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ABSTRACT

THE RELATIONSHIP BETWEEN COUNSELOR-TRAINEES' PERCEPTIONS
OF FILMED CLIENT-PERCEPTS AND THEIR COUNSELING
INTERVIEW BEHAVIOR WITH SPECIFIC CLIENTS

by Jack D. Thorsen

The purpose of this investigation was to develop an instrument for measuring counselor-trainee perceptions of filmed client-percepts and to study the relationship between counselor-trainees' perceptions of the filmed client-percepts and these counselor-trainees' subsequent counseling interview behavior with particular clients by:

- (1) creating a set of filmed counseling segments,
- (2) developing an objective means for tabulating counselortrainee perceptions of filmed client-percepts using a semantic differential format, (3) taping samples of counselor-trainee interview behavior, and (4) comparing statistically counselor-trainee perceptions of the filmed client-percepts with selected interview behavior.

The subjects in this study were thirty graduate students enrolled in the 1965-66 academic year guidance and counseling institute at Michigan State University (Group I) and thirty graduate students enrolled in the 1966 summer practicum at Michigan State University (Group II). For all

analyses of the data Group I was considered the experimental group and Group II the replicating group.

The Person Perception Test (PPT), developed specifically for this study, was used as the independent variable. The PPT consisted of five filmed counseling segments judged on a thirty scale graphic semantic differential. Factor analysis of the thirty scales revealed four judgmental dimensions: (1) evaluative, (2) emotional, (3) potency, and (4) evaluative-activity. Each scale was assigned a factor and the scale positions were numbered 1 through 7.

Test-retest reliability estimates ranging from .55 to .80 were computed by product-moment (\underline{r}). Average absolute deviations of less than one scale unit for each of the four factors were found.

The Counselor Response System (CRS) was used as the dependent variable. Three judges, working independently and from interview tapes, rated the counselor-trainees' responses along the following dichotomous dimensions (interjudge reliability estimates in parentheses): (1) Content: Follow-Shift (.95), (2) Control: Expansive-Restrictive (.92), (3) Referent: Client-Other (.73), and (4) Reinforcing-Nonreinforcing (.94).

Hypotheses tested for this study were grouped under two headings: (1) Person Perception Test hypotheses and (2) validity hypotheses. The first set of hypotheses tested

the internal consistency of factor items with total factor scores and with client-percept factor scores; the differences among client-percept factor scores; and the theoretical notion of the perceiver's "generalized meaning." The second set of hypotheses tested the validity of the PPT by analyzing its relationships with the CRS dimensions.

Major Findings

The following were the major findings of the study:

- 1. The data collected for this study did not support the validity hypotheses and, therefore, did not support the predicted relationship between counselor-trainees' perceptions of filmed client-percepts and their subsequent interview behavior with a specific client.
- Counselor-trainees judge clients along several dimensions with an evaluative dimension being the most dominant, followed by emotional and potency dimensions.
- 3. Counselor-trainees value more highly those clients who are most active as evidenced by the dependence of the activity factor on the evaluative factor for Group I and by its coalescence with the evaluative factor for Group II.
- 4. The PPT is an objective means for tabulating counselor-trainee perceptions of filmed client-

- percepts as evidenced by the ease with which various scoring procedures can be applied.
- 5. The PPT total factor scores represent counselortrainees' generalized meaning for the clientpercepts as evidenced by the positive relationships found between client-percept factor scores and total factor scores.
- 6. If a perceiver's comparative particular judgment of a person percept were known, the perceiver's total judgment of the person percept could be predicted. But his comparative total judgment of people in general could not.
- 7. If a perceiver's comparative total judgment of a person percept were known, the perceiver's comparative total judgment of person percepts in general could be predicted. But his comparative total judgment of another person percept could not.
- 8. The PPT needs further refinement (before discarding it or the theory upon which it was based) in an attempt to bring out better possible relationships.

THE RELATIONSHIP BETWEEN COUNSELOR-TRAINEES' PERCEPTIONS OF FILMED CLIENT-PERCEPTS AND THEIR COUNSELING INTERVIEW BEHAVIOR WITH SPECIFIC CLIENTS

By

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CHAPTER I

INTRODUCTION

This study was designed to explore the relationship between person perception and behavior in the counseling activity. More specifically, it focused upon the relationship between the generalized "meaning" a counselor-trainee attached to client-percepts and the interview behavior he displayed with a particular client. The possibility of predicting counselor-trainee interview behavior from that relationship should be explored, since a measure of person perception might be one effective criterion for selecting prospective counselor-trainees.

Counselor educators today recognize that present counselor selection procedures are inadequate. Selection methods currently practiced by graduate schools are based primarily upon the applicant's intelligence and his general ability to do didactic graduate work.

In a questionnaire study Santavicca found that 85 per cent of 170 responding colleges and universities used an applicant's undergraduate record and a measure of

¹J. D. Linden, S. C. Stone, and B. Shertzer, "The Development and Evaluation of an Inventory for Rating Counseling," <u>Personnel and Guidance Journal</u>, 44:267.

scholastic aptitude as the main criteria for selecting counselor-trainees. Similarly, Hill found that eligibility and potential competence for graduate training was currently the chief counselor-trainee selection criterion. He noted that some schools gave a variety of non-academic tests but that there was little evidence that they were used for selection. Patterson, in his survey of the most commonly used counselor-trainee selection methods, found that two-thirds of the schools he studied used undergraduate grade point average as the most general requirement for entrance. 4

Yet, even though a certain level of intelligence is needed to be an effective counselor, intelligence, per se, and counselor effectiveness do not appear to be linearly related. As Stoughton wrote, "Good scholarship is important but does not guarantee good counseling ability." 5

Because academic ability alone is not a sufficient ingredient for counselor success, some other selection

²G. G. Santavicca, "Supervised Experience and Selection of Counselor Trainees," <u>Personnel and Guidance</u> Journal, 38:195-197.

³G. W. Hill, "The Selection of School Counselors," Personnel and Guidance Journal, 39:357-358.

⁴C. H. Patterson, "Selection of Rehabilitation Counseling Students," <u>Personnel and Guidance Journal</u>, 41:318-320.

⁵R. W. Stoughton, "The Preparation of Counselors and Personnel Workers," Review of Educational Research, 27:175.

criterion should be used in addition to the applicant's academic ability.

Recent literature supported the notion that the best predictor of counselor effectiveness is a measure of counselor-trainee perception of client communication. Davitz wrote that when he was a graduate student, he was encouraged to be "sensitive," to "empathize," to "understand" how the other person felt, to listen with his "third ear," to "let himself go," to react "spontaneously and intuitively," and finally to undergo psychoanalysis. He wrote further that when he became a counseling supervisor, he found himself echoing these same phrases to his students.

In his research on the "Ideal Therapeutic Relation-ship," Fiedler referred to the therapist's ability to communicate with and understand the client. He generalized that the effective "therapist is able to participate completely in the patient's communication."

Rogers reported that clarity of communications and clarity of perceptions are functions of the personal characteristics of speaker and listener:

The more that Y (the counselor) experiences the communication of X (the client) as a congruence of experience, awareness, and communication, the more the ensuing relationship will involve: a tendency toward more mutually accurate understanding of the

⁶J. R. Davitz (ed.), The Communication of Emotional Meaning (New York: McGraw-Hill, 1964), p. 2.

⁷F. Fiedler, "The Concept of Ideal Therapeutic Relationship," <u>Journal of Consulting Psychology</u>, 14:242.

communications; improved psychological adjustment and functions in both parties; and mutual satisfaction in the relationship.⁸

Stating that the communication of ideas, feelings, and facts is of primary importance in the counseling process, Rank concluded that the perception of client communication is directly related to effectiveness of counseling. 9

In <u>Counseling</u>: <u>Content and Process</u>, Fullmer and Bernard cited a research project by Combs which indicated that good teachers could be differentiated from poor teachers by their perception of youngsters, even though they could not be distinguished by what they knew about teaching. "It (perceptual ability) may be the most helpful criterion we have ever had," concluded Fullmer and Bernard, "for selecting and training candidates for teaching and counseling."¹⁰

If the perceptual ability of the counselor is important, then an instrument which measures counselor-trainee perception could be a useful selection tool.

⁸C. R. Rogers, On Becoming a Person (Boston: Houghton-Mifflin Company, 1961), pp. 344-345.

⁹R. C. Rank, "Counseling Competence and Perception," Personnel and Guidance Journal, 45:359-365.

¹⁰D. W. Fullmer and H. W. Bernard, <u>Counseling</u>: <u>Content and Process</u> (Chicago: Science Research Associates, 1964), p. 128

PURPOSE

The purpose of this investigation was two-fold:

(1) to develop an instrument for measuring counselor-trainee perceptions of filmed client-percepts and (2) to study the relationship between counselor-trainees perceptions of filmed client-percepts and these counselor-trainees subsequent counseling interview behavior with particular clients

- a. creating a set of filmed counseling segments,
- b. developing an objective means for tabulating counselor-trainee perceptions of filmed client-percepts using a semantic differential format.

by:

- c. taping samples of counselor-trainee interview behavior, and
- d. comparing statistically counselor-trainee perceptions of the filmed client-percepts with selected interview behavior.

Recently, Whiteley pleaded for shifts in research from the global studies of effective versus ineffective counselors to the studies that focused on "what a counselor does and how he is to behave." His prime concern was that no behavior distinguishing effective from ineffective counselors seemed ever to be specifically identified in global studies. Though Whiteley's remarks were made well

¹¹ John M. Whiteley, "The Selection and Evaluation of School Counselors," a paper presented at the American Personnel and Guidance Association convention, April, 1968, pp. 1, 8.

after this study was begun, they served to underscore the still present need for a behavioral criterion. Also counselor-trainee interview behavior proved a more stringent test for the developed instrument than would a global measure such as counselor effectiveness.

GENERAL RELATIONSHIP HYPOTHESIS

It was hypothesized that a significant relationship existed between the generalized meaning a counselor-trainee had for filmed client-percepts and subsequent selected counseling interview behavior he displayed with a particular client. 12

THEORY

In his ambitious review of perceptual theories,
Allport has clearly shown that "perception" has many
definitions. 13 As is the case with many such constructs it
falls to the investigator to select one which best meets the
needs of his study.

Since one of the two directions of person perception research has been the relationship between perception and

¹²This hypothesis will be expanded and restated in statistically testable form in Chapter III.

¹³F. H. Allport, Theories of Perception and the Concept of Structure (New York: John Wiley & Sons, Inc., 1955).

action, 14 the definition used by those studying person perception was used for this study.

Person Perception Defined

Tagiuri defined person perception as "whenever the perceiver regards the object as having the potential of representation and intentionality." Specifically, Tagiuri referred to the perceiver's observation and inferences about the object's "intentions, attitudes, emotions, ideas, abilities, purposes, traits," i.e. about things inside the person. It is as the existentialist describes "the one who looks back." So it is in the counseling activity: the perceived object is always another person "who looks back."

But this definition has not been without its critic. Pastore objected, saying that perception, per se, is different from interpretations of and inferences made from perceptions. He claimed that interpretations and inferences change according to the perceiver's need even though the perceived object has not changed a bit. But Murphy and his associates, in reply to Pastore's criticism,

¹⁴R. Tagiuri and L. Petrullo (eds.), <u>Person</u>

<u>Perception and Interpersonal Behavior</u> (Stanford: Stanford University Press, 1958), pp. xi-xii.

¹⁵Ibid., p. x.

¹⁶N. Pastore, "Need as a Determinant of Perception," Journal of Psychology, 28:457-475.

said that such a distinction cannot be made operationally. 17

There is no way to separate perceptions, they contend, from interpretations and meanings of the perceptions. And this inability to operationally separate physiological perception from the meaning of the perception appears to be particularly true with person perception where the perceiver is not just looking at the object from the outside (as he would a stone) but is inferring inner states of intentions which cannot be physiologically perceived.

The "Meaning" of Perception

Berlo wrote: "Your meanings for things consist of the ways that you respond to them, internally, and the predisposition which you have to respond to them, externally." 18

Tolman's "map room" where stimuli are sorted out and arranged conceptually before a response ever occurs is similar. 19

Bruner, Goodnow, and Austin state that these concepts are learned by the association of external stimuli with internal mediating stimuli. So meanings are internal, conceptual, and learned.

¹⁷ I. Chein, R. Levine, G. Murphy, H. Proshansky, and R. Schafer, "Need as a Determinant of Perception, a Reply to Pastore," Journal of Psychology, 31:129-136.

¹⁸D. K. Berlo, The Process of Communication (New York: Holt, Rinehart and Winston, Inc., 1960), p. 184.

¹⁹J. S. Bruner, J. Goodnow, and G. Austin, A Study of Thinking (New York: John Wiley & Sons, Inc., 1965), p. vii.

²⁰Ibid., p. 79.

Tagiuri observed that how a person behaves toward another depends upon what that other person means to him. As the First Century A. D. stoic, Epictetus, wrote:

Men are not disturbed by things (perceptions), but by the views they take of things (interpretations of perceptions). Thus death is nothing terrible . . . the terror consists in our notion of death that it is terrible. 21

It is not the perception, <u>per se</u>, which causes men to act but the meaning attached to the perception.

Thus in counseling, clients will be perceived differently by different counselors, not because the client-percept has changed from counselor to counselor, but because the interpretation and the meaning given to the client-percept is different from counselor to counselor. The counselor sorts out the various stimuli coming to him and arranges them into a conceptual pattern which has meaning for him. The counselor responds to this arrangement of stimuli into a meaningful concept--not to the objective percept itself.

Heider points out that this arrangement of perceptual stimuli into meaningful concepts helps the perceiver in several ways: 22

²¹ Epictetus, The Works of Epictetus, trans. E. Carter and T. W. Higginson (Boston: Little, Brown, 1865), p. 377.

Relations (New York: John Wiley & Sons, Inc., 1958), pp. 151, 157.

- 1. "It gives us control over the environment."

 Conceptual structure allows the perceiver to predict.

 For example, if the counselor can have some immediate meaning of his client, he is better able to predict the dynamics of his client.
- 2. "It helps us evaluate." By categorizing stimuli the perceiver can have a meaningful, predictable way of saying this stimulus is good, that one bad. Thus the counselor is able to assess what he sees.
- 3. "It serves as a motivation for further action."

 It serves as a starting place for making hypotheses about
 the client.
- 4. "It gives us the ability to report." Since the perceiver cannot attend to all elements of the stimuli bombarding him, he selectively attends to those elements which have the most meaning and lets the rest go relatively unnoticed, giving him a shorthand for describing what he sees.

Concept Formation and Attribute Seeking

Arrangement of stimuli into meaningful concepts is an ongoing process. Perhaps, as Bruner, Goodnow, and Austin state, the perceiver learns to classify people as "honest," "somewhat shifty," and "downright crooked" early under the tutilage of parents and peers. 23 He learns quickly to find

²³Brunner, Goodnow, Austin, pp. 69, 209.

selected attributes he can use as a basis for predicting a broader range of behaviors of the observed person. Moreover, he is constantly classifying people by their "type," into those who are "his kind" and "not his kind," into the class of those who are "reliable" and those who are not.

Attribute seeking is so important that Heider wrote, "My entire relationship with the other person may hinge on attribution. Those pleasures attributed to him as a person reveal the kind of person I believe him to be and I am accordingly drawn to him or repelled." But what a person sees, Heider pointed out, is dependent upon what he is tuned to see. And as Berlo said, "We are tuned to see what we believe; our beliefs determine what we see." 25

Bruner and associates described this as a "thematic process" or as an "effort after empirical verisimilitude." ²⁶ That is, the perceiver tends to interpret his perceptions congruently with his own attitudes and values in spite of the fact that he may be incorrect logically. And once an interpretation has been established and the person been identified by his attributes, the perceiver will tend to "rectify" or "normalize" the attributes which deviate from expectancy to fit his (the perceiver's) needs and wishes.

²⁴Heider, pp. 151, 157.

²⁵Berlo, pp. 230-231.

²⁶Bruner, Goodnow, Austin, p. 104.

Soon a core of generally consistent categories is developed describing all people, a consistent core which Bruner and Tagiuri call the perceiver's "expressive style," which Heider labels "perceptual style," and which Cronbach calls the "generalized meaning for the other." And this learned generalized meaning for the other will determine how the perceiver will behave toward the other.

So it is with the counselor as perceiver. "We act and choose on the basis of what we see, feel, and believe; meanings and values are part and parcel of our actions. When we are mistaken about things, we act in terms of our erroneous notions, not in terms of things as they are. To understand human action, it is therefore essential to understand the conscious mode in which things appear to us." 28

But even though it is generally known that the perceiver spontaneously categorizes people, Tagiuri and Petrullo noted that the relationship between person perception and behavior is in great need of study. 29 A goal

²⁷J. S. Bruner and R. Tagiuri, "The Perception of People," in G. Lindzey (ed.), Handbook of Social Psychology, Vol. II (Cambridge: Addison-Wesley, 1954), p. 650; Heider, p. 56; L. J. Cronbach, "Proposals Leading to Analytic Treatment of Social Perception Scores," in R. Tagiuri and L. Petrullo, Person Perception and Interpersonal Behavior (Stanford: Stanford University Press, 1958), p. 363.

²⁸S. E. Asch, Social Psychology (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1952), p. 65.

²⁹Tagiuri and Petrullo, pp. xiv-xv.

of this thesis was to develop an instrument to study the relationship in the context of the counseling activity.

THE SEMANTIC DIFFERENTIAL 30

A major concern of this study was the choice of an objective technique for measuring person perceptions.

Because of Osgood's background in social psychology and his attempts to tie the measurement of meaning with learning theory, the semantic differential technique is particularly applicable for any study focusing on person perception and meaning.

The Semantic Differential Technique

The semantic differential technique is Osgood's attempt to quantitatively and objectively measure meaning. The technique consists of a concept (in this study the name of the filmed client-percept) and a set of bipolar adjectival scales. Selection by the subject (in this study the counselor-trainees) among successive pairs of bipolar adjectives gradually isolates the "meaning" the concept has for the subject. Osgood visualized the process analogous to the game of "Twenty Questions': Peggy (concept)--Is she open or closed? Is she strong or weak? Is she fast or slow?

³⁰C. E. Osgood, G. J. Suci, and P. H. Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957).

To increase the sensitivity of the instrument, a seven-point scale is inserted between each pair of adjectives so that the subject can indicate both the direction and the intensity of each judgment as in the example below:

Peggy								
open			<u> </u>	:	:		closed	
strong	:	;	:	:	:	:	weak	
fast	:	:	:	:	:	:	slow	

Analysis of Semantic Differential Data

To analyse the data generated by the semantic differential technique, Osgood postulated a Euclidian semantic space defined by a set of orthogonal dimensions (identified by factor analysis of the bipolar adjectival scales). The meaning of a concept is that point in the semantic space specified by a series of differentiating judgments. Thus, in the example above, the meaning of the concept "Peggy" is defined by the subject's successive choices from among a set of given scaled semantic alternatives—essentially a combination of controlled association and scaling procedures. And since no two people have identical experiences, and since meanings are derived from experiences, it follows in strict logic that no two counselors will perceive precisely the same meaning for any given filmed client-percept (concept).

