a hierarchical cluster analysis based on an algorithm by Johnson (1967). The purpose of the analysis was to classify subjects into groups; a cluster or group being defined as those individuals who correlated highly with one another and had comparatively low correlations with individuals in other clusters.

Table 9 presented the results of this analysis, including the number of basic clusters which appeared, the specific subjects who comprise each cluster and most importantly, the mean score for the group of subjects on each of the factors in the cluster. To further clarify the results, those mean scores are presented separately in Table 10.

Five basic clusters or groups were delineated. Cluster I consisted of thirteen subjects whose mean preference ratings were: Rogers -0.61, Perls -1.69 and Ellis -0.65. This group of subjects

Table 9

Results of Cluster Analysis on Subjects' Factor Scores

Cluster	Subject #	Factor Scores: Factor A (Rogers)	Factor B (Perls)	Factor C (Ellis)
I	1	- .15	-1.07	- .37
	35	- .69	-1.51	- .36
	16	- .25	-2.12	- .72
	40	- .05	-2.06	- .66
	24	.07	-2.53	- .85
	22	.35	-2.27	- .28
	23	.54	-1.68	- .23
	29	- .12	-1.27	-1.83
	32	- .18	-1.17	-2.18
	12	-2.23	-1.26	- .05
	33	-2.32	-1.12	.12
	39	-1.23	-1.68	.53
	38	-2.17	-2.17	-1.54
	N = 13	$\bar{\chi}$ = -0.61	$\bar{\chi}$ = -1.69	$\bar{\chi}$ = - .65
II	2	.90	.39	.18
	51	1.04	.11	.13
	31	.48	- .10	.58
	36	.52	- .21	.42
	34	.52	.07	.74
	10	1.25	.85	.73
	47	.74	.68	.44
	21	.20	1.12	.74
	4	1.32	.07	.73
	42	1.43	- .29	1.10
	48	1.78	.29	.99
	44	1.09	- .98	1.59
	7	1.55	- .96	- .01
	27	1.18	-1.08	.62
	N = 14	$\bar{\chi}$ = 1.00	$\bar{\chi}$ = - .003	$\bar{\chi}$ = .64

Table 9 Continued

Cluster	Subject #	Factor Scores: Factor A (Rogers)	Factor B (Perls)	Factor C (Ellis)
III	6	.42	1.67	- .20
	8	.70	2.04	- .14
	11	1.03	1.82	- .25
	49	.70	2.38	.15
	14	1.57	1.36	.24
	25	1.71	2.00	1.37
	9	1.98	2.87	- .94
	3	.10	- .62	-1.30
	19	- .07	.37	- .96
	26	.24	- .07	- .50
	15	1.56	.13	- .94
	17	.82	.69	- .79
	N = 12	$\bar{X}$ = .90	$\bar{X}$ = 1.22	$\bar{X}$ = - .36
IV	5	-1.74	.90	.68
	13	-1.72	.84	.35
	18	- .79	.20	.10
	20	-1.10	.04	- .47
	41	-1.17	- .15	- .19
	28	-1.21	1.08	- .38
	43	-1.70	1.42	- .05
	45	- .40	.51	1.19
	46	- .86	- .08	1.27
	30	-1.63	.99	1.61
	50	-2.44	1.89	1.49
	N = 11	$\bar{X}$ = 1.34	$\bar{X}$ = .70	$\bar{X}$ = .51
V	37	-1.91	.43	-1.90
	N = 1	$\bar{X}$ =-1.91	$\bar{X}$ = .43	$\bar{X}$ =-1.90

Table 10

Mean Scores Of Preference Groups On

The Three Preference Factors

	Factor A (Rogers)	Factor B (Perls)	Factor C (Ellis)
Group I (Negative)	- .61	-1.69	-.65
Group II (Rogers-Ellis)	+1.00	- .003	+.64
Group III (Perls-Rogers)	+ .90	+1.22	-.36
Group IV (Perls-Ellis)	-1.34	+ .70	+.51

had a relatively negative rating for all three therapists, the most significant being that assigned to Perls (-1.69). This group will be referred to as the total negative group.

Cluster II consisted of fourteen subjects who preferred Rogers (+1.00) over Ellis (+0.64) but were close to the mean with regard to Perls (+.002). This cluster will be called the Roger-Ellis group. The third cluster preferred Perls (+1.22) over Rogers (+0.90) and were slightly negative in their evaluation of Ellis (-0.36). These 12 subjects are characterized as the Perls-Rogers group.

Cluster IV, consisting of eleven subjects, showed a preference for Perls (+0.70) and Ellis (+0.51) but demonstrated a marked devaluation of Rogers (-1.34). This group was designated the Perls-Ellis but dislike Rogers cluster. The fifth cluster consisted of only subject #37, who favored Perls (+0.43) but devalued Rogers (-1.91) and Ellis (-1.90). This final cluster having an N of only 1 will be dropped from future analyses.

Four distinct groups were identified, each of which had a complex preference pattern toward the three therapists in the film. Table 10 presents the mean scores or profile scores, across the three factors for each group, which defined the preference patterns. These profiles illustrate that the subjects showed preferences for pairs of therapists with the third therapist being assessed either neutrally or negatively. All possible preference pairs were found in Clusters II, III and IV.