Osgood's Meaning of "Meaning"

Osgood's meaning of "meaning" is based upon a representational mediation process, a linguistic and communication approach to learning theory. According to the mediation process, certain stimulus patterns have a "wired-in" connection with certain behavior patterns, and other stimulus patterns have acquired a connection with certain behavior patterns. In classical conditioning terminology the behaviors elicited through the "wired-in" connections are the unconditioned reflexes while the behaviors elicited through the acquired connections are the conditioned reflexes. To this point the representational mediation process and classical conditioning are alike.

But there are some important differences between the two. The classical conditioning model is a three-step process: (1) a proximal stimulus elicits reflexive responses in the individual; (2) distal stimuli are paired with the proximal stimulus; and, finally, (3) the individual begins to respond to the distal stimulus in ways that he responded to the proximal stimulus. This three-step process (called single stage conditioning) assumes that the individual responds to the distal stimulus <u>identically</u> as he responded to the proximal stimulus. Tolman likens this approach to a "telephone switchboard connecting stimuli and responses."

The representational mediation process does not make that assumption. Rather than responding totally to the distal stimuli in the same manner as he responded to the

proximal stimulus, Osgood stated that the individual detaches and internalizes some of his original responses to the proximal stimulus. This internalization of responses is what separates the representational mediation process from the classical conditioning model. The process is more like Tolman's "map room" referred to earlier "where stimuli were sorted out and arranged before ever response occurred."

The proximal stimulus, which Osgood called a significate (\$\delta\$), is defined as any stimulus which, in a given situation regularly and reliably produces a predictable pattern of behavior (R_T). Diagrammatically the model is: $\dot{s} \longrightarrow R_T$ where the arrow (\$\limes\$) is the "wired-in" connection between stimulus and response. The distal stimulus, which Osgood called a sign (\$\overline{S}\$), is a stimulus which is not the significate but which elicits in the person: (1) part of the total behavior elicited by the significate and (2) responses which would not occur without the previous contiquity of non-significate and significate patterns of stimulation (\$r_m\$).

$$\begin{array}{c} \dot{s} & \longrightarrow & R_T \\ \overline{\underline{s}} & \longrightarrow & r_m^* \end{array}$$

where r_m is an internalization of some of the behavior (R_T) elicited by the significate, \dot{s} . These internal responses become relatively fixed over time and serve as a selfstimulus, s_m , to the individual to make some sort of overt

Diagrammatically the model is:

response, R_{χ} . The complete representational mediation process model is:

where \longrightarrow $r_m---\rightarrow s_m$ is an acquired connection.

The process is representational because the internal response, r_m , is part of the same behavior, R_T , produced by the significate, \dot{s} . It is mediational because the selfstimulation, s_m , produced by making this short-circuited reaction can now be associated with a variety of acts, R_χ , which "take account of" the significate. To the degree that the sign is similar to the significate, the internal response will be similar to the response made to the significate.

Theory and the Semantic Differential

To this point Osgood has presented two definitions of "meaning." In learning theory the meaning of a sign for a particular person is defined as the representational mediation process which it elicits. For the semantic differential the meaning of a sign is defined as that point in the semantic space specified by a series of differentiating judgments. One is a theoretical definition, the other an operational definition. The task now is to tie theory with the measurement technique itself.

The bipolar adjectival scales used on the semantic differential have two properties: (1) direction and

- (2) <u>distance</u> from the origin or midpoint. Likewise, the representational mediation process has two properties:
- (1) quality of reaction (e.g. is the individual reacting positively or negatively) and (2) <u>intensity</u> of reaction.

 The direction of a point in the semantic space corresponds to the quality of the reaction elicited by the sign and the distance corresponds to the intensity of the reaction.

Corresponding to each dimension in the semantic space is a pair of reciprocally antagonistic mediating reactions which Osgood has labeled r_m and \overline{r}_m . Each judgment by an individual on the semantic differential corresponds to the acquired capacity of a sign to elicit either r_m or \overline{r}_m , and the extremeness of judgments corresponds to intensity. The direction and distance of the judgment is assumed to be proportional to the quality and intensity with which the sign elicits r_m or \overline{r}_m . Therefore, any concepts being judged on the semantic differential corresponds to a sign eliciting a distinctive set of r_m 's or \overline{r}_m 's with differing intensities.

Stated in another way, the filmed client-percepts being judged on the semantic differential for this study correspond to person perceptions eliciting a distinctive set of positive or negative reactions with differing intensities. It is these reactions, acquired via the previously mentioned film test, which this study proposes to compare with counselor-trainee interview behaviors.

DEFINITIONS OF RELEVANT TERMS

Throughout the course of this study four terms were used with specific meanings:

Client-percept: The client viewed on the filmed counseling interview and the name of that client as it appeared at the top of the semantic differential page; usually referred to by Osgood as a "concept."

Scale: Paired bipolar adjectives separated by a seven step interval.

Item: A client-percept/scale pairing.

Meaning: A judgment, or a combination of judgments, made by a counselor-trainee in response to an item.

Generalized Meaning: Meanings summed across client-percepts.

OVERVIEW

Chapter II, the review of literature, includes

(1) a review of person perception research, (2) an examination of several studies which tested the adequacy of the semantic differential, and (3) a detailed inspection of those studies from which this study directly springs.

Described in Chapter III will be the development of the filmed client-percept protocols and the selection of the bipolar adjectival scales, as well as the statistical methods and procedures used in carrying out this study.

The results of the study will be analysed and discussed in Chapter IV and in Chapter V.

Chapter II will begin with a brief historical survey of person perception research to give perspective to the entire study.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter begins with an historical review of person perception research to support the use of the semantic differential technique as the measurement device for this study. Next, a review of the semantic differential, with special emphasis on its measurement and stability properties, will be discussed. Finally, the chapter will conclude with a review and critique of the study from which this study springs.

PERSON PERCEPTION

Person perception researchers focused almost entirely upon the face as a source of data and, with Allport, considered the face the most expressive region of the body. The face was where "most people locate the 'self'" and where "we give chief attention when we are observing others." Piderit developed a detailed set of line drawings of the

¹G. W. Allport, <u>Pattern and Growth in Personality</u> (New York: Holt, Rinehart & Winston, 1961), p. 41.

human head that served as the ground work for much of the empirical work on facial expressions.²

More recently, but prior to World War II, Brunswik and Reiter used line-drawings of the head which, by systematically moving the eyes, nose, and mouth, produced 189 drawings. Nine horizontal rows of these line-drawings were rank ordered by ten subjects according to the following seven qualities: (1) mood, (2) age, (3) beauty, (4) willenstarke (roughly translated as energy plus determination).

Several facial "expressions" were consistently linked with certain qualities. The high mouth, for example, was associated with gaiety, youth, unintelligence, and lack of energy; the low mouth with sadness, age, bad character, intelligence, and energy. High and middle foreheads gave favorable impressions; low foreheads, unfavorable impressions.

Samuels, replicating the Brunswik-Reiter study and using 247 American college students, found that an average of 88 per cent agreed with the Brunswik-Reiter results. 4
But when photographs were selected to correspond to the

²Randall Harrison, "Pictic Analysis: Toward a Vocabulary and Syntax for the Pictorial Code, with Research on Facial Communication" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1964), p. 44.

³E. Brunswik and Lotte Reiter, "Eindruckscharaktereschematisierter Gesichter," z. f. <u>Psychologia</u>, 142:62-134, in Harrison, <u>Ibid.</u>, pp. 52-53.

⁴Myra R. Samuels, "Judgment of Faces," <u>Character and Personality</u>, 8:18-27.

line-drawn faces, Samuels found the percentage of "correct" responses dropped to 63 with the additional noise of a complete photo. Dremensh, Winkler, Seiller, Kuhnel, and Harrison each continued research using line-drawn faces in the Brunswik-Reiter tradition.

But line-drawings were not the only stimulus material used. For example, Charles Darwin, early interested in the recognition of emotion, typically showed photographs depicting various emotions to several subjects "without a word of explanation" and asked for judgment of the emotion expressed. Later investigators followed Darwin's procedure, sometimes adding a list of emotional words for the subject to choose from, other times leaving the subject free to choose his own words.

Probably the first systematic series of photographed expressions were Rudolph's poses of a male actor, but the photographs themselves were touched-up and "idealized" making the poses appear artificial. The Feleky, Ruckmick, Frois-Wittman, and Lightfoot series of poses followed. 8

⁵Harrison, pp. 53-54.

⁶Charles Darwin, The Expression of the Emotions in Man and Animals (London, 1872), p. 14.

⁷R. S. Woodworth and H. Schlosberg, <u>Experimental</u> <u>Psychology</u> (New York: Henry Holt, 1954), pp. 116-123.

⁸Ibid.

"Unposed" photographs were used by Sherman who tried for spontaneous emotions by taking motion pictures of babies. Munn used "unposed" pictures taken from <u>Life</u> and <u>Look</u> magazines and found that showing the complete photograph elicited more sensitive judgments than did showing just the face. The additional information served as an aid rather than mere noise.

Early person perception investigators studied primarily a subject's accuracy of perception, accuracy being defined by the similarity between how the subject described a facial-percept's emotions and a predetermined "correct" answer. Usually, little correlation was found and it soon became apparent that demanding pin-point accuracy of a subject was unrealistic. If, however, the subjects were given credit for "near misses," the results were much more promising. Researchers then shifted to a more global approach in person perception research and turned to factor analysis as the basic statistical model. 11

The first to use a global approach was Woodworth who, using the Feleky series, developed a six-stage unidimensional scale that he found quite reliable. 12 His scale ran as

⁹Ibid.

¹⁰ Ibid.

¹¹C. E. Osgood, "Dimensionality of the Semantic Space for Communication Via Facial Expressions" (Urbana: University of Illinois, N. D.), pp. 1-6.

 $^{^{12}}$ Woodworth and Schlosberg, p. 118.

follows: (1) love-happiness-mirth, (2) surprise, (3) fear-suffering, (4) anger-determination, (5) disgust, and (6) contempt.

But it was Schlosberg who was given credit for transforming the semantics of emotion from discrete labeling to continuous, multidimensional scaling. He discovered that sortings of the Frois-Wittman series into the Woodworth six-dimensions produced a circular rather than a linear scale. Schlosberg started with a two-dimensional system and later, switching from the Frois-Wittman series to the Lightfoot series, showed that three dimensions could be used reliably: (1) pleasant-unpleasant, (2) tension-sleep, and (3) attention-rejection. Schlosberg used all 48 Lightfoots and developed norms using 96 undergraduate subjects. Following Schlosberg's lead, several crosscultural studies have been done which essentially replicate and corroborate Schlosberg's work.

Osgood summarized the factor analytic research completed by Schlosberg and many others and concluded that a perceiver judges emotions of others primarily along three dimensions. According to Osgood, there seems to be

¹³⁰sgood, p. 1.

¹⁴H. Schlosberg, "Three Dimensions of Emotion, Psychological Review, 61:81-88.

¹⁵Woodworth and Schlosberg, p. 132.

^{16&}lt;sub>0</sub>sgood, p. 39.

complete agreement that a "pleasant" dimension exists and almost complete agreement that an "activity" dimension exists. But although a third dimension is apparent, there is little agreement as to what it is. Schlosberg himself was not happy with his term "attention-rejection." And Osgood concluded that even today naming the third dimension is still a problem.

When Osgood counted "near misses" in his Yale study, he also found reliable judgments along three dimensions:

(1) intensity, (2) pleasantness, and (3) control. And when later studies were conducted using the semantic differential technique, Osgood again found reliable judgments along three dimensions: (1) evaluative, (2) activity, and (3) potency. 19

On theoretical grounds as presented in Chapter I, the semantic differential appeared to be an appropriate technique for measuring the generalized meaning a counselor-trainee has for filmed client percepts. It is objective; it employs a factor analytic model for arriving at the dimensions of percepts; and its versatility as a measuring instrument lends itself easily to person perception research even though the technique is not exclusively restricted to person-percepts.

¹⁷Ibid., p. 37.

¹⁸Ibid., p. 12.

¹⁹C. E. Osgood, G. J. Suci, and P. H. Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957), pp. 36-38.

The versatility of the semantic differential can be attested to by the variety of subjects studied, by the variety of concepts and their presentation, and by the many uses to which the semantic differential has been put.

Subjects have typically been college undergraduates, especially students in beginning psychology classes. ²⁰ But elementary students (down to grade three), high school students, and college graduate students have also been studied. ²¹ Similarly, nurses and physicians have been studied in the hospital setting as have various kinds of mental patients such as sexual psychopaths, schizophrenics, neurotics, functional psychotics, acute organic psychotics, and

²⁰R. E. Brown, "A Use of the Semantic Differential to Study the Feminine Image of Girls Who Participate in Competitive Sports and Certain Other School-Related Activities," Dissertation Abstracts 26:4426; M. R. Goldfried, "The Connotative Meaning of Some Animal Symbols for College Students," Journal of Projective Techniques and Personality Assessment, 27:60-67; M. W. Otten and R. L. Van de Castle, "A Comparison of Set 'A' of the Holtzman Inkblots with the Rorschach by Means of the Semantic Differential," Journal of Projective Techniques and Personality Assessment, 27:452-460.

²¹M. R. Goldfried and S. Kissel, "Age as a Variable in the Connotative Perceptions of Some Animal Symbols," Journal of Projective Techniques and Personality Assessment, 27:171-180; A. Jack Hafner and Ephraim Rosen, "The Meaning of Rorschach Inkblots, Responses and Determinants as Perceived by Children," Journal of Projective Techniques and Personality Assessment, 28:192-200; R. S. Lilly, "A Developmental Study of the Semantic Differential," Dissertation Abstracts, 26:4063-4064; O. A. Rosenthal, "A Semantic Differential Investigation of Critical Factors Related to Achievement and Underachievement of High School Students," Dissertation Abstracts, 26:3156; W. A. Lewis and W. Wigel, "Interpersonal Understanding and Assumed Similarity," Personnel and Guidance Journal, 43:155-158.

character disorders.²² Moreover, hard of hearing subjects,²³ industrial workers,²⁴ and various ethnic groups²⁵ have been studied. It seemed reasonable to conclude that counselortrainees could be studied with the technique.

Ordinarily, the semantic differential concept is a word placed at the top of the page followed by a set of bipolar adjectival scales. But concepts have not been limited to words. Inkblots, 26 for example, have been used

²²R. D. Singer, "A Note on the Use of the Semantic Differential as a Predictive Device in Milieu Therapy,"

Journal of Clinical Psychology, 17:376-378; George Stricker,
"Stimulus Properties of the Rorschach to a Sample of Pedophiles," Journal of Projective Techniques and Personality, 28:241-244; Melvin Zax, Robert H. Hoiselle, and Athan Karras, "Stimulus Characteristics of Rorschach Inkblots as Perceived by a Schizophrenic Sample," Journal of Projective Techniques and Personality Assessment, 24:439-443.

²³E. J. Hardich, "The Self-Concept of Hard-of-hearing Adults as Measured by the Semantic Differential," <u>Dissertation Abstracts</u>, 25:6826.

²⁴H. C. Triandis, "Differential Perception of Certain Jobs and People by Managers, Clerks, and Workers in Industry," <u>Journal of Applied Psychology</u>, 43:221-225.

²⁵E. R. Oetting, "Cross-Cultural Communication and the Semantic Differential," <u>Journal of Counseling Psychology</u>, 11:292-293.

²⁶A. I. Rabin, "A Contribution to the 'Meaning' of Rorschach's Inkblots Via the Semantic Differential," Journal of Consulting Psychology, 23:368-372; R. H. Loiselle and A. Kleinschmidt, "A Comparison of the Stimulus Value of Rorschach Inkblots and Their Percepts," Journal of Projective Techniques and Personality Assessment, 27:191-194; A. Jack Hafner and Ephraim Rosen, "The Meaning of Rorschach Inkblots, Responses and Determinants as Perceived by Children," Journal of Projective Techniques and Personality Assessment, 28:192-200; E. L. Witt, "The Connotative Meaning of Selected 'Forced' Rorschach Percepts as Measured by the Semantic Differential Technique," Dissertation Abstracts, 26:4083-4084.

as have pictures, ²⁷ colors, ²⁸ and sonar signals. ²⁹ Glatter and Reece used actual art objects placed in a black, square, curtained box and "tactually examined." ³⁰ Levy used editorials from American, Barron's, and Ebony magazines and McNelly used mass media messages. ³¹ Van de Geer, Levelt, and Plomp used musical tones; Hoar and Meed used subliminal messages presented during a twenty minute film; Barclay and Thumin used slides of students studying while using either coffee, tea, or No-Doz. ³² It seemed reasonable to conclude that filmed client-percepts could be used as semantic differential concepts.

²⁷C. J. Friedman, C. A. Johnson, and K. Forde, "Subjects' Descriptions of Selected TAT Cards Via the Semantic Differential," <u>Journal of Consulting Psychology</u>, 28:317-325.

²⁸John E. Williams, "Connotations of Color Names Among Negroes and Caucasians," <u>Perceptual and Motor Skills</u>, 18:721-731.

²⁹L. N. Solomon, "Semantic Reactions to Systematically Varied Sounds," <u>Journal of the Acoustical Society of America</u>, 31:986-990.

³⁰A. N. Glatter and M. M. Reece, "Tactility and Sexual Symbolism," Perceptual and Motor Skills, 14:302.

³¹ Sheldon G. Levy, "Multidimensional Content Analysis: An Extension of the Semantic Differential," <u>Dissertation</u> Abstracts, 25:1321.

³²J. P. van de Geer, J. M. Levelt, and R. Plomp, "The Connotation of Musical Consonance," Acta Psychological Journal, 20:308-319; J. R. Hoar and E. E. Meek, "The Semantic Differential as a Measure of Subliminal Message Effects," Journal of Psychology, 60:165-169; A. Barclay and F. J. Thumin, "Modified Semantic Differential Approach to Attitudinal Assessment," Journal of Clinical Psychology, 19:376-378.

The technique has been used to quantify such projective techniques as the Rorschach 33 and the Thematic Apperception Test. 34 Clayson used the semantic differential to evaluate an experimental program of treatment of delinquent Stromberg developed a "Semantic differential of social behavior" to predict how a person perceives, assigns meaning to, and behaves in the immediate environment from knowledge of previous experiences. 36 Hypothesizing that the semantic differential would predict group participation on the basis of ratings on the concept "the way I am," Singer concluded that the semantic differential might be quite useful as a predictive device in milieu therapy. 37 Therefore, the semantic differential technique should be useful in studying the relationship between a counselor-trainee's generalized meaning for client-percepts and his counseling interview behavior.

The study which most closely resembled the present one was conducted by Greenberg and Bowes who attempted to isolate

³³George Stricker, "Stimulus Properties of the Rorschach to a Sample of Pedophiles," <u>Journal of Projective Techniques and Personality Assessment</u>, 28:241-244.

³⁴Friedman, Johnson, and Forde, pp. 317-325.

³⁵ Merrill D. Clayson, "Therapeutic Progress in Terms of Semantic Variability," <u>Dissertation Abstracts</u>, 25:623.

³⁶C. E. Stromberg, "Semantic Differentiation of Social Behavior of Valued Persons by Female College Groups," Dissertation Abstracts, 23:3787.

³⁷Singer, pp. 376-378.

independent factors of empathic judgment by showing eleven counseling vignettes to 31 experienced clinicians and 58 graduate students (half "high" in their ability to assess client problems and half "low"). The subjects in this study judged the client-percepts in the filmed vignettes along a 26 scale semantic differential. Factor analysis revealed four factors: (1) dependency, (2) avoidance, (3) anger, and (4) apprehension. 38

Although Greenberg and Bowes did not test their data against counselor behavior with an actual client, they concluded: (1) that expert counselors and counselor-trainees did judge clients along the same dimensions, (2) that there is a common frame of reference counselors use with clients, and (3) that the dimensions used to define that frame of reference is finite in number.

The semantic differential technique is just now beginning to find a place in assessing various aspects of the counseling activity.

The next section summarizes studies that have evaluated the semantic differential as a measuring instrument.

³⁸Bradley S. Greenberg and John Bowes, "Dimensions of Empathic Judgment of Clients by Counselors," in Norman Kagan and David R. Krathwohl, <u>Studies in Human Interaction</u> (East Lansing: Educational Publication Services, College of Education, Michigan State University, 1967), pp. 213-262.

THE SEMANTIC DIFFERENTIAL

Osgood made three assumptions with regard to the semantic differential: (1) intervals within scales are equal, (2) intervals between scales are equal, and (3) scale origin is at the centroid.³⁹

To test these scaling assumptions, Messick used the method of successive intervals applied to nine scales over twenty concepts judged by 100 college students and concluded that interval sizes were fairly consistent between scales. 40 And although the origin was not exactly at the centroid for any scale, its placement was consistent between scales, that is, slightly negative. Osgood has consistently found the origin placed slightly negative, but Mehling, using ninepoint instead of the usual seven-point scale, concluded his results gave added weight to the assumption that "the middle (number) interval in the scales represents the neutral point ...41

But the assumption of equal intervals within scales was not satisfied by the analysis. For example, Messick found that interval "5" was less than half the size of

³⁹Osgood, Suci, and Tannenbaum, pp. 146-153.

⁴⁰S. J. Messick, "Metric Properties of the Semantic Differential," Educational and Psychological Measurement, 17:200-206.

⁴¹ Reuben Mehling, "A Simple Test for Measuring Intensity of Attitudes," <u>Public Opinion Quarterly</u>, 23:567-568.

interval "2."⁴² One wonders with Osgood, then, how far wrong an investigator would be by assuming equal intervals within scales, even though empirical evidence failed to support the assumption.⁴³ Messick concluded, after estimating distortion by correlating assumed boundary positions with scale boundary positions, that little distortion would be introduced by accepting the assumption of equal intervals within scales and by using successive integers as interval midpoints.⁴⁴

Osgood wrote:

Considering this and the other indications of the present study, i.e., an approximate equality of intervals between scales and a similar placement of origins across scales, it seems reasonable to conclude that the scaling properties assumed with the semantic differential have some basis other than mere assumption 45

Still another assumption is scale linearity. Osgood assumed that bipolar adjectival scales are represented by a straight line passing through the semantic space such that scale poles are in opposite directions and equidistant from the origin. Osgood reported a study by Taylor and Kumata that gave evidence supporting the linearity of at least some bipolar scales. 46

⁴²Messick, pp. 200-206.

⁴³⁰sgood, Suci, and Tannenbaum, p. 152.

⁴⁴ Messick, pp. 200-206.

⁴⁵⁰sgood, Suci, and Tannenbaum, p. 152.

⁴⁶ Ibid., p. 153.

Taylor and Kumata had four concepts judged against ten scales in two ways: (1) bipolarly in the usual graphic differential manner and (2) unipolarly by using three-point single member scales. Of the forty judgments made, in only four were significant differences found between the algebraic summation of unipolar judgments and their corresponding bipolar judgments, lending support for the linearity assumption. Further evidence supporting the linearity assumption was supplied by Malmstrom and French. 47 Starting with the assumption that if adjectives are truly opposite, concepts of exactly opposite meaning should show mirror image profiles when rated by the same scales, Malmstrom and French concluded that concepts of opposite meanings do yield mirror image results for those judgments for which relevant information is available and that scale symmetry is possible with pairs of bipolar adjectives.

Stability of Factorial Structures

Factor structure, according to Osgood, can be appraised in three ways: (1) the number of factors needed to account for judgments, (2) the relative weights given to the same set of factors, and (3) the nature of the factors used. 48 Osgood reported that cross-cultural work by Kumata

⁴⁷Edward J. Malmstrom and Gilbert M. French, "Scale-Symmetry and the Semantic Differential," American Journal of Psychology, 76:446-451.

⁴⁸⁰sgood, Suci, and Tannenbaum, p. 222.

and Schramm indicated Americans, Japanese, and Koreans used the same major factors in about the same relative weights. 49 And Elliott and Tannenbaum found that the same meaningful dimensions underly a large portion of human behavior. 50

Osgood concluded that, regardless of other differences between groups of subjects, factor structures are pretty stable. Suci's high versus low ethnocentric study investigated factor structures of two quite different types of people, hypothesizing that high ethnocentrics would show more variance on the evaluative factor than on other dimensions. However, Suci found no such difference. Bopp compared the factorial structures of normal and schizophrenic subjects and found no differences either in relative weights of factors or in the nature of the factors, and therefore, concluded the semantic structure for schizophrenic's does not differ from normals.

⁴⁹Ibid., p. 175.

⁵⁰L. L. Elliott and P. H. Tannenbaum, "Factor-structure of Semantic Differential Responses to Visual Forms and Prediction of Factor-Scores from Structural Characteristics of the Stimulus-Shapes," American Journal of Psychology, 76:589-597.

⁵¹Osgood, Suci, and Tannenbaum, pp. 222-226.

⁵²Ibid.

⁵³ Joan Bopp, "A Quantitative Semantic Analysis of Word Association in Schizophrenia" (unpublished Doctoral thesis, University of Illinois, Urbana, 1955).

This general support for factor stability has led many investigators to take for granted the evaluative, potency, and activity dimensions in meaning without conducting an independent factor analysis to determine the specific factors for the concepts under study. This might be a dubious procedure, for at least one author has cast doubt on the generality of Osgood's three-factor interpretation of semantic space. Even Osgood has said his three dominant factors do not exhaust the semantic space. As a further example, Greenberg and Bowes found more than three dimensions and, more importantly, found that counseling experiences were related to the number of dimensions found. It seems desirable for each investigator to conduct his own factor analysis, especially if the concepts are unique.

Scale-Checking Style

Early in his research Osgood observed that better educated subjects checked scale positions 2,3,5,6 more frequently than positions 1,4,7, and Kerrick found that subjects of low I.Q. checked positions 1 and 7 most

⁵⁴R. E. Lana and F. J. Pauling, "Opinion Change When the Semantic Differential is a Pretest," <u>Psychological Reports</u>, 17:730.

⁵⁵Osgood, Suci, and Tannenbaum, p. 72.

⁵⁶Greenberg and Bowes, p. 246.

frequently.⁵⁷ Grade school children were found to perform better with a five-step scale than a seven-step scale, indicating that age was a factor in scale-checking style.⁵⁸

Subject's emotionality toward the concepts also affected which scale positions were checked. Members of the American Legion used scale positions 1,4,7 more than positions 2,3,5,6. ⁵⁹ In a study of belief systems, Wozniak found that subjects with closed belief systems checked scale positions 1 and 7 more than subjects with open belief systems, and subjects with open belief systems checked scale position 4 more often than subjects with closed belief systems. ⁶⁰ On scale positions 2,3,5,6 no differences in checking style were found between the two groups.

Wohl conducted a study testing scale-checking styles with personality "constriction" and concluded that "constricted" subjects responded on a semantic differential toward the neutral 4 position, avoiding the extreme 1 and 7 positions. 61

⁵⁷ Jean Kerrick, "The Effects of Intelligence and Manifest Anxiety on Attitude Change Through Communication" (unpublished Doctoral thesis, University of Illinois, Urbana, 1954).

⁵⁸Osgood, Suci, and Tannenbaum, p. 227.

^{59&}lt;sub>Ibid</sub>.

⁶⁰Daniel F. Wozniak, "A Factor Analytic Study of Semantic Structures of Closed, Open, and Medium Belief-Disbelief Systems" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1964), p. 71.

⁶¹Osgood, Suci, and Tannenbaum, p. 227.

And finally, when Bopp compared the checking style of schizophrenics and normals, she found that normal subjects checked scale positions 2,3,5,6 significantly more frequently than did schizophrenics. She concluded that schizophrenics were less discriminatory in their use of semantic scales.

In an attempt to compare Osgood's mediation theory with a verbal learning approach to meaning, Cotter concluded, "Semantic differential scores, the deviations from the neutral point on a seven-point scale, are measuring nothing more than response style." (Italics mine.) One method employed to overcome Cotter's conclusion has been research in latency of subject's differential judgments.

In the Lyons and Solomon latency studies, subjects, acting as quickly as possible, made differential judgments by operating a lever to the right or left. ⁶⁴ During the allotted five-second interval for item judgment a split-second timer recorded the item, the subject, the latency of judgment, and the direction of judgment. Forty subjects judged 150 items in the manner described in addition to judging the same items in the usual graphic differential manner.

⁶²Bopp, et passim.

⁶³R. A. Cotter, "Verbal Learning in the Evaluation of Two Theories of Meaning," <u>Dissertation Abstracts</u>, 26:6835.

⁶⁴⁰sgood, Suci, and Tannenbaum, pp. 155-159.

Lyons and Solomon then alligned the favorable poles of each bipolar scale and compared mean latency scores with graphic differential scale judgments. They found that mean latency scores were shortest in the direction of the favorable pole; that is, latencies were shorter for positive judgments than for negative judgments. However, latencies were shortest at the extremes, increasing as judgments moved toward the 4 position, which gave support to Osgood's claim that extremeness of judgment on the semantic differential was a valid measure of habit strength. Osgood felt that latency possibly reflected the degree of conflict the subject was experiencing in making judgments. That is, "the more nearly equal the reaction tendencies, the slower the judgment and the nearer to the center of the scale the check-mark."

But the problem was not that simple. Tannenbaum's attitude change study revealed that amount of attitude change was least at the extremes (scale positions 1 and 7) and increased linearly as the original attitude became less intense, as was expected. But when the original attitude was least intense (neutral 4 position), the amount of attitude change unexpectedly decreased. Latency studies have confirmed these findings. Judgments on scale positions 1 and 7 required the shortest mean latencies, positions 2,3,5,6 required the longest, and the neutral 4 position fell

^{65&}lt;sub>Ibid.</sub>, pp. 158-159.

⁶⁶¹bid., p. 228.

somewhere in between. Osgood explained that when a subject had a response conflict he resolved it by avoiding a decision and by relying on a "neither" or "don't know" choice. This led Osgood to suggest three judgmental levels: (1) an all-or-nothing choice (positions 1 and 7) being the easiest to make, (2) a "neither" choice (scale position 4) being the next easiest to make, and (3) a discriminatory choice (scale positions 2,3,5,6) being the hardest to make.

Behavioral Validity of the Semantic Differential

Of the three major dimensions Osgood typically used, one, the evaluative dimension, has been used as a measure of attitude. Suci, using evaluative scales of a semantic differential, was able to distinguish between high and low ethnocentrics by their ratings of various ethnic concepts. Suci as well as Tannenbaum and Kerrick was able to discriminate between shades of political preference by evaluative scale ratings. 68

That the evaluative dimension of the semantic differential can be used as a measure of attitude was also supported by Osgood's highly significant correlations between

⁶⁷G. J. Suci, "A Multidimensional Analysis of Social Attitudes with Special Reference to Ethnocentrism" (unpublished Doctoral thesis, University of Illinois, Urbana, 1955).

⁶⁸Osgood. Suci, and Tannenbaum, p. 193.

semantic differential evaluative scores and scores on both the Thurstone (p<.01) and the Guttman (p<.01) scales. 69

In the Manis study five undergraduate "communicators" wrote two short passages on their views toward college life and rated their passages on a nine-scale semantic differential. The rating results were then compared with ratings given to the passages by 30 undergraduate "recipients," and Manis concluded that the evaluative scales can be profitably used in assessing attitudes.

Walker constructed a laboratory analogue for social attitude learning and used it to assess the attitudinal validity of an evaluative semantic differential's capacity to predict behavior. The behavioral validity of an evaluative semantic differential was partially confirmed. In cross-cultural attempts to assess attitude Diab and Rosen each concluded that attitude can be measured by the evaluative factor. The semantic differential was partially confirmed.

But Diab wrote that the evaluative factor alone was not enough and Doob agreed that "overt behavior can seldom be

^{69&}lt;u>Ibid.</u>, pp. 193-194.

⁷⁰M. Manis, "Assessing Communication with the Semantic Differential," American Journal of Psychology, 72:111-113.

⁷¹ Lawrence Walker, "A Concept Formation Analogue of Attitude Development," <u>Dissertation Abstracts</u>, 22:2482-2483.

⁷²L. N. Diab, "Studies in Social Attitudes:III:Attitude Assessment Through the Semantic Differential Technique," Journal of Social Psychology, 67:303-314; E. Rosen, "A Cross-Cultural Study of Semantic Profiles and Attitude Differences," Journal of Social Psychology, 49:137-144.

predicted from knowledge of attitude alone."⁷³ Within the theoretical structure of the semantic differential, attitude was only one of the dimensions of meaning; therefore, attitude gave only part of the information needed to make predictions. To improve predictability of overt behavior, Osgood suggested the addition of the other semantic dimensions.⁷⁴

To support his suggestion, Osgood reported a pilot study by Tannenbaum in which 40 subjects judged three nationality concepts against a set of scales representing the three major factors--evaluative, activity, and potency. The subjects also rated these nationalities on a modified Bogardus Social Distance Scale. Tannenbaum compared each factor score with each other and with the Bogardus ratings, and, as was expected, the evaluative score correlated the highest with the Bogardus ratings. But multiple correlation analysis revealed a significant increase in predictibility:

Concept	E-Score/Bogardus	E-A-P Scores/Bogardus
Germans	.22	.78
Chinese	.62	.80
Hindus	.59	.72

⁷³Diab, <u>Ibid.</u>; L. W. Doob, "The Behavior of Attitudes," <u>Psychological</u> Review, 54:135-156.

⁷⁴Osgood, Suci, and Tannenbaum, p. 198.

⁷⁵Ibid., p. 199.

In their "tribes of stickmen" study, Solley and Messick investigated the degree to which the profile of an "arbitrary" concept described by the semantic differential could be predicted from the experiences presented in developing the concept's meaning. They concluded:

- 1. The semantic differential provides a very accurate index of the final ratios . . . of guesses by the subjects; it has high validity in this sense.
- 2. The semantic differential scores also reflect with considerable accuracy the input characteristics of the stimuli making up the arbitrary concept. In other words, when we experimentally produce a complex "meaning" for a concept . . . the instrument faithfully reflects the learning experiences.

Osgood also discussed the limitations of
"reversibility of the measurement operations" as a validity
criterion. That is, given concept profiles produced by a
subject, could the investigator discriminantly label the
concept originally judged? He found that reversibility was
successful when the concepts were both few in number and
highly varied in meaning. But when the concepts were many or
when they were connotatively similar, then reversibility
could not be accomplished with any degree of confidence.
Furthermore, meaning is in the perceiver and before an
investigator could predict a concept from a profile, he
would have to know the meaning of the concept for the
subject who produced the profile. Osgood concluded,
"Therefore, this is not a necessary validity criterion for

⁷⁶Ibid., p. 164.

this type of measurement; its application would require that we reproduce the <u>meaning</u> of the concept from the profile, not the concept label."⁷⁷

A FILM TEST OF COUNSELOR PERCEPTIONS

Krathwohl wrote that no study starts de novo. 78 This study was a direct outgrowth of one conducted by Rank at the University of Minnesota. To examine the relationship between counselor perceptions and counselor effectiveness, Rank developed a Film Test of Counselor Perceptions (FTCP) which was administered to enrollees of three consecutive National Defense Education Act Guidance and Counseling Institutes. 79

The filmed portion of the FTCP consisted of ten 1 1/2 to 5 minute excerpts selected from filmed counseling interviews. The graphic portion of the FTCP consisted of 200 items generated by counselor educators from the University of Minnesota who viewed the filmed excerpts and after each segment listed statements describing their observations of the client, the counselor, and the interaction of client

⁷⁷Ibid., p. 166.

⁷⁸ David Krathwohl, How to Prepare a Research Proposal (Syracuse, New York: Syracuse University, 1966), p. 26.

⁷⁹R. C. Rank, "The Assessment of Counselor-trainee Perceptions of Interview Protocols Before and After an Intensive Practicum Experience" (unpublished Doctoral thesis, University of Minnesota, Minneapolis, 1964).

and counselor. A Likert scale was attached to each item as in the following examples:

	SA	Α	?	D	SD
Barbara (the client) likes people.	()	()	()	()	()
Barbara is anxious.	()	()	()	()	()
	ζį	Çį	Ϋ́	Ϋ́	Ϋ́
All students should be	()	()	()	()	()
like Mary.					
The counselor is genuinely	()	()	()	()	()
interested in Elizabeth.					
The client is happy with	()	()	()	()	()
	()	()	()		()
herself.					

Test-retest reliability coefficient of .69 (interval one week) was reported.

Scores on the FTCP were correlated with the dependent variable "counselor effectiveness" defined by staff rankings and significant results were found:

- 1. \underline{r} .41--"counselor effectiveness" correlated with post-test scored with pre-test key (p<.01).
- 2. \underline{r} .54--"counselor effectiveness" correlated with post-test scored with post-test key (p<.005).
- 3. \underline{r} .34--"counselor effectiveness" correlated with pre-test scored with post-test key (p<.025).

Rank's study gave evidence that a relationship exists between "counselor-perceptions" and "counselor effective-ness," and that a film of counseling interviews is an excellent vehicle for presenting stimulus material. Such stimulus material resembled a real counseling activity closely and at the same time allowed the investigator to repeat the material exactly, a distinct advantage for any instrument. Using live actors would be closer to reality, but then no two performances could be replicated in every detail as could a film.

But his was a pilot study and as such his definitions for the dependent and independent variables were tentative.

Improved definitions were sought for both "counselor effectiveness" and "counselor perceptions."

"Counselor effectiveness" defined by staff rankings did not satisfy Cronbach's criticism of global scores. 80 Global scores, claimed Cronbach, compress many dimensions into a single index and thereby, significant relations are overlooked and results are interpreted as general without sufficient evidence.

To overcome the global index criticism and to attempt a more behavioral approach to the problem, Rank with DeRoo developed the Counselor Response System (CRS), ⁸¹ a "method for objectively analyzing the verbal statements of counselors during counseling interviews." This multidimensional response system was composed of six dichotomous dimensions:

- (1) affective-cognitive, (2) affective-cognitive change,
- (3) content: follow-shift, (4) control: restrictive-

⁸⁰L. J. Cronbach, "Proposals Leading to Analytic Treatment of Social Perception Scores," in Renato Tagiuri and Luigi Petrullo, <u>Person Perception and Interpersonal Behavior</u> (Palo Alto: Stanford University Press, 1958), p. 355.

⁸¹R. G. Rank and W. M. DeRoo, "Counselor Response System of the Behavior Interaction Description System" (East Lansing: Michigan State University, 1965, mimeographed).