It is interesting that no single therapist was perceived as

outstanding and favored over his other two peers. This may relate to the issue raised in the previous section; namely, that all three therapists are considered particularly astute, superior professionals. The naive observer, without technical or theoretical biases, would probably relate to the general impressions created by the therapists and find it difficult to make a single, clear choice when confronted with three who are "the best" in their field. Thus, discriminations were made in the form of pairings.

Cluster I articulated a fourth logical pattern: all therapists were rated negatively. It would appear that these subjects consistently rated the therapists negatively and found their intervention to be of small value, perhaps indicating a general disavowal of psychotherapy.

IV. Analysis of Variance of Preference Groups. A 4 X 3 analysis of variance was performed with four levels of group assignment determined by the cluster analysis, as the independent measure and three levels of factor scores as the dependent measure. The purpose of this analysis was to determine whether the preference groups defined by the cluster analysis were significantly different from one another. The mean scores for each of the four preference groups across the three factors are presented in Table 10.

The results of the analysis of variance are presented in Table 11. The ANOVA indicated a significant main effect for preference groups with an F-ratio of 37.18 ($p<.001$) and, in addition, a significant group-factor interaction effect ($p<.01$). The significant

Table 11

Analysis Of Variance Of Mean Score Values For The Effect Of Preference Group And Factor Scores

Source of Variation	SS	df	MS	F
Between				
A (Preference Group)	57.880	3	19.290	37.18***
Within				
B (Factor Scores)	.137	2	.069	1.33
AB	5.191	2	2.600	5.01**
Within Cell	71.590	138	.519	

***Significant beyond the .001 level.

**Significant at the .01 level.

main effect for groups indicates clearly that the four preference groups differed significantly in their preference patterns. The significant interaction effect indicates that, while the groups were significantly different, those differences were not consistent over the three levels of factor scores. An inspection of Table 10 will further elucidate the crossover of factor scores between groups which created the significant interaction.

Part C. Analysis of the Relationship Between Individual Grids and the Therapy Rating Form

I. Multivariate Analysis of Variance of Therapists' Grid Ratings.

A multivariate analysis of variance was performed in order to investigate the relationship between preference group membership, as determined by the Therapy Rating Form analyses, and subjects' Role Rep grid ratings of Rogers, Perls and Ellis on the sixteen provided construct dimensions. The analysis thus involved two classification variables: Preference Group (levels = 4) and Therapist (levels = 3) and sixteen dependent variables, that is, the grid ratings on each of the sixteen construct-contrast dimensions. The results of that analysis are presented in Table 12. To facilitate analysis, eleven subjects were randomly chosen from groups one, two and three resulting in four equal groups, N = 11 (See Table 9). Subjects 2, 7, 14, 21, 32 and 38 were eliminated from the analysis. More specifically, the analysis was performed to determine whether subjects utilized certain constructs differentially in rating the three psychotherapists, whether the TRF preference groups utilized

Table 12

Multivariate Analysis of Therapists' Role Rep Grid Ratings For Four TRF Preference Groups

Dependent Variable	Source of Variation	SS	df	F
Construct 1	Group	26.02	3	2.35
	Therapist	6.11	2	.83
	Group X Therapist	21.77	6	.98
	Error	443.82	120	
2	Group	9.96	3	1.92
	Therapist	0.05	2	0.01
	Group X Therapist	5.11	6	0.49
	Error	207.64	120	
3	Group	10.08	3	1.73
	Therapist	1.77	2	0.46
	Group X Therapist	4.35	6	0.37
	Error	232.73	120	
4	Group	8.79	3	1.25
	Therapist	17.56	2	3.74*
	Group X Therapist	1.89	6	0.13
	Error	281.64	120	
5	Group	10.45	3	0.92
	Therapist	10.74	2	1.42
	Group X Therapist	6.53	6	0.29
	Error	452.91	120	
6	Group	31.90	3	3.47*
	Therapist	11.88	2	1.94
	Group X Therapist	8.48	6	0.46
	Error	367.45	120	
7	Group	15.05	3	2.50
	Therapist	19.11	2	4.76**
	Group X Therapist	3.56	6	0.30
	Error	240.91	120	

* Significant beyond the .05 level

** Significant beyond the .01 level

Table 12 continued

Dependent Variable	Source of Variation	SS	df	F
Construct 8	Group	4.88	3	0.49
	Therapist	22.74	2	3.40*
	Group X Therapist	3.26	6	0.16
	Error	401.97	120	
9	Group	2.51	3	0.22
	Therapist	15.86	2	2.07
	Group X Therapist	4.56	6	0.20
	Error	460.48	120	
10	Group	44.02	3	3.99**
	Therapist	24.56	2	3.34*
	Group X Therapist	28.59	6	1.30
	Error	441.09	120	
11	Group	47.45	3	7.09**
	Therapist	34.65	2	7.76**
	Group X Therapist	12.32	6	0.92
	Error	267.82	120	
12	Group	3.00	3	0.69
	Therapist	0.47	2	0.16
	Group X Therapist	2.14	6	0.24
	Error	174.91	120	
13	Group	15.12	3	1.57
	Therapist	18.65	2	2.91
	Group X Therapist	11.47	6	0.60
	Error	384.73	120	
14	Group	10.57	3	1.67
	Therapist	1.56	2	0.37
	Group X Therapist	1.41	6	0.11
	Error	253.63	120	
15	Group	23.48	3	2.46
	Therapist	14.74	2	2.32
	Group X Therapist	4.59	6	0.24
	Error	381.27	120	
16	Group	14.27	3	1.84
	Therapist	28.14	2	5.44**
	Group X Therapist	4.89	6	0.32
	Error	310.66	120	

* Significant beyond the .05 level
** Significant beyond the .01 level

constructs differentially in rating the therapists and whether any significant interaction between therapist rating and preference group rating would emerge.