⁸²W. M. DeRoo, "A Study of Relationships Between Counselor Personality and Counseling Behavior" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1965).

expansive, (5) temporal: present-past/future, and (6) referrent: client-other.

DeRoo used the CRS to study the relationship between counselor personality and counseling behavior. 83 Counselor personality was defined by the Holtzman Inkbiot Technique and by the Rokeach Dogmatism Scale. Counseling behavior was defined by frequency of responses in each dimension of the CRS. DeRoo found a positive relationship (p<.025) between Human Movement scores on the Holtzman and Client reference scores on the CRS. Significant, but not predicted, relationships were found between Barrier and Integration scores on the Holtzman and Client reference scores on the CRS. DeRoo concluded that his results "suggest that the CRS is a potentially useful tool for research in counseling." 84

In a similar, but independent, study Riewald also used counselor interview responses as the dependent variable in his investigation of the relationship between tolerance of ambiguity and counselor behavior and found that frequency of certain counselor responses was a fruitful criterion. 85 Riewald hypothesized a positive relationship between

⁸³Ibid.

⁸⁴ Ibid., pp. 87-88.

⁸⁵ Arthur G. Riewald, "The Relationship of Counselor's Tolerance of Ambiguity to Counselor Behavior in the Counseling Interview" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1964).

intolerance of ambiguity, defined by Figure Recognition and Verbal Reasoning tests and:

- movement toward premature closure or resolution of the client's problem, defined by frequency of responses in which the counselor initiated, interrupted, or changed the client's topic; and by frequency of counselor summary or closure statements;
- 2. use of cognitive rather than affective statements;
- 3. tendency toward value laden statements and conclusions.

Analyzing the data generated by 23 beginning counselors at Wayne State University, Riewald found support for each of his hypotheses except movement toward premature closure when defined by frequency of summary or closure statements.

Kagan and Krathwohl over the past few years also have been developing a method for quantifying counselor behavior. 86 Their instrument, the Counselor Verbal Response Scale (CVRS), consisted of five forced choice dichotomous dimensions, much like Rank and DeRoo's system.

Therefore an adequate solution to Rank's "global criterion" problem has been found by using the frequency of actual counselor interview responses to define the dependent variable. But to the time of this study no one had attempted to improve upon Rank's measurement of the independent variable.

⁸⁶ Norman Kagan and David R. Krathwohl, Studies in Human Interaction (East Lansing: Educational Publication Services, College of Education, Michigan State University, 1967), p. 27.

Since the FTCP counseling segments included both the counselor and the client-percept, the viewer, because he was a counselor-trainee, might have concentrated upon the counselor and his technique rather than on the client. Filming only the client-percept should not only eliminate counselor technique but also should help create the illusion of a one-to-one relationship between filmed client-percept and viewer. No one had developed a film that concentrated solely on the client. Moreover, many of the FTCP items were concerned with counselor technique. No one had developed a graphic scale free from counselor technique to be used with a counseling film test. This study sought to improve the definition of Rank's independent variable by developing an objective measuring instrument based upon person perception theory.

SUMMARY

In this chapter a review of the pertinent literature leading to the present study was presented. The chapter began with an historical review of facial expression studies in which line-drawn or photographed faces, both posed and unposed, were the stimulus material and the similarity between how a subject described a facial-percept's emotion and a predetermined "correct" answer was the criterion.

But demanding pin-point accuracy of a subject proved unrealistic and a review of more global approaches

to the problem of recognizing emotions in others followed.

Starting with Woodworth's six-stage unidimensional scale,

Schlosberg transformed the semantics of emotion from discrete

labeling to continuous, multidimensional scaling, eventually

arriving at three reliable dimensions on which a perceiver

judges emotions in others: (1) pleasant-unpleasant,

(2) tension-sleep, (3) attention-rejection. Using the

semantic differential technique, Osgood also found reliable

judgments along three dimensions: (1) evaluative,

(2) activity, (3) potency.

A rationale for using the semantic differential technique in this study was then presented followed by a review of studies that examined the measurement characteristics of the technique. The major measurement assumptions made by Osgood were examined and the following conclusions were reached: (1) interval sizes between scales were fairly consistent, (2) the origin was consistent between scales, slightly negative of the centroid, (3) intervals within scales were not equal but little distortion would be introduced by accepting the assumption, and (4) scale linearity is possible.

The factorial structure of the semantic differential was shown to be consistent from study to study and from group to group irrespective of other differences between studies or groups of subjects. But a note of caution was raised about blindly accepting Osgood's three major

dimensions without conducting an independent factor analysis, especially if the concepts under study were unique.

Scale checking style was also examined and apparently three judgmental levels exist: (1) an all-or-nothing choice (positions 1 and 7) being the easiest to make, (2) a "neither" choice (scale position 4) being the next easiest to make, and (3) a discriminatory choice (scale positions 2,3,5,6) being the hardest to make. Differences in scale checking style were observed for various subjects: the less educated, less intelligent, more emotional, and more psychologically closed subjects checked the less discriminatory scale positions (1,4,7) more than did their respective counterparts.

A review of the semantic differential as a measure of attitude followed and although the evaluative dimension was generally conceded to measure attitude, it was concluded that predictive validity could be improved by including the other dimensions and by conducting a multiple correlation analysis.

The chapter concluded with a review and critique of Rank's Film Test of Counselor Perceptions (FTCP) which gave evidence not only that a relationship between counselor perceptions and counselor effectiveness exists but also that a film of counseling interviews is an excellent vehicle for presenting stimulus material. But Rank's definitions for "counselor perceptions" and counselor effectiveness" were questioned. Although it was pointed

out that Rank and DeRoo improved upon the criterion for "counselor effectiveness" by developing the Counselor Response System (CRS), a more behavioral approach to the problem, to the time of this study no one had attempted to improve upon Rank's definition of "counselor perceptions."

In the next chapter the design of this study will be presented.

CHAPTER III

DESIGN

In the preceding chapter the literature concerned with person perception research, the semantic differential technique, and the Film Test of Counselor Perception was reviewed. This chapter will describe the design of this study.

The chapter begins with a demographic description of the subjects included in the study. Development of the independent variable, the Person Perception Test, is then discussed followed by the dependent variable, tabulated counselor-trainee interview responses. The chapter concludes with hypotheses to be tested and procedures employed in collecting and analyzing the data.

THE SUBJECTS

The purpose of this investigation was to study the relationship between counselor-trainees' perceptions of filmed client-percepts and these counselor-trainees' subsequent counseling interview behavior with particular clients. Two groups of counselor-trainees were used in this study.

Group I included 30 graduate students attending the 1965-1966 National Defense Education Act Guidance and Counseling Institute at Michigan State University. The group was composed of 21 males and 9 females, and ranged in age from 23 to 38 with a mean age of 28.4. Twenty-three enrollees were married.

Although the enrollees came to the institute from 14 states, Michigan contributed the most (13) and Illinois and Wisconsin contributed three each. Four other enrollees came from the Midwest, five from the East, and two from west of the Mississippi River.

Only five enrollees had Master's degrees, none of which was in guidance or counseling; and only five enrollees had any counseling experience prior to attending the institute. Three enrollees had one year of counseling experience and one each had five years and seven years, respectively, of part-time counseling experience.

Group II was composed of 30 graduate students enrolled in the counseling practicum for Master's degree students at Michigan State University in the summer of 1966. Since the practicum class was a requirement for completion of the Master's degree, none of the class members had a Master's degree in counseling and guidance prior to their enrolling in the practicum.

The practicum class had 18 males and 12 females, and ranged in age from 22 to 58 with a mean age of 32.2. All but two of the practicum enrollees came from Michigan.

Data from each group were treated separately although the probability of obtaining significant results could have been increased by combining them. But with the great number of correlations computed for this study, the probability of finding significant relationships where none, in fact, existed was high. And if these significant relationships were found by using the groups combined, there would be no way of estimating how many of the relationships were significant merely by chance alone. With Group II as the replicating group, this problem was at least partially controlled. Separating the groups controlled for false positive results and also strengthened the conclusion that a relationship indeed did exist when it was confirmed by both groups.

THE PERSON PERCEPTION TEST

The independent variable used in this study was the Person Perception Test (PPT), a specially developed film test based upon person perception theory as described in Chapter I and upon Osgood's semantic differential technique. The test consisted of five filmed client-percepts and a 30 scale graphic semantic differential. Development of the PPT required several operations: (1) selection and (2) filming of client-percepts to be used as semantic differential concepts, (3) selection of bipolar adjectives to be used as semantic differential scales, (4) factor analysis of the

data generated, (5) development of scoring procedures, and (6) conducting reliability estimates.

Selection of Client-Percepts

Osgood listed three primary criteria for selecting semantic differential concepts:

- 1. The investigator should select concepts which are similar to the significate they represent. Osgood's representational mediation process suggested that the more a sign is similar to a significate, the more the mediating process will lead to overt behavior similar to the behavior elicited by the significate. Since the counselor-trainees to be tested were prospective secondary school counselors, filmed high school students were used as client-percepts.
- 2. The investigator should try to select concepts that vary in meaning one from the other. To obtain concept variability, both male and female percepts were filmed and one percept was Negro. Further concept variability was obtained by varying interview content.
- 3. The investigator should use "good judgment" when selecting concepts. The "good judgment" criteria for client-percept selection was (1) recommendation from the high school counselor, (2) verbal ability, and (3) a willingness to participate in the project.

¹C. E. Osgood, G. J. Suci, and P. H. Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957), pp. 77-78.

Using the above criteria, five students were selected from three area high schools. The following is a brief profile of each client-percept and the interview content assigned to each.

Client-percept Peggy and Client-percept Bill. Client-percept Peggy was a female, high school senior who, according to her counselor, was a good academic student who took part in many extra-curricular activities and planned to attend college after graduation. Client-percept Bill was a male, high school junior interested in science, particularly in computer programming and statistics. According to his high school counselor, he was a good academic student, participated in some science-related extra-curricular activities, and planned to attend college after graduation.

Interview content for both these client-percepts concerned a typical adolescent problem, educational-vocational planning. Harmon and Arnold found that 19 out of 20 counselors they studied dealt specifically with vocational and educational information. And 1152 out of 1282 counselors studied by Hitchcock assisted pupils with educational-vocational plans. Schmidt concluded that

²Donald Harmon and Dwight L. Arnold, "High School Counselors Evaluate Their Formal Preparation," <u>Personnel and Guidance Journal</u>, 39:303.

³William Hitchcock, "Counselors Feel They Should," Personnel and Guidance Journal, 32:72-74.

secondary school counselors saw their "ideal function" as including counseling students with vocational and educational problems.

Client-percept Bob. Client-percept Bob was a male,
Negro, high school senior on a cooperative work-study
program attending school half days and working at a drive-in
restaurant half days. No information was made available
regarding his academic achievement.

He was asked to focus upon his ambitions and goals and how he thought being a Negro affected them. With the passage of the various Civil Rights Acts, equal rights for minority groups has become a dominant social issue in public schools. The problems of Negro identity conflicts mentioned by Derbyshire, will undoubtedly be a problem brought to the secondary school counselor. 5

Client-percept Lynn and Client-percept Terry. Client-percept Lynn was a female, high school junior with above average grades but not interested in attending college.

Client-percept Terry was a male high school senior with average grades who participated in football and wrestling.

His further educational goals were undecided.

⁴Lyle D. Schmidt, "Concepts of the Role of Secondary School Counselors," <u>Personnel and Guidance Journal</u>, 40:602.

Scotology and Social Research, 51:63-77.

In an attempt to capitalize on the principle that the perceiver invests ambiguous stimuli with those responses unique to his personality, the interview content for these two client-percepts was their reaction to three minutes of counselor silence. According to Bordin, counselor silence should produce an anxiety reaction not only in the client-percept but also in the counselor-trainee perceivers. With reference to ambiguity, Bordin wrote: "One possible consequence is the more direct expression of feelings toward the counselor. This can be very threatening to the counselor if he is not both personally and professionally secure."

Filming of Client-Percepts

Although films of counseling sessions frequently show both the counselor and the client, only the client was filmed for this study. Filming only the client had several advantages:

- 1. It eliminated counselor technique as a confounding stimulus, thereby allowing the counselor-trainees to concentrate solely on the client-percepts.
- 2. It helped create the illusion that the counselortrainee was the interview counselor.

⁶Edward S. Bordin, <u>Psychological Counseling</u> (New York: Appleton-Century-Crofts, Inc., 1955), pp. 146-150.

3. The client-percepts thus filmed would more easily translate to the semantic differential as stimuli-concepts than if both counselor and client were seen.

With the cooperation of the Michigan State University audio-visual service, the five client-percepts were filmed in a counseling practicum room. During filming, the camera and cameraman were present but behind a screen (as illustrated by Figure 3.1) to give both the client and the counselor the best possible opportunity to forget they were being filmed. The audio was picked up by a microphone sitting openly on a table between the counselor and the client.

Because of financial limitations, filming time was restricted to 66 minutes, divided as follows:

```
Client-percept Peggy (Educ.-Voc. Planning) 20 Min.
Client-percept Bill (Educ.-Voc. Planning) 20 Min.
Client-percept Bob (Negro Goals) 20 Min.
Client-percept Lynn (Counselor Silence) 3 Min.
Client-percept Terry (Counselor Silence) 3 Min.
Total Filming Time 66 Min.
```

So that the PPT could be administered in one fiftyminute class period, it was necessary to pare the film to a
more reasonable length. Total film time was, therefore,
reduced to twenty-one minutes by cutting each twenty-minute
film segment to approximately five minutes. The two threeminute segments were left in tact.

With the aid of a moviola the counselor's voice was eliminated and the film was spliced so that client verbal

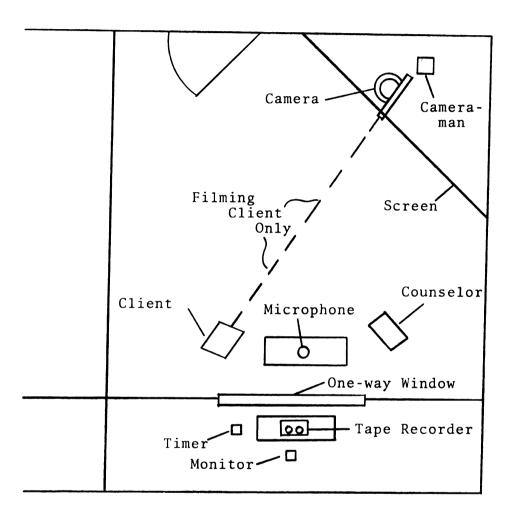


Figure 3.1--Floor plan of filming room.

content appeared continuous despite the absence of the counselor's comments. Specifically, the film footage was cut (1) when the counselor and the client were both talking at the same time and the counselor's voice could not be eliminated, (2) when the counselor asked a question (which the viewer ultimately would not be able to hear) to which the client was quite obviously just listening, (3) when the client answered a direct question (again ultimately not heard by the viewer) with a "yes" or "no" response, and (4) when client comments did not verbally make sense with immediately preceding uncut comments or when comments seemed to stray from the interview content assigned.

Because the periodic jerking created by splicing would serve as a distracting element for the viewer, a fading technique was used to smooth the client's body movements while still maintaining continuity of verbal content.

The dictates of the editing process brought the film time to twenty-one minutes, leaving twenty-nine minutes in the class period, which in retrospect worked out quite well. Fourteen minutes was estimated for camera loading and unloading, test direction reading, and miscellaneous classroom administrative duties. Fifteen minutes was thus allowed for counselor-trainee judgments of the five client-percepts.

Selection of Bipolar Adjective Scales

Since the time available for making semantic judgments was limited to fifteen minutes, it was necessary to know what size differential the subjects could be expected to complete in the allotted time. Osgood's experience was that "even the slowest college student subjects can be expected to make judgments of at least 10 items per minute" (150 items in 15 minutes). The number of items on any form of a semantic differential is merely the number of scales times the number of concepts. So with five concepts to be judged on this 150 item differential, 30 scales, repeated in typical graphic differential form for each concept, could be easily completed in the available fifteen minutes.

When selecting semantic differential scales, Osgood advised the investigator to follow three main criteria:

(1) factor composition of the scales, (2) relevancy of the scales to the concepts being judged, and (3) semantic stability of the scales for the concepts and subjects in a particular study. Because no similar use of the semantic differential had ever before been made, no adequate guide existed for choosing scales by their factor composition or semantic stability. Therefore relevancy was the most important scale selection criterion for this study. However, since Osgood usually arrived at three dominant

⁷Osgood, Suci, and Tannenbaum, p. 80.

^{8&}lt;u>Ibid</u>., pp. 78-80.

factors in his studies (evaluation, potency, and activity), a deliberate attempt was made to select scales which <u>looked</u> as if they might load on an evaluative, potency, or activity factor. To allow each subject equal use of the three major factors, balance of ten scales per factor was maintained as a fourth criterion for selecting differential scales.

Relying on assumed factor composition and relevancy, the scales selected for this study were taken from two sources: (1) Osgood's Thesaurus study and (2) Harrison's thesis on pictic analysis. 10

Six scales were selected as markers to help identify the factor composition of the remaining scales in the PPT. Harrison's open-closed and honest-dishonest seemed to load on an evaluative factor and also seemed relevant for judging client-percepts. The activity factor was most purely defined by Osgood's active-passive and fast-slow; and the potency factor was best defined by Osgood's strong-weak and tenacious-yielding.

Several scales selected seemed more applicable to the perceiver than to the person perceived. For example, because the focus of any counseling activity is on the client, it seemed more probable that the counselor-trainee

⁹<u>Ibid</u>., pp. 47-64.

¹⁰ Randall Harrison, "Pictic Analysis: Toward a Vocabulary and Syntax for the Pictorial Code, with Research on Facial Communication" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1964), p. 44.

would find himself <u>agreeing</u> or <u>disagreeing</u> with the client rather than perceiving the client as <u>agreeing</u> or <u>disagreeing</u> with the counselor. Nine scales focusing on the perceiver were separated slightly from the rest in the graphic presentation of the differential. Scales in the first part focused on the client-percept; scales in the second part focused on the perceiver, thus hopefully incorporating the essential dyadic nature of the counseling activity. The thirty selected scales were then randomly alternated by polarity direction and also randomly ordered with each part.

Table 3.1 is a sample page of the PPT showing the name of the client-percept to be judged and listing the scales with a seven-step interval between each bipolar adjective. The complete test with directions modified from Osgood's typical semantic differential directions can be found in Appendix A.

Factor Analysis

One task in the development of the PPT was to determine which factors emerged consistently from group to group and to discover which scales consistently defined which factors irrespective of group.

The purpose of factor analysis of semantic differential data is to make possible the selection of a minimum number of scales which taken together can best define a judgmental dimension. As Osgood explained:

TABLE 3.1--Sample page of the Person Perception Test.

Client #1: Peggy

A. Please make your judgments on the basis of what this client has communicated to you about herself.

The client is:

*							
closed	:	:	:	:	:	:	:open
transparent	:	:	:	:	:	:	:opaque
near	;	;	:	:	:	:	:far
tired	:	:	:	:	:	:	:energetic
active	::	:	:	:	:	:	:passive
fast	-:	:	:	:	:	:	:slow
yielding	:	:	:	:	:	:	:tenacious
defensive	:	:	:	:	:	:	:agressive
excited	:	:	:	:	:	:	:relaxed
static	::	:	:	:	:	:	:dynamic
upset	::	:	:	:	:	:	:calm
unhappy	:	:	:	:	:	:	:happy
complex	:	:	:	:	:	:	:simple
strong	::	:	:	:	:	:	:weak
embarrassed	:	:	:	:	:	:	:smug
controlled	:	:	:	:	:	:	:uncontrolled
hopeful	:	:	:	:	:	:	:fearful
feminine	::	:	:	:	:	:	:masculine
constrained	:	:	:	:	:	:	:free
honest	:	:	:	:	:	:	:dishonest
profound	:	·	:	:	:	:	:superficial

B. Please make your judgments on the basis of how you feel toward the client.

I feel:

supportive perplexed	_::_	<u>:</u>	-::	: : : : : : : : : : : : : : : : : : :
disagreeing	::-	:	-:	::agreeing
approving	;;_	:	_;; <u></u>	::::::::::::::::::::::::::::::::::::::
surprised	_::_	::	_::	: bored
unhurried	::	:	_::	::harrassed
mild	_::_	:	_::	: :intense
patient	_:::	:	_::	: :impatient
satisfied	;;	::	_::	::::::::::::::::::::::::::::::::::::::

After viewing the next film segment, turn the page and make your judgments of the next client.

- 1. The process of description or judgment can be conceived as the allocation of a concept to an experiential continuum defined by a pair of bipolar adjectives.
- 2. Many different continua of judgments are essentially equivalent and hence may be represented by a single dimension (factor).
- 3. A limited number of such continua, representative of the dimensionality of meaningful judgments, can be used to define a semantic space within which the meaning of any concept can be specified.

Theoretically, thirty factors could emerge from factor analysis of thirty scales, but in practice this never occurs.

Osgood normally isolated three major factors.

administered to each group of subjects. The data were transferred to computer cards and submitted for factor analysis using the Factor A: Principal Components and Orthogonal Rotations Program. This program called for a principal axis solution and a quartimax rotation, with the Kiel-Wrigley criterion of three for terminating rotation. The Kiel-Wrigley criterion of three discontinues rotation when less than three scales have their highest loading on the factor under consideration.

As can be seen from Tables 3.2 and 3.3 factor analysis of the counselor-trainee judgments computed for Group I isolated four factors accounting for 56 per cent of

¹¹C. E. Osgood, "The Nature and Measurement of Meaning," Psychological Bulletin, 49:227.

¹²A. Williams, "Factor A: Principal Components and Orthogonal Rotations," Michigan State University Computer Institute for Social Science Research, Technical Report No. 31, October 21, 1966.

TABLE 3.2--Factor analysis of Person Perception Test scales: Group I.

Scales	I	ΙΙ	III	IV	h^2
closed-open	.62	.02	.30	50	.74
opaque-transparent	.25	21	.21	45	.36
far-near	.53	.12	.15	62	.71
energetic-tired	28	.11	.32	.70	.70
active-passive	18	.08	.17	.81	.73
fast-slow	28	.17	.32	.66	.66
yielding-tenacious	.16	26	.75	.00	.66
aggressive-defensive	27	25	.00	.50	.39
excited-relaxed	.04	.80	.11	.19	.70
dynamic-static	29	.13	.24	.72	.69
upset-calm	.25	.77	.21	15	.73
unhappy-happy	.34	.22	.18	62	.59
complex-simple	15	.10	.55	.00	. 34
strong-weak a	22	50	.54	.04	.59
smug-embarrassed	.23	52	.20	.15	.39
controlled-uncontrolled	17	59	.29	16	.49
hopeful-fearful	27	64	.08	.32	.60
masculine-feminine	02	50	.04	18	.29
constrained-free	.46	.03	.23	65	.69
dishonest-honest	.75	.06	.15	16	.62
profound-superficial	66	28	22	.00	.57
angry-supportive	.84	08	01	01	.72
perplexed-understanding	.62	06	02	24	.45
disagreeing-agreeing	.73	05	10	19	.58
disapproving-approving	.79	.00	.05	22	.67
surprised-bored	.07	09	.54	.07	.31
harrassed-unhurried	.57	.17	.08	15	.38
intense-mild	.32	.06	.41	.13	.30
impatient-patient	.80	.11	.07	07	.66
dissatisfied-satisfied	.75	.27	.01	24	.73
Proportion of variance	.22	.11	.08	.15	.56

Legend:

I = Evaluative factor
II = Emotional factor

III = Potency factor
IV = Activity factor

TABLE 3.3--Factor analysis of Person Perception Test scales: Group II.

Scales	I	II	III	h ²
closed-open	.86	.01	.00	.74
opaque-transparent	.66	.00	.07	.45
far-near	.84	.11	.00	.73
energetic-tired	64	.37	.38	.69
active-passive	70	.27	.41	.74
fast-slow	65	.27	.47	.73
yielding-tenacious	.58	32	.30	.53
aggressive-defensive	56	14	.36	.46
excited-relaxed	.10	.84	.13	.73
dynamic-static	67	.14	.48	.71
upset-calm	.23	.79	02	.68
unhappy-happy	.62	.12	11	.41
complex-simple	06	09	. 44	.20
strong-weak	33	39	.59	.63
smug-embarrassed	.34	36	.27	.32
controlled-uncontrolled	21	61	.22	.46
hopeful-fearful	45	53	.32	.60
masculine-feminine	07	55	18	.35
constrained-free	.72	.04	11	.54
dishonest-honest	.67	.12	.13	.49
profound-superficial	53	35	.05	.40
angry-supportive	.81	02	.13	.67
perplexed-understanding	.76	.03	.14	.61
disagreeing-agreeing	.70	.06	.10	.50
disapproving-approving	.80	.04	.01	.64
surprised-bored	.13	.01	.35	.14
harrassed-unhurried	.57	.31	.35	.55
intense-mild	.21	.19	.68	.54
impatient-patient	.66	.15	.21	.50
dissatisfied-satisfied	.82	.00	.02	.68
Proportions of variance	.34	.11	.09	.54

Legend:

I = Evaluative factor
II = Emotional factor
III = Potency factor

the total variance and for Group II isolated three factors comprising 54 per cent of the total variance.

Those scales which loaded highest on a given factor defined that factor's structure. A close inspection of the factor structures revealed striking similarities between the two groups indicating marked factor stability.

The first factor was named the <u>evaluative</u> factor.

For Group I it was defined by ten scales: <u>closed-open</u>,

<u>dishonest-honest</u>, <u>superficial-profound</u>, <u>angry-supportive</u>,

<u>perplexed-understanding</u>, <u>disagreeing-agreeing</u>, <u>disapproving-approving</u>, <u>harrassed-unhurried</u>, <u>impatient-patient</u>,

<u>dissatisfied-satisfied</u>. These same ten scales also loaded

highest on Factor I for Group II.

The second factor, defined by the same six scales for both groups, appeared to be mainly an emotional factor:

excited-relaxed, upset-calm, embarrassed-smug, uncontrolled-controlled, fearful-hopeful, feminine-masculine. This factor not only was defined by the same six scales, but also accounted for 11 per cent of the total variance for each group.

The third factor was named the <u>potency</u> factor and was defined by the same four scales for both groups: <u>simple-complex</u>, <u>weak-strong</u>, <u>bored-surprised</u>, <u>mild-intense</u>. Again the variance accounted for by this factor was similar for both groups: 8 per cent for Group I; 9 per cent for Group II.

Group I used a fourth factor, an activity factor, defined by nine scales: opaque-transparent, far-near, tired-energetic, passive-active, slow-fast, defensive-agressive, static-dynamic, unhappy-happy, constrained-free. Though Group II did not use a fourth factor, a close inspection of the scales revealed that each of the Group I activity scales had coalesced with Group II's evaluative factor, indicating a quasi-stability at least. For this study this factor, defined by the above nine scales, was treated as if it were stable and was named the evaluative-activity factor.

Only the scale <u>yielding-tenacious</u>, which loaded high on the evaluative factor for Group II and high on the potency factor for Group I, was not assigned to one of the four factors discussed above. Each of the scale groupings have been summarized in Table 3.4

In summary, the factor analysis for each testing indicated that the counselor-trainees in the two groups judged the filmed client-percepts from several perspectives or dimensions: (1) an evaluative dimension, (2) an emotional dimension, (3) a potency dimension, and (4) an evaluative-activity dimension. These four dimensions constituted the framework by which the Person Perception Test was scored and results analyzed.

Scoring Procedures

After factor analysis the scales defining each factor were aligned within their respective factor dimensions. By

TABLE 3.4--Person Perception Test factor composition and factor loading for Group I and Group II counselor-trainees.

Scales	Group I	Group II
I-Evaluative Factor		
closed-open dishonest-honest superficial-profound angry-supportive perplexed-understanding disagreeing-agreeing disapproving-approving harrassed-unhurried impatient-patient	.62 .75 .66 .84 .62 .73 .79 .57	.86 .67 .53 .81 .76 .70 .80 .57
I-IV-Evaluative-Activity Factor		
opaque-transparent far-near tired-energetic slow-fast defensive-aggressive passive-active static-dynamic unhappy-happy constrained-free II-Emotional Factor	.45 .62 .70 .66 .50 .81 .72 .62	.66 .84 .64 .65 .56 .70 .67
excited-relaxed upset-calm embarrassed-smug uncontrolled-controlled fearful-hopeful feminine-masculine	.80 .77 .52 .59 .64	.84 .79 .36 .61 .53
III-Potency Factor		
<pre>simple-complex weak-strong bored-surprised mild-intense</pre>	.55 .54 .54 .41	.44 .59 .35 .68
Unnamed Factor		
yielding-tenacious	III.75	I.58

convention the most valued, the most active, and the most potent pole of the scales were placed at the right of the seven-step semantic space, and for this study the least emotional pole was also placed to the right. Numerical values of 1 through 7 were assigned to each scale position as in the example below:

closed 1 : 2 : 3 : 4 : 5 : 6 : 7 open

passive 1 : 2 : 3 : 4 : 5 : 6 : 7 active

upset 1 : 2 : 3 : 4 : 5 : 6 : 7 calm

weak 1 : 2 : 3 : 4 : 5 : 6 : 7 strong

Every counselor-trainee judgment was thus converted to a number for scoring purposes. 13

Two scoring procedures have typically been used to analyze semantic differential data. One method, hereafter called the "1-7" procedure, was to sum by factor the numbers assigned to counselor-trainee judgments (1) by client-percepts to obtain a client-percept factor score and then (2) across client-percepts to obtain a total factor score. Thus, for each counselor-trainee an <u>evaluative</u> score was calculated for each client-percept and, by summing across client-percepts, for the total test. In a like manner emotional scores, potency scores, and evaluative-activity scores were computed. Each counselor-trainee was given

 $^{13 \}mbox{Complete}$ item distributions can be found in Appendix B.

twenty-four "1-7" procedure scores: 4 factors times 5 client-percepts plus 4 total factors.

The second method, hereafter called the frequency or f-procedure, was to tabulate by factor the number of responses in scale positions 2,3,5,6 and to sum by clientpercept and across client-percept for each factor. As was noted in Chapter II, Osgood suggested three scale-checking levels with the "discriminatory" level (scale positions 2,3,5,6) being the most difficult for subjects to make. Because of Wozniak's finding that subjects with open belief systems checked scale position 4 more than did subjects with closed belief systems, frequencies of responses in scale position 4 were also tabulated. To complete the f-procedure, scale positions 1 and 7 were similarly tabulated. With the f-procedure each counselor-trainee received 64 f-procedure 3 scale-checking levels times 4 factors times 5 scores: client-percepts plus 4 total factors. The two scoring procedures combined yielded 88 part and total scores.

A third scoring system, using variance as a score, was explored. No precedent was found to justify using variance as scores with the semantic differential technique. But it was reasoned that a high variance score would represent more use of the available semantic space than would a low variance score, which in turn would represent a wider range of openness to stimuli on the part of the counselor-trainee (i.e. less rigidity and sterotopy). With

the "1-7" procedure as the base, variance scores were computed by using the five client-percept factor scores as the basic data for each counselor-trainee. One variance score was computed for each factor, yielding four additional scores.

Reliability

PPT test-retest data (interval one week) were collected from Group II. Reliability estimates, using Pearson's product-moment correlations, were computed for each total factor score as well as for each client-percept factor score. (See Table 3.5.) Reliability estimates for total factor scores were: evaluative factor .71; emotional factor .75; potency factor .80; and evaluative-activity factor .55. The low reliability estimate for the evaluative-activity factor possibly resulted because that factor was the least stable of the four and for Group II was completely artificial.

Client-percept factor score reliability estimates were not quite so high, predominantly in the .60's and ranged from .35 for Client-percept Lynn emotional factor score to .78 for Client-percept Bob evaluative factor score.

Although Osgood does not ordinarily estimate item reliability, PPT items were subjected to a test-retest reliability check. (See Appendix D.) Item reliability coefficients were not as high as those found for either the total factor scores or the client-percept factor scores.

TABLE 3.5--Person Perception Test test-retest reliability estimates using product-moment (r) for each client-percept factor score and for each total factor score for Group II.

Client- Percept	Factors				
	Evaluative	Emotional	Potency	Eval-Activity	
Peggy	.60	.62	.62	.66	
Bill	.48	.67	.57	.72	
Bob	.78	.67	.60	.75	
Lynn	.76	.35	.61	.45	
Terry	.62	.66	.62	.51	
TOTAL	.71	.75	.80	.55	

Less than half of the items (69 of 150) had estimates higher than .50 and almost a third (46 of 150) had estimates so low that the coefficients computed did not reach the .05 level of significance. However, for this study individual items had relevance only when they were combined to form various factor scores.

Osgood argued against the product-moment as an appropriate procedure for semantic differential data on the grounds that \underline{r} does not account for absolute differences between means. A perfect correlation could occur when absolute differences are great and no scores are reproduced. Or an indeterminate correlation could occur when each subject gave the same score on test-retest.

As an alternative to the product-moment correlation, Osgood suggested computing an error of measurement based upon average absolute deviations. Osgood considered the average absolute deviation to be analoguous to the reproducibility criterion of reliability held for physical measurements. That is, perfect reliability is obtained only when measures on a second testing are identical with measures on a first testing. Deviations from zero represent a certain degree of unreliability.

Following Osgood, then, test-retest average absolute deviations were computed by factor for client-percepts and for factor totals. The formula used was (1) to determine the

¹⁴Osgood, Suci, and Tannenbaum, pp. 126-140.

absolute difference from test to retest for each of the 150 items of the Person Perception Test, (2) to combine the items by factor and add the absolute differences obtained by client-percept and by total factor, and (3) to divide by the number of items included in client-percept factor score or the total factor score. For example, ten items comprise the evaluative factor for Client-percept Peggy. Therefore, after the ten absolute deviations were summed, that total was divided by ten and the resultant figure was the average absolute deviation from test to retest on the evaluative factor for Client-percept Peggy.

Figure 3.2 shows the per cent of 150 items (30 scales by five client-percepts) yielding observed average absolute deviations between test-retest scores for Group II.

The average absolute deviations by item ranged from as small as .30 scale units to as large as 1.87 scale units. Over half the deviations were less than one scale unit. Although the deviations were slightly greater than Osgood reported finding, the difference perhaps can be explained by the concepts being judged. Osgood's subjects were asked to rate generalized concepts (e.g. father, sin, lady), whereas the counselor-trainees in this study were asked to judge quite specific concepts (client-percepts). Deviations

¹⁵ Osgood, Suci, and Tannenbaum, p. 129.

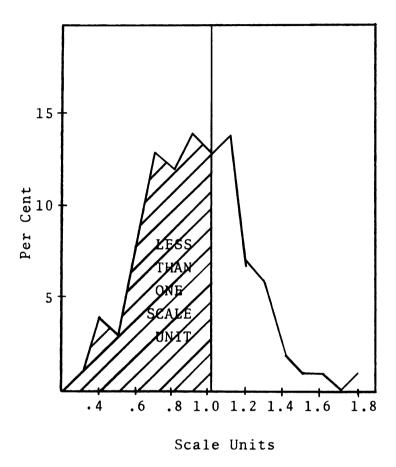


Figure 3.2--Per cent of items yielding observed absolute deviations between test-retest for Group II expressed in scale units.

could be explained by real changes in judgments after having had the opportunity to view the client-percepts a second time.

Table 3.6 shows the average absolute deviations, expressed in scale units, computed for each client-percept and summed across client-percepts for each of the four factors. Summing across client-percepts, average absolute deviations for each of the four factors were less than one scale unit with no apparent differences among the factors. As with item deviations, factor deviations were slightly greater than figures reported by Osgood. But "we can expect subjects, on the average, to be accurate within a single unit of the scale, which for practical purposes is satisfactory." 17

COUNSELOR RESPONSE SYSTEM

The depentent variable used in this study was the frequency of selected counselor-trainee interview responses tabulated according to four dimensions of the Counselor Response System (CRS) as rated independently by three judges from interview tapes. DeRoo described the CRS as a "method for objectively analyzing the verbal statements of

¹⁶Ibid., pp. 130-139.

¹⁷Ibid., p. 131.

TABLE 3.6--Group II test-retest factor average absolute deviations by client-percepts and by total expressed in scale units.

Client- Percept	Evaluative	Evaluative- Activity	Emotional	Potency
Peggy	.83	.87	.99	.96
Bill	.96	1.03	.91	.87
Bob	.87	.93	.79	.85
Lynn	.92	.95	1.15	1.18
Terry	.96	1.17	.99	.91
TOTAL	.91	.99	.97	.99

counselors during counseling interviews." The dichotomous dimensions used were defined as follows:

- 1. <u>Content: Follow-Shift</u>. Rank and DeRoo define the Content: Follow-Shift dimension as concerning the general topic of discussion between the client's last statement and the counselor's response. A response is considered "following" if it does not depart from the general topic. DeRoo reported interjudge reliability of .87 for this dimension. An interjudge reliability of .95 computed by analysis of variance was found for this study.
- 2. <u>Control: Expansive-Restrictive</u>. This dimension concerns the extent to which the counselor allows the client to express himself freely. DeRoo reported an interjudge reliability coefficient of .89, while an interjudge reliability estimate of .92 was found for this study.
- 3. Referrent: Client-Other. This dimension concerns the extent to which the referrent of the counselor's response is the client. A reliability coefficient of .63 was reported

¹⁸William M. DeRoo, "A Study of Relationships Between Counselor Personality and Counselor Behavior" (unpublished Doctoral thesis, Michigan State University, East Lansing, 1965), p. 53.

¹⁹ Richard C. Rank and William M. DeRoo, "Counselor Response System of the Behavior Interaction Description System" (Michigan State University, East Lansing, 1965, mimeographed).

by DeRoo and a coefficient of .73 was computed for this study.

4. Reinforcing Statement. A reinforcing response is a supportive and/or encouraging or positive statement about the client's previous statement. DeRoo did not use this dimension in his research. But Rank had begun experimenting with it and it was decided to have the counselor-trainees in this study judged on the frequency of their reinforcing statements. At the time of this writing no comparative reliability estimates were available. An interjudge reliability coefficient of .94 was computed for this study.