As presented in Table 12, four constructs were utilized differentially in rating the therapists across groups (constructs 4, 7, 8 and 16), one construct was associated with significant overall preference group differences (construct 6) and two constructs (constructs 10 and 11) were associated with significant differences for both groups and therapists. There were no significant interactive effects.

Variable means for those cells which showed significant differences were calculated and a consideration of these means can indicate the direction of those significant differences and assist in interpretation. Table 12 indicates, for example, that construct 4, Humble/Assertive, was utilized differentially in rating the three therapists by the forty-four subjects being considered. The overall means for Rogers (2.82), Perls (2.07) and Ellis (2.02) suggest that Rogers was evaluated more in terms of the construct pole, Humble, than Perls and Ellis. For construct 7, the means (Rogers 3.32, Ellis 2.63 and Perls 2.52) indicate an evaluation of Rogers in the direction of Shy versus Venturesome. Rogers' mean rating (4.54), for construct 8, in contrast with Perls (5.34) and Ellis (5.20), implies a tendency to rate Rogers more in the direction of Tender-minded, while the means of the other two place them clearly at the construct pole, Tough-minded. For construct 16, Relaxed/Tense,

the therapists' means (Rogers 5.45, Perls 4.73 and Ellis 4.34) seem to rank them with Rogers perceived as most relaxed and Ellis as most tense.

Significant differences among the preference groups were found for construct 6, Expedient/Conscientious. A ranking of group means provides an interesting result: Group 1 - 3.54, Group 3 - 2.67, Group 2 - 2.48 and Group 4 - 2.24. These suggest strongly that group 1, the "Total Negative" group tended to rate the three therapists in the construct direction. The description of this construct (Appendix C) stresses "not following rules" and suggests the interpretation that group 1 members, who were most negative about psychotherapy, may have perceived the psychotherapists as not following the accepted rules of social interaction.

For construct 10, Practical/Imaginative, both group and therapist differences were found. The mean ratings of all subjects for Rogers (4.93), Perls (4.02) and Ellis (4.11) suggest that again Rogers received the most deviant ratings, in this case, in the direction of the construct, Practical. When preference group differences are considered, the mean of Group 3 (Perls-Rogers) is most clearly in the construct direction. While this result was expected considering the mean rating of Rogers across groups, it was somewhat surprising that Group 2 (Rogers-Ellis) had the mean rating most clearly in the contrast direction (3.45). Groups 1 and 4 (Total Negative and Perls-Ellis, respectively) had mean therapist ratings of 4.45 and 4.48. These results cannot be easily interpreted.

Group and therapist differences were also found for construct 11, Forthright/Shrewd. The mean therapist ratings across groups (Rogers 4.07, Perls 3.14 and Ellis 2.77) show that Rogers was rated most in the construct direction. The mean preference group ratings across therapists (Group 1 - 2.64, Group 2 - 4.48, Group 3 - 3.03 and Group 4 - 3.15) indicates that Group 2 (Rogers-Ellis) tended to rate the therapists more in the construct direction.

In summary, the results suggest that, overall, constructs 4, 7, 8, 10, 11 and 16 were utilized to differentiate Rogers from the other two therapists and that he was perceived to a greater degree than the others in terms of the following dimensions: humble, shy, tender-minded, relaxed, practical and forthright. If construct descriptions (Appendix C) are carefully considered, these results are not surprising considering Rogers' personal style and his non-directive approach to psychotherapy.

The significant preference group differences for constructs 10 and 11, while not totally clear, are consistent with the therapist ratings for those constructs. A particularly interesting finding was that Group 1, the group that was totally negative about the psychotherapists, and particularly Perls, in the TRF analyses, appeared to be significantly different from the other three preference groups in their application of the construct dimension, Expedient (Construct 6) to the three psychotherapists.

CHAPTER IV

DISCUSSION

Three major hypotheses were investigated in the present research. The first was that non-participant observers would be able to utilize Cattell's source traits, derived from his Sixteen Personality Factor Questionnaire (16PF), as constructs in a Role Rep Test format to evaluate important role figures in their interpersonal worlds and to differentiate those figures from the therapists and client they had observed in a preceding film presentation. The second hypothesis stated that subsets of subjects with specific therapist preferences could be determined from responses to the Therapy Rating Form (TRF), a rationally derived instrument constructed by the author. Finally, the third hypothesis stated that those TRF subgroups would show differential patterns of Role Rep Test construct utilization, specifically, in relation to the three therapists.

As outlined in Part A of the Results section, the first hypothesis was not confirmed. The univariate analyses of constructs, taken from the group grid data, indicated that, in general, the means of more sociably desirable traits tended to be grouped together and less sociably desirable traits were rated in the opposite direction. As might be expected, positive and negative role figures were evaluated in this same bi-polar fashion, the therapists being included with the positive figures and Gloria with those more negative.

However, because the range of means was quite narrow, only tendencies toward a bi-polar, evaluative use of the constructs could be reported.

Interestingly, the variability estimates for the elements, or role figures, indicated a much narrower utilization of constructs for the more negative role figures. While this may support the notion that negative figures are evaluated in a more stereotyped way, it most probably is the result of the relatively few negative or socially undesirable descriptions that were presented among the thirty-two descriptions provided for consideration.