The CRS Temporal: Present-Past/Future dimension was also tabulated but interjudge reliability was so low the dimension was eliminated from further consideration in this study. The complete set of dependent variable rating scales, together with their respective definitions and judges' directions, can be found in Appendix E.

HYPOTHESES

Hypotheses tested for this study were grouped under two headings: (1) Person Perception Test hypotheses, and (2) validity hypotheses.

Person Perception Test Hypotheses

Person Perception Test hypotheses were concerned with relationships (1) between PPT items and total factor scores, (2) between client-percept factor scores and the semantic

differential criterion of concept variability, and
(3) between the PPT and person perception theory.

Internal Consistency. One mark of a test's validity is the degree its individual items relate with its total score. The PPT had four total scores, one for each factor. Although factor analysis by itself validated the 30 scales with their respective total factor scores, it did not validate the individual items (scale/client-percept pairings) with their respective total factor scores. So the following internal consistency hypotheses were tested:

- H_{1.1}: A positive relationship will be found between evaluative items and the total evaluative score ("1-7" procedure).
- H_{1.2}: A positive relationship will be found between emotional items and the total emotional score ("1-7" procedure).
- H_{1.3}: A positive relationship will be found between potency items and the total potency score

 ("1-7" procedure).
- H_{1.4}: A positive relationship will be found between evaluative-activity items and the total evaluative-activity score ("1-7" procedure).

<u>Client-percept Variability</u>. As reported earlier in this chapter, one of the primary criteria for selecting semantic differential concepts was that the investigator

try to select concepts that vary in meaning one from the other. The concepts used in this study (client-percepts) were filmed counseling interviews of high school students. The following hypotheses were used to test the difference in meanings among the five client-percepts:

- H_{2.1}: A statistically significant difference will be found among the five client-percept evaluative factor scores ("1-7" procedure).
- H_{2.2}: A statistically significant difference will be found among the five client-percept emotional factor scores ("1-7" procedure).
- H_{2.3}: A statistically significant difference will be found among the five client-percept potency factor scores ("1-7" procedure).
- H_{2.4}: A statistically significant difference will be found among the five client-percept evaluative-activity factor scores ("1-7" procedure).

Person Perception Theory. Under the theoretical discussion of person perception in Chapter I it was noted that the perceiver tends to interpret his perceptions congruently with his own attitudes and values in spite of the fact that he may be incorrect logically. This tendency was called the "perceiver's expressive style," by Brunner

and Taguiri or the perceiver's "generalized meaning for the other" by Cronbach. 20

An attempt was made to test the theoretical notion of the perceiver's "generalized meaning" and to assess the degree total factor scores represent the concept of "generalized meaning." Theory suggests that, although he may not judge all five client-percepts the same, a counselor-trainee should, nevertheless, have style of judging that would be detectable when his judgments are compared with those judgments of other counselor-trainees. For example, if a counselor-trainee had a high potency score ("1-7" procedure) for Client-percept Peggy when compared with other counselortrainees, he should also have a high potency score for Client-percept Bill, comparatively, despite possible differences in the actual degree of potency seen between the two client-percepts. Or if this same counselor-trainee had a comparatively high potency score for Client-percept Peggy, he should also have a comparatively high total potency score.

To test the notion of perceiver's "generalized meaning," the following hypotheses were advanced:

²⁰For a more complete discussion please refer to Chapter I, pages 6-12.

- $H_{3,1}$: A positive relationship will be found:
 - a. when each client-percept evaluative factor score is compared with every other clientpercept evaluative factor score;
 - b. when each client-percept evaluative factor score is compared with the total evaluative score.
- H_{3,2}: A positive relationship will be found:
 - a. when each client-percept emotional factor score is compared with every other clientpercept emotional factor score;
 - b. when each client-percept emotional factor score is compared with the total emotional score.
- H_{3,3}: A positive relationship will be found:
 - a. when each client-percept potency factor score is compared with every other clientpercept potency factor score;
 - b. when each client-percept potency factor score is compared with the total potency score.
- H_{3.4}: A positive relationship will be found:
 - a. when each client-percept evaluativeactivity factor score is compared with every other client-percept evaluativeactivity factor score;

b. when each client-percept evaluativeactivity factor score is compared with the total evaluative-activity score.

Validity Hypotheses

The validity hypotheses tested the relationships between various PPT scores and outside criteria of counselor-trainee interview behavior as measured by the Counselor Response System (CRS).

Approach-Avoidance: Evaluative Factor. Osgood related the evaluative factor with a measure of "attitude." Attitudes are "predispositions to respond, but are distinguished from other such states of readiness in that they predispose toward an <u>evaluative</u> response," wrote Osgood. 21 He referred to attitudes as "tendencies to approach or avoidance."

For this study it was hypothesized that a significant positive relationship would be found between the generalized evaluative meaning a counselor-trainee had for filmed client-percepts and selected counseling behavior displayed with a particular client. That is, the more positive the total evaluative score ("1-7" procedure) obtained by the counselor-trainee on the PPT, the more his counseling responses, as rated on the CRS, would tend to approach rather than avoid the client.

²¹Osgood, Suci, and Tannenbaum, p. 189.

The following specific hypotheses were advanced:

- H_{4.1}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.
- H_{4.2}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{4.3}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{4.4}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.

Approach-Avoidance: Interrelated Factors. In Chapter II it was reported that the evaluative factor alone was not enough for predicting behavior--that the addition of other semantic dimensions could improve predictability. Thus, the following four hypotheses were tested:

H_{5.1}: A positive relationship will be found between counselor-trainee interrelated PPT total factor

- scores ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{5.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.
- H_{5.3}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{5.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.

Scale-Checking Style. Also reported in Chapter II were several studies concerned with scale-checking style. The following hypotheses were based upon the findings of those studies:

- H_{6.1}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f2356 procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{6.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor

scores (f2356 procedure) and the frequency of Control: Expansive responses recorded on the CRS.

- H_{6.3}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f2356 procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{6.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f2356 procedure) and the frequency of Reinforcing responses recorded on the CRS.

Rigidity and Sterotopy. The following hypotheses were tested using variance scores as indicators of counselor-trainees openness to stimuli:

- H_{7.1}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Content: Follow responses recorded on the CRS.
- H_{7.2}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Control: Expansive responses recorded on the CRS.
- H_{7.3}: A positive relationship will be found between counselor-trainee interrelated PPT variance

scores and the frequency of Referrent: Client responses recorded on the CRS.

H_{7.4}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Reinforcing responses recorded on the CRS.

COLLECTION OF DATA

Person Perception Test and Counselor Response

System data were collected from both Group I and Group II subjects.

The Independent Variable

The PPT was administered to each counselor-trainee group studied. Group II received the test twice (one week interval) to estimate test-retest reliability. Procedures for administering the test were the same for each group. The counselor-trainees received a copy of the graphic differential and were instructed to read the directions silently while the examiner read them aloud. After all questions were answered, the first five minute film segment (Client-percept Peggy) was shown. At the conclusion of the segment the projector was turned off and the counselor-trainees were asked to rate, according to test directions, the client-percept they had just viewed. When all counselor-trainees had finished rating the first segment (no attempt was made to time them), the second client-percept segment

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was shown and the procedure was repeated until all five client-percepts were judged.

The raw data were transferred to computer cards, one card for each subject/client-percept pairing, and a separate card deck for each testing was then submitted to the computer for factor analysis, scoring, and reliability estimates.

The Dependent Variable

First-interview tapes were procured from counselortrainees in both Group I and Group II. Twenty-nine tapes
were turned in by Group I subjects, but only twenty-four
were usable since five tapes were inaudible and no effective
rating was possible for them. From Group II twenty-eight
tapes were turned in and twenty-six were usable. For ease
of judging, the first half hour of each usable tape was
transferred to a fresh tape, allowing six half hour sessions
to be placed on one continuous tape.

Three judges, each with Master's or Specialist's degrees in counseling and guidance, were used to rate the tapes. They received their respective degrees in separate institutions: Michigan State University, Western Michigan University, and Florida State University. The diversity of the judges' background precluded any systematic bias by theoretical training from contaminating the CRS dimensions.

Before beginning to judge counselor-trainee interview responses on the CRS dimensions described earlier in this chapter, the three judges practiced on a tape not used for

study. After they were rating in a similar manner, the three judges independently rated the counselor-trainee tapes.

Interjudge reliability was computed by analysis of variance.

Average judges' ratings were used as the best estimate of counselor-trainee responses on each dimension.

The following is a summary of interjudge reliability estimates for this study compared with those from DeRoo's study:

CRS Dimension	Present Study	DeRoo Study
Content: Follow	.95	. 87
Control: Expansive	.92	.89
Referrent: Client	.73	.63
Reinforcing Statement	. 94	(*) ²²

ANALYSIS OF DATA

Seven sets of hypotheses were tested in this study subsumed under two major categories: (1) Person Perception Test hypotheses and (2) validity hypotheses.

Person Perception Test Hypotheses

Internal consistency hypotheses were tested by the Pearson product-moment correlation coefficient method (\underline{r}) . A correlation large enough to reveal a significant relationship with 95 per cent confidence was accepted as evidence supporting the hypotheses.

²²DeRoo did not use this dimension in his study.

The four client-percept variability hypotheses were tested by a simple one-way analysis of variance computed across client-percepts. An F ratio large enough to be significant with 95 per cent confidence was accepted as evidence supporting the hypotheses that a difference in meaning existed among the client-percepts. Where the F ration was found to be significant, tests of differences by use of \underline{t} as described by Garrett were computed. 23

The four theory hypotheses were tested by the rank-difference (<u>rho</u>) method to determine the degree of the relationships. The rank-difference method had the advantage of not assuming that the distribution of scores on the PPT were normal. A <u>rho</u> large enough to be significant with 95 per cent confidence was accepted as evidence supporting the theoretical notion of perceiver's "generalized meaning."

Validity Hypotheses

The relationship between various PPT scores and selected counseling interview behavior as recorded on the CRS was also hypothesized. Gleser wrote:

The only valid basis for prediction is experimental verification of the relationship between potential predictors and actual performance of a group of subjects who are representative of the population for which it is desired to make predictions.²⁴

²³Henry E. Garrett and R. S. Woodworth, <u>Statistics</u> (New York: Longmans, Green and Company, 1958), pp. 280-281.

²⁴G. C. Gleser, "Prediction," Encyclopedia of Educational Research (3rd edition), C. W. Harris, editor (New York: The Macmillan Company, 1960), p. 1039.

For the first set of validity hypotheses the rank-difference method was used since it had the advantage of not assuming that the distribution of scores on the PPT nor on the CRS was normal. Moreover, the relative order of judgments were more important than the actual scores because of the experimental nature of the instruments used which seemed to make the conservative rank-difference method an appropriate technique. A <u>rho</u> large enough to indicate a relationship with 95 per cent confidence was accepted as evidence in support of the hypotheses.

But for the remaining validity hypotheses, where the interrelated PPT factor scores were compared with the CRS criteria, the rank-difference method was contraindicated. Instead, a coefficient of multiple correlation, R, was computed to test each hypothesis. An R large enough to indicate a relationship with 95 per cent confidence was accepted as evidence supporting the hypotheses.

Exploratory Analyses

In this day of computer analyses, it is just as easy to compute all possible relationships as it is to compute the hypothesized ones. Since, as Sproull noted, computers can "now provide fast and comprehensive analysis," many exploratory analyses of data were made: 25

²⁵Natalie Sproull, "Finding and Stating the Research Problem: A Suggested Approach with Examples from Higher Education," (mimeographed), School of Advanced Studies, College of Education, Michigan State University, June 1967, p. 6.

- 1. In addition to the evaluative factor, each of the other PPT factor scores ("1-7" procedure)--emotional, evaluative-activity and potency--were compared with the CRS criteria by the product-moment, \underline{r} , method.
- 2. Using the f-procedure, each PPT factor score was compared with the CRS criteria by the product-moment method.
- 3. Using the variance procedure, each PPT factor score was compared with the CRS criteria by the product-moment method.
- 4. Each of the 150 PPT items were compared with the CRS criteria by the product-moment method.

SUMMARY

The subjects in this study were graduate students enrolled in the 1965-66 academic year guidance and counseling institute at Michigan State University (Group I) or in the 1966 summer counseling practicum at Michigan State University (Group II).

The Person Perception Test (PPT), developed especially for this study, consisted of five filmed counseling segments judged on a 30 scale graphic semantic differential. Factor analysis of the 30 scales revealed four judgmental dimensions: (1) evaluative, (2) emotional, (3) potency, and (4) evaluative-activity.

Three scoring procedures were used to tabulate PPT data: (1) checked scale position numbers were summed by factor ("1-7" procedure), (2) frequency of responses in

various scale positions were summed by factor (f-procedure), and (3) variance scores were computed using the five client-percept factor scores as the basic data (V procedure).

Test-retest reliability estimates ranging from .55 to .80 were reported using Pearson's product-moment. Item test-retest reliability was also reported using Pearson's product-moment. Average absolute deviations were compared favorably with Osgood's typical findings.

The Counselor Response System (CRS), developed by Rank and DeRoo, was used as the dependent variable. Three judges, working independently and from interview tapes, rated the counselor-trainees' responses along the following dichotomous dimensions:

CRS Dimensions	Interjudge Reliability
Content: Follow-Shift	.95
Control: Expansive-Restrictive	.92
Referrent: Client-Other	.73
Reinforcing-Nonreinforcing	.94

Hypotheses tested for this study were grouped under two headings: (1) Person Perception Test hypotheses and (2) validity hypotheses. The first set of hypotheses tested the internal consistency of factor items with total factor scores, the differences among client-percept meanings, and the theoretical notion of the perceiver's "generalized meaning." The second set of hypotheses tested the validity

of the PPT by analyzing the relationships between various PPT scores and CRS dimensions.

PPT and CRS data were collected from both—Group I and Group II subjects. Raw data were transferred to computer cards and submitted to the computer for factor analysis, scoring, and reliability and validity estimates.

Internal consistency hypotheses were tested by the Pearson product-moment method. The differences among client-percept meanings were computed by one-way analyses of variance. The PPT-theory hypotheses were tested by the rank-difference method to determine the degree of the relationships.

Validity hypotheses were tested by the Spearman rank-difference method or by the coefficient of multiple correlation. Many exploratory analyses of the data were made.

In the next chapter a detailed analysis of the data resulting from the Person Perception Test hypotheses will be reported.

CHAPTER IV

ANALYSIS OF DATA: PERSON PERCEPTION TEST HYPOTHESES

The preceding chapter described the design of this study. Particularly important was the discussion of the Person Perception Test (PPT), an instrument especially created for this study. Development of the PPT was traced (1) from the selection and filming of the five client-percepts and the selection of the bipolar adjectives used as semantic differential scales, (2) through a factor analysis of the data generated and the development of various scoring procedures, (3) to a presentation of several reliability estimates. Three sets of hypotheses were advanced which were concerned with the PPT development.

In this chapter results of the PPT hypothesized relationships will be presented in the following order:

(1) internal consistency--a study of the relationships between PPT items and total factor scores, (2) concept variability--a study of the differences among client-percept factor scores, and (3) perceiver's "generalized meaning"--a study of the relationship between individual client-percept factor scores and total factor scores and the relationships of client-percept factor scores with each

other. The chapter will conclude with a discussion of the results and a complete summary.

Two separate groups of counselor-trainees were used to test the hypotheses: Group I was the experimental group; Group II, the replicating group. The .05 level of significance was accepted as the criterion for rejecting the null hypothesis.

INTERNAL CONSISTENCY

The hypotheses in this section tested the relationships between factor items and their respective total factor
scores and between factor items and client-percept factor
scores. Such relationships constituted one indication of
the PPT's internal consistency. For a complete list of
item/total factor score correlations see Appendix I.

Because total factor scores were the operational definitions of the perceiver's "generalized meanings" for person percepts, the hypotheses tested the relationships between a perceiver's particular judgments of a person percept and his total judgments of person percepts generally. Likewise, the hypotheses tested the relationships between a perceiver's particular judgments of a person percept and his total judgments of that person percept by comparing items with client-percept factor scores.

The Pearson product-moment was used to test all hypotheses in this section, with the .05 level of significance used as the criterion for rejecting the null hypothesis.

Evaluative Factor

- H_{01} : No relationship will be found between:
 - a. evaluative factor items and the total evaluative factor score ("1-7" procedure);
 - b. evaluative factor items and client-percept factor scores ("1-7" procedure).
- $H_{1,1}$: A positive relationship will be found between:
 - a. evaluative factor items and the total evaluative factor score ("1-7" procedure);
 - b. evaluative factor items and client-percept factor scores ("1-7" procedure).

The evaluative factor consisted of 50 items (10 scales times 5 client-percepts). With total factor score as the criterion, the experimental group found forty significant relationships from the possible fifty. And thirty of the fifty items were found to be significant by the replicating group. More importantly, however, 24 of the fifty items were found to be significantly related with the total factor score by both groups. (See Table 4.1.)

When the items were correlated with their respective client-percept factor scores, all 50 possible relationships were found significant for the experimental group. (See Table 4.2.) Moreover, the replicating group confirmed 47 of the fifty significant relationships.

Emotional Factor

- H_{01.2}: No relationship will be found between:
 - a. emotional factor items and the total emotional factor score ("1-7" procedure);
 - b. emotional factor items and client-percept factor scores ("1-7" procedure).

TABLE 4.1--Items significantly related to total factor score ("1-7" procedure) by both groups: Evaluative factor.

Evaluative Scales	Client-Percept	Group I	Group II
closed-open	Peggy Bob	.40 .59	.38
dishonest-honest	Bob Terry	.65 .49	.49
superficial-profound	Bob	.52	.54
angry-supportive	Bob	.46	.61
	Terry	.58	.40
perplexed-understanding	Bill	.52	.50
	Bob	.67	.59
disagreeing-agreeing	Bill	.44	.47
	Bob	.56	.55
	Lynn	.62	.37
disapproving-approving	Peggy	.48	.49
	Bill	.37	.46
	Bob	.62	.54
	Terry	.49	.39
harrassed-unhurried	Bob	.59	.55
	Lynn	.45	.61
	Terry	.41	.50
impatient-patient	Bob	.53	.37
	Lynn	.57	.37
	Terry	.49	.37
dissatisfied-satisfied	Peggy Bill	.64	.37 .60

TABLE 4.2-Item/client-percept score ("1-7" procedure) correlation coefficients (\underline{r}) for both groups: Evaluative factor.

	Client-Percepts					-
Scales	Group	Peggy	Bill	Bob	Lynn	Terry
closed-open	I I I	.55	.83	.91	.64	.64
dishonest-honest	I II	.74		.93 .75	.67 .37	.68 .55
superficial-profound	I II	.65 .68	.56 .72	.87 .82	.69 .22	.71 .37
angry-supportive	I II	.73 .45		.87 .82	.80 .53	.76 .87
perplexed-understanding	ΙΙ	.61 .37	.67 .75	.63 .77	.71 .46	.69 .47
disagreeing-agreeing	I II	.69 .61	.80 .70	.89 .69	.72 .67	.77 .64
disapproving-approving	I II	.69 .45	.73	.90 .82	.82 .63	.85 .86
harrassed-unhurried	I II	.59 .36	.70 .46	.52 .78	.58	.74 .39
impatient-patient	II	.72 .75	.80 .63	.88 .52	.75 .72	.81 .77
dissatisfied-satisfied	II	.81° .63		.94	.79 .49	.81 .66

 $H_{1,2}$: A positive relationship will be found between:

- emotional factor items and the total emotional factor score ("1-7" procedure);
- b. emotional factor items and client-percept factor scores ("1-7" procedure).

The emotional factor summed across the five client-percepts consisted of thirty items (6 scales times 5 client-percepts). Twenty-one of the thirty possible relationships between item and total factor score were found to be significant by the experimental group. The replicating group confirmed sixteen of the twenty-one significant relationships. Excited-relaxed and upset-calm related significantly with total factor score for all five of the client-percepts. (See Table 4.3.) Fearful-hopeful was found significantly related when paired with every client-percept except Client-percept Peggy. On the other hand, feminine-masculine did not relate significantly with total factor score for any of the client-percepts.

The items were also compared with client-percept factor scores. (See Table 4.4.) The scale <u>feminine-masculine</u> was generally found to be not significantly related with the criterion or if a relationship were found by the experimental group, it was not confirmed by the replicating group. The scales <u>embarrassed-smug</u> and <u>uncontrolled-controlled</u> when paired with Client-percept Bob and Client-percept Lynn respectively had unconfirmed relationships with the criterion. All other items had confirmed significant relationships with the criterion. In total the experimental

TABLE 4.3--Items significantly related to total factor score ("1-7" procedure) by both groups: Emotional factor.

Emotional Scales	Client-Percept	Group I	Group II
excited-relaxed	Peggy Bill Bob Lynn Terry	.46 .43 .45 .40	.44 .37 .64 .42
upset-calm	Peggy Bill Bob Lynn Terry	.54 .52 .48 .39	.65 .59 .57 .51
embarrassed-smug	Bill	.38	. 47
uncontrolled-controlled	Lynn	.42	.37
fearful-hopeful	Bill Bob Lynn Terry	.49 .50 .53 .66	.45 .41 .37 .63
feminine-masculine	none		·

TABLE 4.4--Item/client-percept score ("1-7" procedure) correlation coefficients (\underline{r}) for both groups: Emotional factor.

	Client-Percepts					
Scales	Group	Peggy	Bill	Bob	Lynn	Terry
excited-relaxed	I	.77		.66	.82 .75	.82
upset-calm	II	.85 .81		.82		.85
embarrassed-smug	II	.63 .39		.59	.58 .58	.44 .56
uncontrolled-controlled	II	.66 .60		.70 .72	.30 .67	.79 .58
fearful-hopeful	II	.74		.67 .85	.64 .75	.74 .62
feminine-masculine	II	.28		.63 .17		.36

group found twenty-eight of a possible thirty relationships to be significant, with twenty-six of the twenty-eight significant relationships confirmed by the replicating group.

Potency Factor

- H_{01.3}: No relationship will be found between:
 - a. potency factor items and the total potency factor score ("1-7" procedure);
 - b. potency factor items and client-percept factor scores ("1-7" procedure).
- H_{1} 3: A positive relationship will be found between:
 - a. potency factor items and the total potency factor score ("1-7" procedure);
 - b. potency factor items and client-percept factor scores ("1-7" procedure).

Twenty items (4 scales times 5 client-percepts) comprised the potency factor. With the total factor score as the criterion, the experimental group found only three significant relationships from the possible twenty. And although the replicating group found seven significant relationships, none of them confirmed the experimental group's findings. The potency factor, alone of the four factors, yielded no confirmed evidence for rejecting the null hypothesis when total factor score was the criterion.

Potency items were then compared with client-percept factor scores. (See Table 4.5.) By contrast, seventeen of the possible twenty relationships were found significant for the experimental group, each of which was confirmed by replication. Only for bored-surprised when Client-percept Peggy factor score and Client-percept Lynn factor score were the criteria and mild-intense when Client-percept Lynn

TABLE 4.5--Item/client-percept score ("1-7" procedure) correlation coefficients (\underline{r}) for both groups: Potency factor.

Client-Percepts					
Group	Peggy	Bill	Bob	Lynn	Terry
I	.60	.64	.64	.69	.65
ΙΙ	.72	.61	.68	.62	.52
I	.57	.46	.71	.57	.42
ΙΙ	.79	.68	.60	.57	.57
I	.24	.79	.57	.28	.60
ΙΙ	.51	.58	. 44	.65	.46
I	.66	.49	.39	. 24	.56
ΙΙ	.70	.55	.70	.72	.78
	I II I	Group Peggy I .60 II .72 I .57 II .79 I .24 II .51 I .66	Group Peggy Bill I .60 .64 II .72 .61 I .57 .46 II .79 .68 I .24 .79 II .51 .58 I .66 .49	Group Peggy Bill Bob I .60 .64 .64 II .72 .61 .68 I .57 .46 .71 II .79 .68 .60 I .24 .79 .57 II .51 .58 .44 I .66 .49 .39	Group Peggy Bill Bob Lynn I .60 .64 .64 .69 II .72 .61 .68 .62 I .57 .46 .71 .57 II .79 .68 .60 .57 I .24 .79 .57 .28 II .51 .58 .44 .65 I .66 .49 .39 .24

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factor score was the criterion were no significant relationships found.

Evaluative-Activity Factor

- H_{01.4}: No relationship will be found between:
 - evaluative-activity factor items and the total evaluative-activity score ("1-7" procedure);
 - b. evaluative-activity factor items and client-percept factor scores ("1-7" procedure).
- H_{1,4}: A positive relationship will be found between:
 - evaluative-activity factor items and the total evaluative-activity score ("1-7" procedure);
 - b. evaluative-activity factor items and client-percept factor scores ("1-7" procedure).

The evaluative-activity factor consisted of fortyfive items (9 scales times 5 client-percepts). Twenty-eight
items were found by the experimental group to relate
significantly with the total factor score. Eighteen
significant relationships were found by the replicating
group, but only nine were common to both groups. (See
Table 4.6.) Moreover, five of the nine were contributed by
Client-percept Bob, while Client-percepts Peggy and Lynn,
the two female percepts, contributed no confirmed items.

Three scales had no confirmed relationships with the total factor score irrespective of its client-percept pairing. One of these scales, <u>slow-fast</u>, was a marker scale for this factor.

When the evaluative-activity factor items were correlated with their respective client-percept factor

TABLE 4.6--Items significantly related to total factor score ("1-7" procedure) by both groups: Evaluative-activity factor.

Evaluative-Activity Scales	Client- Percept	Group I	Group II
opaque-transparent	none		
far-near	Bob	.60	.53
tired-energetic	Bob	. 4 4	.48
passive-active	Bill Bob	.41 .49	.37
slow-fast	none		
defensive-aggressive	Bob Terry	.39	.52 .45
static-dynamic	none		
unhappy-happy	Bob Terry	.56 .47	.40
constrained-free	Terry	.53	.43

scores, forty-two of the forty-five relationships were found to be significant by the experimental group. (See Table 4.7.) Furthermore, forty-one of the forty-two significant relationships were confirmed by the replicating group. The four non-significant or unconfirmed items involved only two scales: opaque-transparent and unhappy-happy.

To summarize, briefly, when the total factor scores were the criteria, the null hypothesis was rejected forty-eight of a possible 145 times. The evaluative factor contributed the most confirmed items (24 of a possible 50), the emotional factor contributed the most confirmed items by percentage (16 of a possible 30), while the potency factor contributed no items to the total of confirmed items.

with the client-percept factor scores as the criteria a much higher percentage of confirmed relationships was found. Of the possible 145 relationships, 134 were found significant by the experimental group and confirmed by the replicating group. The evaluative factor had confirmed significant relationships for forty-nine of a possible fifty items; the evaluative-activity factor had forty-two of a possible forty-five; the emotional factor, twenty-six of thirty; and the potency factor, seventeen of twenty.

CLIENT-PERCEPT MEANINGS

One criterion for selecting semantic differential concepts was to select concepts that vary in meaning one

TABLE 4.7--Item/client-percept score ("1-7" procedure) correlation coefficients (\underline{r}) for both groups: Evaluative-activity factor.

G1	Client-Percepts					
Scales	Group	Peggy	Bill	Bob	Lynn	Terry
opaque-transparent	II	.11	.40	.20	.59 .36	.66
far-near	II	.72	.86 .78	.81 .77	.65 .44	.80 .59
tired-energetic	II	.67 .43	.58 .68	.71	.65 .54	.78 .56
passive-active	II	.61 .74	.84 .71	.79 .78	.51 .59	.74 .63
slow-fast	II	.60 .81	.70 .62	.62 .79	.64 .55	.77
defensive-aggressive	II	.47	.68 .76	.50 .57	.46 .57	.65 .62
static-dynamic	II	.66 .55	.73 .75	.64	.70 .49	.53 .79
unhappy-happy	II	.70 .52	.42 .57	.77 .69	.24	.64 .11
constrained-free	III	.58 .61	.72 .74	.59 .66	.62 .50	.65 .77

from the other. To determine client-percept meanings, separate factor means ("1-7" procedure) were computed for each client-percept. Table 4.8 presents the means per factor for each group. By dividing each factor mean by the number of scales comprising each factor, an average semantic meaning was computed for each factor/client-percept combination. (See Table 4.9.)

Some general statements about each client-percept/ factor combination can be made:

- 1. Evaluative factor: Client-percepts Peggy, Bill, and Bob were valued similarly, and highly (Group 1, 5.0-5.4; Group II, 5.3-5.5) while Client-percepts Lynn and Terry were value similarly and somewhat lower (Group I, 4.0-4.6; Group II, 3.0-3.6).
- 2. Emotional factor: Again, both groups saw the client-percepts relatively similarly. Client-percept Bob was the most emotive (Group I, 5.0; Group II, 4.8), Client-percept Peggy the least (Group I, 2.9; Group II, 3.2).
- 3. Potency factor: Though both groups saw Clientpercepts Bill as the least potent, the range over all clientpercepts was small (one scale unit for Group I; less than one
 scale unit for Group II).
- 4. Evaluative-activity factor: Client-percept Peggy was judged by both groups as being the most active (Group I, 5.2; Group II, 5.3), while Client-percept Lynn was seen as the least active (Group I, 3.1; Group II, 2.5). Except for

4.8--Factor means by client-percepts for both groups.

54.0 50.2 50.8	53.4
50.2 50.8	
50.8	F / E
	54.6
	54.7
40.2	29.8 36.2
40.2	30.2
Emotional Fac	ctor (6 scales)
17.6	19.1
25.7	28.8
	32.0
23.0	23.3
25.8	25.4
Potency Facto	or (4 scales)
16.8	17.4
15.5	15.3
19.4	19.2
19.6	18.7
17.6	17.8
	ctivity Factor scales)
46.0	48.1
	48.1 34.4
	42.2
	22.1
	28.0
	17.6 25.7 29.8 23.0 25.8 Potency Factor 16.8 15.5 19.4 19.6 17.6

TABLE 4.9--Average semantic meanings for the client-percepts by factor for both groups.

Client-Percept	Group I G	roup II
	Evaluative Fac	tor
Peggy	5.4	5.3
Bill	5.0	5.5
Bob	5.1	5.5
Lynn	4.0	3.0
Terry	4.6	3.6
	Emotional Fact	or
Peggy	2.9	3.2
Bill Bill	4.3	4.8
Bob	5.0	5.3
Lynn	3.8	3.8
Terry	4.3	4.2
	Potency Factor	
Peggy	4.2	4.4
Bill Bill	3.9	3.8
Bob	4.8	4.8
Lynn	4.9	4.7
Terry	4.4	4.5
	Evaluative-Activity	Factor
Peggy	5.2	5.3
Bill	3.4	3.8
Bob	4.8	4.8
Lynn	3.1	2.5
Terry	4.0	3.1

Client-percept Terry, both groups viewed each of the client-percepts relatively similarly.

In summary, there were apparent differences in meaning among the five client-percepts on each factor as judged by the two studied groups. To determine if the apparent differences in meaning were statistically significant, a simple one-way analysis of variance was computed across client-percepts by factor. Where the F ratio was found to be significant, tests of differences by use of t as described by Garrett were computed. 1

Evaluative Factor

- H_{02.1}: No statistical difference will be found among the five client-percepts when evaluative scores ("1-7" procedure) are used as the criterion.
- H_{2.1}: A statistically significant difference will be found among the five client-percepts when evaluative scores ("1-7" procedure) are used as the criterion.

A significant difference was found among the five client-percepts on the evaluative dimension by both the experimental and replicating groups. (See Table 4.10.) Thus, the null hypothesis was rejected, the evidence supporting the alternative hypothesis.

Specifically, the experimental group found significant differences between Client-percepts Peggy and Lynn, Bill and

Henry E. Garrett and R. S. Woodworth, <u>Statistics</u> (New York: Longmans, Green and Company, 1958), pp. 280-281.

TABLE 4-10--Differences among client-percept factor scores ("1-7" procedure) by analysis of variance, for both groups: Evaluative factor.

Source	df	SS	ms	F	SD
	Gr	oup IExperi	mental Gro	up	
Between Within	4 140	3241.31 17320.10	810.33 123.72	8.77*	11.1
Total	144	20561.41			
	Gr	oup IIRepli	cating Gro	up	
Between Within	4 145	16894.30 9830.07	4223.58 67.79	62.30*	8.2
Total	149	26724.37			

^{*}Significant at .01 level.

Tests of differences by \underline{t} :

Client-Percept	Group I	Group II
Peggy-Bill	NS	NS
Peggy-Bob	NS	NS
Peggy-Lynn	.01	.01
Peggy-Terry	.01	.01
Bill-Bob	NS	NS
Bill-Lynn	.01	.01
Bill-Terry	NS	.01
Bob-Lynn	.01	.01
Bob-Terry	NS	.01
Lynn-Terry	NS	.01

Legend: NS=not significant; .01=significant at the .01 level.

Lynn, Bob and Lynn, and Peggy and Terry, each of which was confirmed by the replicating group. In addition, the replicating group found differences between Client-percepts Bill and Terry, Bob and Terry, and Lynn and Terry.

In summary, Client-percepts Peggy, Bill, and Bob were seen evaluatively the same as each other (i.e. no significant differences among them) and evaluatively different from Client-percepts Lynn and Terry.

Emotional Factor

- H_{02.2}: No statistical difference will be found among the five client-percepts when emotional scores ("1-7" procedure) are used as the criterion.
- H_{2.2}: A statistically significant difference will be found among the five client-percepts when emotional scores ("1-7" procedure) are used as the criterion.

A significant difference was found among the five client-percepts on the emotional dimension by both the experimental and the replicating groups. (See Table 4.11.) Therefore, the null hypothesis was rejected and evidence was submitted in support of the alternate hypothesis.

The experimental group found significant differences among nine of the ten comparisons, eight of which were confirmed by the replicating group. Only the difference found between Client-percepts Lynn and Terry were not seen as significantly different by the replicating group.

On the other hand, the replicating group also found significant differences in nine of the ten comparisons,

TABLE 4.11--Differences among client-percept factor scores ("1-7" procedure) by analysis of variance, for both groups: Emotional Factor.

Source	df	SS	ms	F	SD
	Grou	p IExperi	mental Gro	ıp	
Between Within	2391.64 140	2391.65 3274.41	597.91 23.39	26.48*	4.75
Total	144	5666.06			
	Grou	p IIRepli	cating Gro	лb	
Between Within	4 145	2961.29 4508.50	740.32 31.09	23.81*	5.50
Total	149	7469.79			

^{*}Significant at .01 level.

Tests of differences by t:

Client-Percept	Group I Group		
Peggy-Bill	.01	.01	
Peggy-Bob	.01	.01	
Peggy-Lynn	.01	.01	
Peggy-Terry	.01	.01	
Bill-Bob	.01	.05	
Bill-Lynn	.05	.01	
Bill-Terry	NS	.05	
Bob-Lynn	.01	.01	
Bob-Terry	.01	.01	
Lynn-Terry	.05	NS	

Legend: NS=not significant;
.01=not significant at the .01 level;
.05=significant at the .05 level.

with the difference between Client-percepts Bill and Terry not confirmed.

Potency Factor

- H_{02.3}: No statistical difference will be found among the five client-percepts when potency scores ("1-7" procedure) are used as the criterion.
- H_{2.3}: A statistically significant difference will be found among the five client-percepts when potency scores ("1-7" procedure) are used as the criterion.

A significant difference was found among the five client-percepts on the potency dimension by both the experimental and replicating groups. (See Table 4.12.) Therefore, the null hypothesis was rejected.

For the experimental group seven of the ten clientpercept comparisons were found significant and each of the seven was confirmed by the replicating group.

Evaluative-Activity Factor

- H_{02.4}: No statistical difference will be found among the five client-percepts when evaluative-activity scores ("1-7" procedure) are used as the criterion.
- H_{2.4}: A statistically significant difference will be found among the five client-percepts when evaluative-activity scores ("1-7" procedure) are used as the criterion.

A significant difference was found among the five client-percepts on the evaluative-activity dimension by both the experimental and replicating groups. (See Table 4.13.) The null hypothesis was, therefore, rejected in favor of the alternate hypothesis.

TABLE 4.12--Differences among client-percept factor scores ("1-7" procedure) by analysis of variance, for both groups: Potency factor.

Source	<u>,</u> df	SS	ms	F	SD
	G	roup IExper	imental G	roup	
Between Within	4 140	354.79 947.24	88.70 6.77	13.10*	2.60
Total	144	1302.03			
	G	roup IIRepl	icating G	roup	
Between Within	4 145	278.60 1810.90	69.65 12.49	5.58*	2.36
Total	149	2089.50			

^{*}Significant at .01 level.

Tests of differences of t:

Client-Percept	Group I	Group II
Peggy-Bill	NS	.01
Peggy-Bob	.01	.01
Peggy-Lynn	.01	.05
Peggy-Terry	NS	NS
Bill-Bob	.01	.01
Bill-Lynn	.01	.01
Bill-Terry	.01	.01
Bob-Lynn	NS	NS
Bob-Terry	.01	.05
Lynn-Terry	.01	.01

Legend: NS=not significant;
.01=significant at the .01 level;
.05=significant at the .05 level.

TABLE 4.13--Differences among client-percept factor scores (1"-7" procedure) by analysis of variance, for both groups: Evaluative-activity factor.

Source	df	SS	ms	F	SD
	Grou	ıp IExperii	mental Gro	ир	
Between Within	4 140	7708.87 8857.79	1927.22 63.27	30.50*	7.94
Total	145	16566.66			
	Grou	up IIRepli	cating Gro	up	
Between Within	4 145	13162.46 9699.37	3290.62 66.89	49.19*	8.18
Total	149	22861.83			

^{*}Significant at .01 level.

Tests of differences by t:

Client-Percept	Group I	Group II
Peggy-Bill	.01	.01
Peggy-Bob	NS	.01
Peggy-Lynn	.01	.01
Peggy-Terry	. 01	.01
Bill-Bob	.01	.01
Bill-Lynn	NS	.01
Bill-Terry	.01	.01
Bob-Lynn	.01	.01
Bob-Terry	.01	.01
Lynn-Terry	.01	.01

Legend: NS=not significant; .01=significant at the .01 level.