While the tendencies reported in the univariate analyses were generally supportive of the first hypothesis, the principal components analyses of the group grid data did not confirm those tendencies. The PCA of construct variables produced a first factor that was statistically bi-polar but conceptually unipolar and positively-valenced. The second and third factors were not conceptually clear and could only be tentatively interpreted however, the second factor did seem to define an intrusiveness or "tough vs. tender-minded" dimension. The PCA of element variables also did not produce very lucid results. The first factor distinguished the client from the more positive role figures but omitted those which were most clearly negative, thus further refuting the possibility of an evaluative primary dimension. However, the results do support the fact that the subjects were able to utilize the constructs to differentiate Gloria from the therapists and other positive role figures. The second factor separated the most negatively-valenced role figures

from mother, self, Gloria and pitied person. Ellis and Perls also received significant loadings on this factor in the direction of the negative figures, although Rogers did not. This again encouraged an interpretation of an intrusiveness or tough-mindedness dimension and showed that subjects were able to use the provided constructs to make some distinction regarding the therapists, namely in terms of differentiating Rogers from Perls and Ellis in the direction of "tender-mindedness."

To summarize, the results pertaining to the first hypothesis did contain marginal support for the general hypothesis of differential construct utilization in evaluation of therapists, client and other role figures; however, the clear evaluative and therapist-client dimensions predicted did not emerge. While rotation of the element PCA to simple structure whether orthogonal or oblique, might have produced those interpretable dimensions, it is interesting that in parallel research by Haber (1979) utilizing elicited rather than provided constructs, those two factors did appear without factor rotation. It seems that the 16PF source traits did not function as well as subjects' personally generated dimensions as evaluative constructs for judging others' behaviour and personalities. This is supported by the relatively uninterpretable results of the PCS of constructs. The 16PF source traits were chosen because they are purportedly the underlying and most basic qualities in the normal human personality and are relatively, but not completely, independent dimensions. The present research suggests that, although

these dimensions do meet all empirical criteria for the above claims, they would seem to be lacking in construct validity. In other words, overall, the subjects were not able to utilize these traits to evaluate the behavior of others which calls into question how valid they are as constructs which describe actual, observable characteristics. An important implication of this is the issue of how useful these source traits are when the user of the 16PF attempts to interpret the test results in terms of them, and link the concepts to their behavioral manifestations in the individual they purport to define. Another criticism of these traits as evaluative constructs is the relative lack of negative or socially undesirable qualities included among them which obfuscated the judgmental task of the subjects.

The second hypothesis stated that specific therapist preference groups could be determined by an analysis of subjects' responses to the Therapy Rating Form. As described in Part B of the Results section, this hypothesis was confirmed. The preference patterns which emerged indicated that the subjects either disliked all of the therapists or preferred two at the expense of the third. Four preference groups emerged with three of the groups showing all possible combinations of therapist preferences. This result seemed reasonable since all three therapists are acknowledged experts and it would be difficult for the naive subject to identify one of them as exceptional. The finding that one group rated all three therapists negatively seems to point to a general hostility toward or

disavowal of psychotherapy by those subjects.

The third hypothesis, that the TRF preference groups would show differential patterns of construct utilization, was only marginally confirmed. The groups differed significantly from one another in their utilization of only three constructs. On construct 10 (Practical/Imaginative), Group III, the Perls-Rogers preference group, rated the therapists more in the direction of "Practical" which was consistent with the overall group rating of Rogers in that direction. On construct 11 (Forthright/Shrewd), Group II, the Rogers-Ellis group, rated the therapists most in the direction of "Forthright" again seeming to reflect the overall evaluation of Rogers. Indeed, these results also indicated that when the ratings of all four groups were considered, Rogers was differentiated from the other two therapists not only on the two constructs mentioned, but also on constructs 4 (humble), 7 (shy), 8 (tender-minded) and 16 (relaxed); however, significant preference group differences did not result for these four constructs. These results indicate that, while a variety of preference patterns emerged from the TRF data, the subjects were able to utilize the limited construal possibilities presented by the 16PF traits as Role Rep Test constructs only to differentiate Rogers from the other two therapists. This conclusion is supported, as well, by the element PCA results which indicated that Rogers was differentiated from Perls and Ellis on the second factor.

The third significant difference among the preference groups

was related to utilization of construct 6 (Expedient/Conscientious). Group 1, the group which disliked all three therapists, tended to rate the therapists much more in the direction of "Expedient" than the other three groups. The description of this construct is: "Doesn't follow rules. Feels few obligations to others. Erades responsibilities. Not bound by rules." This suggests a number of interpretations. Perhaps Group 1 members believed that the therapists behaviour in relation to the client was too socially unconventional and impolite. More likely, they distrusted the therapists' intentions and saw them as manipulative. From a psychodynamic viewpoint, it is even possible to hypothesize that these subjects tend to be characterological. This would lead them to conflicts with and dislike of authority figures (in this case, the therapists) and, perhaps, to projection of their own "expedient" characteristics onto those figures. All of this is purely conjectural and based on little data; however, the result does raise several interesting issues for possible future research.

Since the provided constructs proved clearly inadequate as evaluative, differentiating dimensions, no further attempts were considered to investigate how therapists were perceived in relation to other important role figures in the subjects' interpersonal worlds.

Conclusions and Implications: The general purpose of the present, exploratory research was to investigate how well non-participant

observers could utilize 16PF source traits as constructs utilized to evaluate therapists in relation to other important persons in their interpersonal worlds. Overall, the results indicated that the source traits are not well-suited to this type of construal task. Future research is necessary to develop construct descriptions which are more useful for evaluating the personalities and behavior of others. Once constructs are developed which permit clear differentiation of therapists, clients, and positive and negative role figures it would then be necessary to investigate how individuals' construals of therapists and other figures were structurally related. Finally, it would be important to determine how much predictive power such preferences and cognitive-structural relationships had in terms of a clinical setting; the ultimate goal of this type of investigation being the development of a means by which therapist-client congruence and productivity can be predicted and maximized.

APPENDIX A

ROLE SPECIFICATION SHEET CODE NUMBER_____

PLEASE DO THE BEST YOU CAN TO THINK OF PEOPLE WHO BEST FIT THE DESCRIPTIONS GIVEN BELOW. AFTER READING THE DESCRIPTION, PLACE THE PERSON'S FIRST NAME ONLY IN THE SPACE PROVIDED. IF TWO PEOPLE HAVE THE SAME FIRST NAME, USE A SECOND INITIAL TO BETTER IDENTIFY THAT PERSON. PLEASE BE SURE TO LIST EACH NAME ONLY ONCE.

_____ 1. Yourself.
_____ 2. Your ideal self.
_____ 3. Your mother or the person who has played that part.
_____ 4. Your father or the person who has played that part.
_____ 5. A brother or sister.
_____ 6. Your spouse or girlfriend/boyfriend (indicate which it is)
_____ 7. A pal or close friend.
_____ 8. An ex-friend.
Gloria 9. The client you have just seen in the film.
Rogers 10. A therapist you have just seen in the film.
Perls 11. A therapist you have just seen in the film.
Ellis 12. A therapist you have just seen in the film.
_____ 13. A rejecting person you know.
_____ 14. A person you pity the most.
_____ 15. The most threatening person you know.
_____ 16. An attractive person you know.
_____ 17. A person you feel most uncomfortable with.
_____ 18. A person you would consider to be harmful to others.
_____ 19. An authority figure in your life.
_____ 20. A successful person you know.
_____ 21. A person you would consider to be well-adjusted or normal.
_____ 22. A person you would go to for help.

APPENDIX B

ROLE → TITLE INITIALS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
				1																	

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CODE #

1 RESERVED Detached, Cool, Critical, Aloof, Likes things rather than people, Precise.	OUTGOING Warm hearted, Easygoing, Kindly, Likes to work with people, Expresses feelings easily
2 LESS INTELLIGENT Dull, Thinks very concretely, Slow to learn, Slow to grasp meaning of things.	MORE INTELLIGENT Bright, Thinks abstractly, Quick to grasp ideas, Quick to learn.
3 AFFECTED BY FEELINGS Emotions change quickly, Easily upset, easily frustrated, Very changeable, Easily annoyed, Loses cool easily.	EMOTIONALLY STABLE Very mature, Stable, Realistic about life, Stays cool in a crisis, Doesn't get upset easily
4 HUMBLE Readily gives into others, conforms easily, Very mild, Overly dependent on others, Readily confesses faults.	ASSERTIVE Confronts others easily, Independent-minded, Dominates others, Self-assured, A law to himself, Stubborn.
5 SOBER Very prudent, Serious about life, A pessimist, Doesn't say much, Seen as very correct by others.	HAPPY-GO-LUCKY Lively, Gay, Impulsive, Very active, Very talkative, Care-free, Enthusiastic about life.
6 EXPEDIENT Doesn't follow rules. Feels few obligations to thers, Evades responsibilities, Not bound by rules.	CONSCIENTIOUS Very responsible, Takes rules and regulations seriously, Deep sense of duty, Stays with things, Perserveres.
7 SHY Timid, Withdraws, Very Cautious, A wallflower, Feels inferior, Avoids expressing self to others, Avoids groups.	VENTURESOME Bold, Uninhibited, Spontaneous, Ready to try new things, Pushy Ignores danger.
8 TOUGH-MINDED Self-reliant, Realistic, No-nonsense, Practical, Acts 'masculine', Hard, Smug,	TENDER-MINDED Very sensitive, Artistic, Over-protected, Act's feminine. Impatient, Impractical, Dislike crude people, Day-dreamer.
9 TRUSTING Adaptable, Free of jealousy, Easy to get on with, Good team worker, Uncompetitive, Cheerful.	SUSPICIOUS Self-opinionated, Hard to fool, Mistrusting, Doubts things, Involved in self, Poor team worker.
10 PRACTICAL Careful, Proper, Does what is expected, Concerned with detail Unimaginative, Attends to practical matters.	IMAGINATIVE Careless, Unconventional, Unconcerned over everyday matters, Imaginative, Creative, Self-motivated.
11 FORTHRIGHT Natural, Simple, Sentimental, Content with what comes, Crude, Artless, Unsophisticated.	SHREWD Calculating, Worldly, Polished, Unsentimental, Experienced, Shrewd.
12 PLACID Confident, self-assured, Untroubled, Unshakeable nerve, Never flustered, Rarely anxious.	APPREHENSIVE Worrying, Depressive, Troubled Moody, Broods often, Becomes anxious easily, A worrier.
13 CONSERVATIVE Respects established ideas, Cautious, Opposes change, Traditional, Confident in 'tried' and 'true' ideas.	EXPERIMENTING Critical, Liberal, Free-thinking, Doubts older beliefs, Very inquiring, Tolerant of change, Likes new ideas.
14 GROUP DEPENDENT A joiner, A follower, Depends on social admiration, Goes along with group, Needs group support.	SELF-SUFFICIENT Prefers own decisions, Likes going own way, Independent, Does not need support of others, Takes own action.
15 UNDISCIPLINED Careless, Follows own urges, Will not be bothered by control, Not considerate, Not careful.	CONTROLLED Socially precise, Strong control of emotions, Careful, Follows his 'image' of himself.
16 RELAXED Tranquil, Composed, Not driven Unfrustrated, Very Satisfied, Almost lazy in manner, Very inactive.	TENSE Driven, Frustrated, Restless, Excitable, Impatient, Tense, Must be doing something.

APPENDIX C

Construct Descriptions

Taken from Cattell's 16PF

1	RESERVED Detached, Cool, Critical, Aloof, Likes things rather than people, Precise.	OUTGOING Warm hearted, Easygoing, Kindly, Likes to work with people, Expresses feelings, easily.
2	LESS INTELLIGENT Dull, Thinks very concretely, Slow to learn, slow to grasp meaning of things.	MORE INTELLIGENT Bright, Thinks abstractly, Quick to grasp ideas, Quick to learn.
3	AFFECTED BY FEELINGS Emotions change quickly, Easily upset, easily frustrated, Very changeable, Easily annoyed, Loses cool easily.	EMOTIONALLY STABLE Very mature, Stable, Realistic about life, Stays cool in a crisis, Doesn't get upset easily.
4	HUMBLE Readily gives into others, conforms easily, Very mild, Overly dependent on others, Readily confesses faults.	ASSERTIVE Confronts others easily, Independent-minded. Dominates others, Self-assured, A law to himself, Stubborn.
5	SOBER Very prudent, Serious about life, A pessimist, Doesn't say much, Seen as very correct by others.	HAPPY-GO-LUCKY Lively, Gay, Impulsive, Very active, Very talkative, Care-free, Enthusiastic about life.
6	EXPEDIENT Doesn't follow rules. Feels few obligations to thers, Evades responsibilities, Not bound by rules.	CONSCIENTIOUS Very responsible, Takes rules and regulations seriously, Deep sense of duty, Stays with things, Perserveres.
7	SHY Timid, Withdraws, Very Cautious, A wallflower, Feels inferior, Avoids expressing self to others, Avoids groups.	VENTURESOME Bold, Uninhibited, Spontaneous, Ready to try new things, Pushy, Ignores danger.
8	TOUGH-MINDED Self-reliant, Realistic, Nonsense, Practical, Acts 'masculine', Hard, Smug.	TENDER-MINDED Very sensitive, Artistic, Over-protected, Acts feminine, Impatient, Impractical, Dislikes crude people, Day-dreamer.

9	TRUSTING Adaptable, Free of jealousy, Easy to get on with, Good team worker, Uncompetitive, Cheerful.	SUSPICIOUS Self-opinionated, Hard to fool, Mistrusting, Doubts things, Involved in self, Poor team worker.
10	PRACTICAL Careful, Proper, Does what is expected, Concerned with detail Unimaginative, Attends to practical matters.	IMAGINATIVE Careless, Unconventional, Unconcerned over everyday matters, Imaginative, Creative, Self-motivated.
11	FORTHRIGHT Natural, Simple, Sentimental, Content with what comes, Crude, Artless, Unsophisticated.	SHREWD Calculating, Worldly, Polished, Unsentimental, Experienced, Shrewd.
12	PLACID Confident, self-assured, Untroubled, Unshakeable nerve, Never flustered, Rarely anxious.	APPREHENSIVE Worrying, Depressive, Troubled Moody, Broods often, Becomes anxious easily, A worrier.
13	CONSERVATIVE Respects established ideas, Cautious, Opposes change, Traditional, Confident in 'tried' and 'true' ideas.	EXPERIMENTING Critical, Liberal, Free-thinking, Doubts older beliefs, Very inquiring, Tolerant of change, Likes new Ideas.
14	GROUP DEPENDENT A joiner, A follower, Depends on social admiration, Goes along with group, Needs group support.	SELF-SUFFICIENT Prefers own decisions, Likes going own way, Independent, Does not need support of others, Takes own action.
15	UNDISCIPLINED Careless, Follows own urges, Will not be bothered by control, Not considerate, Not careful.	CONTROLLED Socially precise, Strong control of emotions, Careful, Follows his 'image' of himself.
16	RELAXED Tranquil, Composed, Not driven Unfrustrated, Very Satisfied, Almost lazy in manner, Very inactive.	TENSE Driven, Frustrated, Restless, Excitable, Impatient, Tense, Must be doing something.

APPENDIX D

Page 1.

FOR THE FOLLOWING QUESTIONS PLEASE CIRCLE THE NUMBER BENEATH THE STATEMENT WHICH MOST ACCURATELY DESCRIBES YOUR THOUGHTS OR FEELINGS.

1. Please rate how much you liked each of the therapists in the film.

	extreme dislike	moderate dislike	mild dislike	neither like nor dislike	mild liking	moderate liking	extreme liking	
Rogers:	1	2	3	4	5	6	7	1
Perls:	1	2	3	4	5	6	7	2
Ellis:	1	2	3	4	5	6	7	3

2. Please rate how helpful each therapist was with the client, Gloria.

	extremely unhelpful	moderately unhelpful	mildly unhelpful	neither helpful nor unhelpful	mildly helpful	moderately helpful	extremely helpful	
Rogers:	1	2	3	4	5	6	7	4
Perls:	1	2	3	4	5	6	7	5
Ellis:	1	2	3	4	5	6	7	6

3. Please rate how much confidence you would have in each of the therapists if you were to seek assistance from them for a problem of your own.

	extreme lack of confidence	moderate lack of confidence	mild lack of confidence	neither	mild amount of confidence	moderate amount of confidence	extreme amount of confidence	
Rogers:	1	2	3	4	5	6	7	7
Ellis:	1	2	3	4	5	6	7	8
Perls:	1	2	3	4	5	6	7	9

4. If this had been your first session with each of the therapists, how likely is it that you would continue with each?

	absolutely not continue	most probably not	probably not continue	maybe	probably continue	most probably continue	absolutely continue	
Rogers:	1	2	3	4	5	6	7	10
Perls:	1	2	3	4	5	6	7	11
Ellis:	1	2	3	4	5	6	7	12

5. Rate how similar you feel you are to each of the therapists.

	extremely dissimilar	moderately dissimilar	mildly dissimilar	neither	mildly similar	moderately similar	extremely similar	
Rogers:	1	2	3	4	5	6	7	13
Perls:	1	2	3	4	5	6	7	14
Ellis:	1	2	3	4	5	6	7	15

6. Rate how physically attractive you find each of the therapists.

	extremely unattractive	moderately unattractive	mildly unattractive	neither	mildly attractive	moderately attractive	extremely attractive	
Rogers:	1	2	3	4	5	6	7	16
Perls:	1	2	3	4	5	6	7	17
Ellis:	1	2	3	4	5	6	7	18

7. Rate how effective each of the therapists' techniques were (not in relation to Gloria).

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	19
Ellis:	1	2	3	4	5	6	7	20
Perls:	1	2	3	4	5	6	7	21

IMAGINE YOURSELF GOING TO EACH OF THE THERAPISTS YOU SAW IN THE FILMS WITH EACH OF THE FOLLOWING PROBLEMS. PLEASE RATE HOW EFFECTIVE YOU THINK EACH WOULD BE IN HELPING YOU WITH THAT PARTICULAR PROBLEM.

1. Please rate how effective each would be for a marriage problem or a problem with your girlfriend/boyfriend.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	22
Perls:	1	2	3	4	5	6	7	23
Ellis:	1	2	3	4	5	6	7	24

2. Please rate how effective each would be if you were seriously considering suicide.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	25
Perls:	1	2	3	4	5	6	7	26
Ellis:	1	2	3	4	5	6	7	27

3. Please rate how effective each would be if you were very depressed.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	28
Perls:	1	2	3	4	5	6	7	29
Ellis:	1	2	3	4	5	6	7	30

4. Please rate how effective each would be if you wanted to improve your self-confidence and understand yourself better.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	31
Perls:	1	2	3	4	5	6	7	32
Ellis:	1	2	3	4	5	6	7	33

5. Please rate how effective each would be if you had a problem with drugs or alcohol.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	34
Perls:	1	2	3	4	5	6	7	35
Ellis:	1	2	3	4	5	6	7	36

6. Please rate how effective each would be if you wanted to do better in school or at work.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	37
Perls:	1	2	3	4	5	6	7	38
Ellis:	1	2	3	4	5	6	7	39

7. Please rate how effective each would be if you wanted to relate better with others and improve your social skills.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	40
Perls:	1	2	3	4	5	6	7	41
Ellis:	1	2	3	4	5	6	7	42

3. Please rate how effective each would be if you were having a problem with your children.

	extremely ineffective	moderately ineffective	mildly ineffective	neither	mildly effective	moderately effective	extremely effective	
Rogers:	1	2	3	4	5	6	7	43
Perls:	1	2	3	4	5	6	7	44
Ellis:	1	2	3	4	5	6	7	45

FOR THE FOLLOWING QUESTIONS AGAIN CIRCLE THE NUMBER BENEATH THE STATEMENT WHICH MOST ACCURATELY DESCRIBES YOUR THOUGHTS OR FEELINGS.

1. Please rate how disturbed you felt the client was in this film.

extremely disturbed	moderately disturbed	mildly disturbed	neither	mildly healthy	moderately healthy	extremely healthy	
1	2	3	4	5	6	7	46

2. Describe how you feel Gloria felt about each therapist in the film.

	extremely disliked	moderately disliked	mildly disliked	neither neither	mildly liked	moderatley liked	extremely liked	
Rogers:	1	2	3	4	5	6	7	47
Perls:	1	2	3	4	5	6	7	48
Ellis:	1	2	3	4	5	6	7	49

3. How much did you like Gloria.

extremely disliked	moderately disliked	mildly disliked	neither	midly liked	moderately liked	extremely liked	
1	2	3	4	5	6	7	50

4. How similar do you feel to Gloria.

extremely dissimilar	moderately dissimilar	mildly dissimilar	neither neither	mildly similar	moderately similar	extremely similar	
1	2	3	4	5	6	7	51

5. Considering just the problem that Gloria presented, how serious do you think it was.

extremely abnormal	moderately abnormal	mildly abnormal	neither	mildly normal	moderately normal	extremely normal	
1	2	3	4	5	6	7	52

THE FOLLOWING QUESTIONS ARE RELATED TO ATTITUDES ABOUT TREATMENT. PLEASE CIRCLE THE NUMBER BENEATH THE STATEMENT THAT BEST DESCRIBES YOUR THOUGHTS AND FEELINGS.

1. How much confidence do you have in psychotherapy for helping people with problems?

extremely unconfident	moderately unconfident	mildly unconfident	neither	mildly confident	moderately confident	extremely confident	
1	2	3	4	5	6	7	53

2. If you had a problem, how probable is it that you would seek help from a therapist?

extremely improbable	moderately improbable	mildly improbable	neither	mildly probable	moderately probable	extremely probable	
1	2	3	4	5	6	7	54

1. How disturbed do you think an individual must be before he or she seeks help from a therapist?

extremely disturbed	moderately disturbed	mildly disturbed	neither	mildly healthy	moderately healthy	extremely healthy	
1	2	3	4	5	6	7	55

APPENDIX E

PERSONAL INFORMATION SHEET

CODE NUMBER_____

Please make up a six-digit number and put it in the space provided after "code number." Do not put your name on any materials. Use only your code number.

All information given will remain confidential. Please provide the following information:

AGE: _____

SEX: Male____ Female____

MARITAL STATUS: Married____ Single____ Separated____ Divorced____

RACE: _____

RELIGION: _____ (optional)

EDUCATION-- Please circle the number of years beyond high school of education completed:

1 2 3 4 5 6 7 8 9 10

PRESENT OCCUPATION: _____

YOUR GROSS FAMILY INCOME YEARLY: (Check one)

Under $5,000 _____
$5,000 to $10,000 _____
$10,000 to $20,000 _____
$20,000 to $30,000 _____
Over $30,000 _____

IF YOU HAVE EVER PARTICIPATED IN PSYCHOTHERAPY AND/OR COUNSELLING, PLEASE CHECK ONE:

Long-term treatment--inpatient (more than 15 sessions) _____
Long-term treatment--outpatient " " " " _____
Short-term treatment--inpatient (less than 15 sessions) _____
Short-term treatment--outpatient " " " " _____

NEVER HAD PSYCHOTHERAPY AND/OR COUNSELLING: _____

HAVE YOU EVER BEEN A COUNSELLOR OR THERAPIST YES____ NO____

IF YES, PLEASE DESCRIBE YOUR EXPERIENCE:

_____
_____
_____
_____

APPENDIX F

ROLE REP TEST CODE NUMBER _____

Now that you have viewed the film, we would like you to complete the following questionnaire. This questionnaire will require that you make judgments about various people, including the four individuals that you saw in the film. Please read all of the instructions carefully.

This questionnaire will consist of four parts:
1) a set of instructions
2) a role specification sheet
3) a response sheet
4) a scoring sheet

GENERAL INSTRUCTIONS

This questionnaire is designed to consider important ways in which you see different people. If the instructions are not perfectly clear please ask for more information. First take the role specification sheet and read the instructions at the top. Starting with your own name write only the first names of the people that come to mind when you read the given descriptions. Some of the names will be provided (the four people in the film). Be sure to list each name only once and if two people have the same first name, use a second initial that will clearly identify that person for you.

Step 1.

When you have completed the role specification sheet, please take the response sheet numbered '2' and list the names in the numbered blanks, starting in the upper left hand corner. Please indicate the sex of the person (where necessary) by putting either an F(female) of an M(male) beside that person's name. (See sample response sheet below).

SAMPLE:

	1. Mom	2. Dad	3. Sue	4. Bill	5. John	6. Mary
Row 1						
Row 2						

Step 2.

Now read the following instructions carefully. Look at the response sheet on which you have just entered the names in Step 1. You will see that constructs and contrasts have been provided for you in the far right hand columns. The descriptions in the first column (e.g., Reserved, Less Intelligent, etc.) represent the constructs and the second column (e.g. Outgoing, More Intelligent, etc.) contains the contrasts. Look at Row 1 and consider the first name. You must first decide whether the construct or contrast (i.e., Reserved or Outgoing) applies to that person.

Then rate that person in accord with the provided scoring sheet. When you have decided on a rating please put the numerical value in the square under the person's name. Continue across the row utilizing the first construct-contrast pair, Reserved-Outgoing, and then go on to the other rows, being sure to utilize the correct pair for each, until all 16 rows are completed. Please do your best not to leave any blanks. Thank you for your generous time and cooperation.

APPENDIX G

SCORING SHEET FOR RATINGS

STEP 1: DECIDE WHETHER THE "CONSTRUCT" OR THE "CONTRAST" APPLIED TO THE PERSON IN QUESTION.

STEP 2: WHEN YOU HAVE DECIDED, RATE THAT PERSON ACCORDING TO THE SCALE GIVEN BELOW AND PLACE THE NUMBER IN THE SQUARE UNDER THAT PERSON'S NAME.

CONSTRUCT	CONTRAST
DEFINITELY APPLIES - 7	DEFINITELY APPLIES - 1
MODERATELY APPLIES - 6	MODERATELY APPLIES - 2
MINIMALLY APPLIES - 5	MINIMALLY APPLIES - 3

4

NEITHER THE CONSTRUCT NOR THE CONTRAST APPLIES TO THIS PERSON

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
								GLORIA	ROGERS	PERLS	ELLIS										

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