With the client-percept comparisons, the experimental group found significant differences between eight of the ten possibilities. No significant differences were found between Client-percepts Peggy and Bob and between Client-percepts Bill and Lynn. The replicating group found significant differences for all ten possible comparisons, thus confirming the eight found by the experimental group.

In summary, the F ratios computed to test the above four hypotheses were all significant. Therefore, it was concluded that the semantic differential concepts variability criterion was met for this study. Not only were all four F ratios significant, but of the total of forty the total of the total of the total of the significant the and the replicating group had thirtyfour. In addition, the two groups agreed on the significance of twenty-seven of the differences in meaning.

PERSON PERCEPTION THEORY

An attempt was made to test the theoretical notion of the perceiver's "generalized meaning" and to assess the degree that total factor scores represented the concept of "generalized meaning." Theory suggests that, although he may not judge all five client-percepts the same, a counselor-trainee should nevertheless, have a style of judging that would be detectable when his judgments are compared with

those judgments of other counselor-trainees. For example, if a counselor-trainee had a high potency score ("1-7" procedure) for Client-percept Peggy when compared with other counselor-trainees, he should also have a high potency score for Client-percept Bill, comparatively, despite possible differences in the actual degree of potency seen between the two client-percepts. Or if this same counselor-trainee had a comparatively high potency score for Client-percept Peggy, he should also have a comparatively high total potency score:

"Generalized meaning" was assessed in two ways:

(1) by comparing client-percept factor scores with each other and (2) by comparing client-percept factor scores with total factor scores. The first was a quite restrictive and stringent view of perceptual style. With this view, if the comparative meaning attached to a particular person percept were known, then the comparative meaning attached to another particular person percept could be predicted. The second was a general view of perceptual style. That is, if the comparative meaning attached to a particular person percept were known, the comparative meaning attached to person percept in general could be predicted.

total factor score was ranked separately and comparisons were made by the rank-difference method (<u>rho</u>) to determine the existence of a relationship.

Evaluative Factor

- H_{03 1}: No relationship will be found:
 - a. when each client-percept evaluative factor score is compared with every other client-percept evaluative factor score ("1-7" procedure):
 - b. when each client-percept evaluative factor score is compared with the total evaluative score ("1-7" procedure).
- $H_{3,1}$: A positive relationship will be found:
 - a. when each client-percept evaluative factor score is compared with every other clientpercept evaluative factor score ("1-7" procedure);
 - b. when each client-percept evaluative factor score is compared with the total evaluative score ("1-7" procedure).

Significant relationships were found when Clientpercept Peggy was compared with Client-percept Lynn and when
Client-percept Lynn was compared with Client-percept Terry.
(See Table 4.14.) None of the other client-percept
comparisons were significant for the experimental group.
Under replication, however, neither significant relationship
was confirmed despite the fact that the replicating
group had three significant relationships itself. Therefore, the null hypothesis was not rejected for any of the
ten possible comparisons.

Despite lack of confirmed client-percept relationships, however, nine of the comparisons were in the predicted direction for the experimental group, and ten of the comparisons were in the predicted direction for the replicating group.

TABLE 4.14--Client-percept factor score comparisons by the rank-difference method ($\underline{\text{rho}}$), for each group: Evaluative factor.

Client-Percept	Group I Experimental	Group II Replicating
Peggy-Bill	.11	.21
Peggy-Bob	.32	.38*
Peggy-Lynn	.59**	.16
Peggy-Terry	.21	.00
Bill-Bob	.21	.40*
Bill-Lynn	.00	.40*
Bill-Terry	03+	.11
Bob-Lynn	.34	.09
Bob-Terry	.23	.07
Lynn-Terry	.78**	.02

Legend:

^{** =} relationship significant at .01 level;
* = relationship significant at .05 level;
† = direction opposite that which was predicted.

When client-percept factor totals were compared with total factor score, the experimental group found all relationships to be significant. (See Table 4.15.) All significant relationships were confirmed by the replicating group.

Emotional Factor

- $H_{03,2}$: No relationship will be found:
 - a. when each client-percept emotional factor score is compared with every other clientpercept emotional factor score ("1-7" procedure);
 - b. when each client-percept emotional factor score is compared with the total emotional score ("1-7" procedure).
- $H_{3,2}$: A positive relationship will be found:
 - a. when each client-percept emotional factor score is compared with every other client-percept emotional factor score ("1-7" procedure);
 - b. when each client-percept emotional factor score is compared with the total emotional score ("1-7" procedure).

No significant relationships were found for any of the ten client-percept comparisons for the experimental group, though a significant relationship was found when Client-percept Bill was compared with Client-percept Bob for the replicating group. (See Table 4.16.) Therefore, the null hypothesis was not rejected.

All ten client-percept comparisons were in the predicted direction for the experimental group. Eight of the ten were confirmed by replication.

Five of five possible relationships were found to be significant by the experimental group and confirmed by the

TABLE 4.15--Relationships between client-percept factor scores and total factor score using the rank-difference method (rho), for each group: Evaluative factor.

Client-Percept	Group I Experimental	Group II Replicating
Peggy	.64**	.54**
Bill'	.37*	.72**
Bob	.68**	.69**
Lynn	.83**	.52**
Terry	.69**	.45*

TABLE 4.16--Client-percept factor score comparisons by the rank-difference method (<u>rho</u>), for each group: Emotional factor.

Client-Percept	Group I Experimental	Group II Replicating
Peggy-Bill	.19	.19
Peggy-Bob	.17	.20
Peggy-Lynn	.16	.10
Peggy-Terry	.13	.15
Bill-Bob	. 24	.39*
Bill-Lynn	.02	06+
Bill-Terry	.17	.26
Bob-Lynn '	.13	10+
Bob-Terry	.34	.25
Lynn-Terry	.15	.25

Legend: * = relationship significant at .05 level;

t = direction opposite that which was predicted.

replicating group when client-percept factor scores were compared with their respective total factor score. (See Table 4.17.) Therefore, the null hypothesis was rejected.

Potency Factor

- $H_{03,3}$: No relationship will be found:
 - when each client-percept potency factor score is compared with every other client-percept potency factor score ("1-7" procedure);
 - b. when each client-percept potency factor score is compared with the total potency score ("1-7" procedure).
- H_{3.3}: A positive relationship will be found:
 a. when each client-percept emotional factor
 score is compared with every other clientpercept emotional factor score ("1-7"
 procedure);
 - b. when each client-percept potency factor score is compared with the total potency score ("1-7" procedure).

No significant relationships were found for any of the ten client-percept comparisons for the experimental group. The replicating group found two significant relationships, but, of course, none of them were substantiated by the experimental group. (See Table 4.18.) The null hypothesis, therefore, was not rejected.

Seven of the ten comparisons for the experimental group, however, were in the predicted direction. But only two comparisons were confirmed by the replicating group.

Three of five possible relationships were confirmed significant by the two groups when client-percept factor scores were compared with total factor scores. (See Table 4.19.) Both groups found four significant relationships,

TABLE 4.17--Relationships between client-percept factor score and total factor score using the rank-difference method ($\underline{\text{rho}}$), for each group: Emotional factor.

Client-Percept	Group I Experimental	Group II Replicating
Peggy	.56**	.54**
Bill Bill	.54**	.59**
Bob	.65**	.56**
Lynn	.50**	.48**
Terry	.65**	.69**

Legend: ** = relationship significant at .01 level.

TABLE 4.18--Client-percept factor score comparisons by the rank-difference method ($\underline{\text{rho}}$), for both groups: Potency factor.

Client-Percept	Group I Experimental	Group II Replicating
Peggy-Bill	.16	.48**
Peggy-Bob	.25	.51**
Peggy-Lynn	27+	34+
Peggy-Terry	12+	.14
Bill-Bob	.14	.31
Bill-Lynn	.05	.15
Bill-Terry	.04	08+
Bob-Lynn	.08	19+
Bob-Terry	12+	.09
Lynn-Terry	. 24	07+

Legend: ** = relationship significant at .01 level; + = direction opposite that which was predicted.

TABLE 4.19--Relationships between client-percept factor scores and total factor score using the rank-difference method (rho), for each group: Potency factor.

Client-Percept	Group I Experimental	Group II Replicating
Peggy	.47**	.62**
Bill Bill	.59**	.69**
Bob	.31	.59**
Lynn	.42**	.33
Terry	.38**	.41*

but each group found one relationship not confirmed by the other. The experimental group, for instance, found a significant relationship with Client-percept Lynn, but the replicating group did not. The opposite occurred with Client-percept Bob.

Evaluative-Activity Factor

- $H_{03.4}$: No relationship will be found:
 - a. when each client-percept evaluativeactivity factor score is compared with every other client-percept evaluativeactivity factor score ("1-7" procedure);
 - b. when each client-percept evaluativeactivity factor score is compared with the total evaluative-activity score ("1-7" procedure).
- H_{3.4}: A positive relationship will be found:
 a. when each client-percept evaluativeactivity factor score is compared with
 every other client-percept evaluativeactivity factor score ("1-7" procedure);
 b. when each client-percept evaluative
 - b. when each client-percept evaluativeactivity factor score is compared with the total evaluative-activity score ("1-7" procedure).

A significant relationship was found when Clientpercept Lynn was compared with Client-percept Terry for the
experimental group and the relationship was confirmed by the
replicating group. (See Table 4.20.) Each group had two
other but unconfirmed significant relationships. For the
replicating group, Client-percepts Peggy and Bill were
significantly related, but in a direction opposite that
which was predicted. Because only one of ten comparisons was
significant and confirmed, the null hypothesis was not
rejected.

TABLE 4.20--Client-percept factor score comparisons by the rank-difference method ($\underline{\text{rho}}$), for each group: Evaluative-activity factor.

Client-Percept	Group I Experimental	Group II Replicating	
Peggy-Bill	05	47"	
Peggy-Bob	.43*	05+	
Peggy-Lynn	.32	05+	
Peggy-Terry	.42*	06†	
Bill-Bob	.16	.52**	
Bill-Lynn	.08	05+	
Bill-Terry	.00	07t	
Bob-Lynn	.36	17+	
Bob-Terry	.25	05+	
Lynn-Terry	.66**	.42*	

Legend:

** = relationship significant at .01 level;

* = relationship significant at .05 level;

" = relationship significant at .01 level but in a direction opposite that which was predicted;

t = direction opposite that which was

predicted.

Nine of the ten relationships were in the predicted direction for the experimental group. But only two of these were confirmed by the replicating group.

Client-percept factor scores were compared with the total factor score and each of the five relationships were found to be significant for the experimental group. (See Table 4.21.) Though four relationships were confirmed by the replicating group, the relationship between Client-percept Peggy factor score and the total factor score was not.

In summary, when client-percept factor scores were compared with each other, only five of forty relationships were found to be significant, and only one of the five was confirmed by the replicating group. The replicating group found nine of forty relationships significant.

But thirty-five of forty relationships were in the predicted direction for the experimental group with twenty-three of the thirty-five positive directions confirmed by the replicating group.

The relationships between client-percept factor scores and total factor scores were found to be significant seventeen of the possible twenty times (5 client-percept items times 4 factors) by the experimental group and all seventeen were confirmed by the replicating group.

TABLE 4.21--Relationships between client-percept factor scores and total factor score using the rank-difference method (rho), for each group: Evaluative-activity factor.

Client-Percept	Group I Experimental	Group II Replicating	
Peggy	.64**	.08	
Bill	.37*	.52**	
Bob	.67**	.67**	
Lynn	.77**	.40*	
Terry	.76**	.53**	

DISCUSSION

When PPT items were compared with their respective total factor score, forty-nine of the 145 items correlated significantly for both the experimental and the replicating groups. Two factors, the evaluative factor and the emotional factor, contributed forty of the forty-nine items (twenty-four of fifty for the evaluative factor and sixteen of thirty for the emotional factor). Though the items contributed by the evaluative-activity and the potency factors were disappointingly few, there may be some possible explanations for their lack of item correlations.

To be considered significantly related to their total factor score, items had to be found significantly related by both validating groups. As discussed in Chapter III, the evaluative-activity factor was only quasi-stable at best and, in fact, was not validated by Group II at all. Therefore, the low number of items contributed was not too surprising since the factor was an artificial one forced upon the data in an attempt to account for all the scales. The artificiality of the factor could also explain why the scale slow-fast was not significantly related with the total factor score irrespective of client-percept pairing.

Although factor artificiality may be claimed for the evaluative-activity factor, no such claim can be advanced for the potency factor. Both groups revealed a potency factor through factor analysis. Yet no potency items

correlated significantly with the total factor score consistently for both the experimental and replicating groups. Perhaps, of all the judgmental dimensions, potency is the least generalizable across person percepts and, therefore, the most specialized.

Markedly different results were obtained, however, when items were compared with their respective clientpercept factor scores. Only ten of the 145 relationships studied were not significant for both groups. Of course, there always exists the danger of having spuriously high relationships when items are compared with scores because the items make up part of the score; and one would expect higher correlations when items are compared with clientpercept factor scores than when items are compared with total factor scores because each item made more of a contribution to the client-percept factor score than it did to the total factor score. For example, an evaluative item was only one of fifty items that comprised the total factor score but was one of ten items that comprised the client-percept factor score. Nevertheless, the data do indicate that when compared with client-percept factor scores the item judgments made by the counselor-trainees were internally consistent despite limited internal consistency when the total factor score was the criterion.

The dangers of spurious relationships, however, were even more present when client-percept factor scores instead

of items were compared with total factor scores since the client-percept factor score had a much larger influence on the total factor score than did items. Anastasi called the relationship between test part scores and total scores the degree of test homogeniety.²

But naive psychology suggests that a striking parallel exists (1) between a factor item/client-percept factor score comparison and the real world where a perceiver's total judgment of a person percept is composed of his particular judgments of that person percept and (2) between the client-percept factor score/total factor score comparisons and the real world where a perceiver's comparative generalized meaning for person percepts is composed of his comparative meanings for single person percepts.

Perhaps what was indicated by the data was that if a perceiver's particular value judgment (for example) of a given person percept were known, the perceiver's total value judgment of that person percept could be predicted. But his comparative total value judgment of people in general could not. On the other hand, the data that compared client-percept factor scores with client-percept factor scores and client-percept factor scores with total factor scores suggested that if a perceiver's comparative total value judgment of a person percept were known, the perceiver's

²Anne Anastasi, <u>Psychological Testing</u> (New York: The Macmillan Company, 1954), pp. 98-101.

comparative total value judgment of person percepts in general could be predicted, even though his comparative total value judgment of another person percept could not.

At this level, at least, the scores on the PPT ("1-7" procedure) have referents in the real world and their relationships as discussed in this chapter lend support for person perception theory.

The semantic differential criterion that clientpercepts should vary in meaning one from the other was
apparently met since significant differences were found
among the five client-percepts in each of the four PPT
Dimensions. Moreover, the experimental group and the
replicating group agreed on the significance of twentyseven of the forty differences between specific clientpercepts. Only the results obtained for the potency factor
were surprising in light of "eye-ball" inspection of the
data. Little practical differences seemed to appear among
the judgments made for each of the client-percepts (less
than one scale unit separating most potent from least
potent). Evidently the differences had little to do
with mean differences but rather with counselor-trainee
variability in judgments.

SUMMARY

Table 4.22 which follows contains a summary of the Person Perception hypotheses including the statistics used and the results found.

TABLE 4.22--Summary of results of Person Perception Test hypotheses tested.

Hypothesis

Results

H_{1.1}: A positive relationship will be found between:

- a. Evaluative factor items and the total evaluative factor score ("1-7" procedure)
- A positive relationship was found and confirmed for 24 of 50 items using the product-moment (\underline{r}) .
- b. Evaluative factor items and clientpercept factor scores ("1-7" procedure).

A positive relationship was found and confirmed for 48 of 50 items using the product-moment (\underline{r}) .

H_{1.2}: A positive relationship will be found between:

a. Emotional factor items and the total emotional factor score ("1-7" procedure)

A positive relationship was found and confirmed for 16 of 30 items using the product-moment (\underline{r}) .

b. Emotional factor items and clientpercept factor scores ("1-7" procedure). A positive relationship was found and confirmed for 26 of 30 items using the product-moment (\underline{r}) .

H_{1.3}: A positive relationship will be found between:

a. Potency factor items and the total potency factor score ("1-7" procedure)

A positive relationship was found and confirmed for none of the 20 items using the product-moment (r).

b. Potency factor items and client-percept factor scores ("1-7" procedure).

A positive relationship was found and confirmed for 17 of 20 items using the product-moment (\underline{r}) .

TABLE 4.22--(continued)

- H_{1.4}: A positive relationship will be found between:
 - a. Evaluative-activity
 factor items and the
 total evaluativeactivity factor
 score ("1-7"
 procedure)

A positive relationship was found and confirmed for 9 of 45 items using the product-moment (\underline{r}) .

b. Evaluative-activity factor items and client-percept factor scores ("1-7" procedure).

A positive relationship was found and confirmed for 41 of 45 items using the product-moment (\underline{r}) .

H_{2.1}: A significant difference will be found among the five client-percepts when evaluative scores ("1-7" procedure) are used as the criterion.

A difference was found among the client-percepts at .01 by analysis of variance.
Differences were found between 4 of 10 client-percept comparisons by t test.

H_{2.2}: A significant difference will be found among the five client-percepts when emotional scores ("1-7" procedure) are used as the criterion.

A difference was found among the client-percepts at .01 by analysis of variance.
Differences were found between 8 of 10 client-percept comparisons by t test.

H_{2.3}: A significant difference will be found among the five client-percepts when potency scores ("1-7" procedure) are used as the criterion.

A difference was found among the client-percepts at .01 by analysis of variance.
Differences were found between 7 of 10 client-percept comparisons by t test.

H_{2.4}: A significant difference will be found among the five client-percepts when evaluative-activity scores ("1-7" procedure) are used as the criterion.

A difference was found among the client-percepts at .01 by analysis of variance. Differences were found between 8 of 10 client-percept comparisons by t test.

TABLE 4.22--(continued)

H_{3.1}: A positive relationship will be found:

- a. When each clientpercept evaluative
 factor score is
 compared with every
 other clientpercept evaluative
 factor score ("1-7"
 procedure)
- None of the ten clientpercept comparisons were found significant by rankdifference method. 9 of 10 relationships were in the predicted direction.
- b. When each clientpercept evaluative
 factor score is
 compared with the
 total evaluative
 score ("1-7"
 procedure).

A positive relationship was found and confirmed in 5 of 5 comparisons by rank-difference method.

H_{3.2}: A positive relationship will be found:

a. When each clientpercept emotional
factor score is
compared with every
other client-percept
emotional factor
score ("1-7"
procedure)

None of the ten clientpercept comparisons were found significant by rankdifference method. 8 of 10 relationships were in the predicted direction.

b. When each clientpercept emotional
factor score is
compared with the
total emotional
score ("1-7"
procedure).

A positive relationship was found and confirmed in 5 of 5 comparisons by rank-difference method.

H_{3.3}: A positive relationship will be found:

a. When each clientpercept potency
factor score is
compared with every
other clientpercept potency
factor score
("1-7" procedure)

None of the ten clientpercept comparisons were found significant by rankdifference method. 2 of 10 relationships were in the predicted direction.

TABLE 4.22--(continued)

b. When each clientpercept potency
factor score is
compared with the
total potency
score ("1-7"
procedure).

A positive relationship was found and confirmed in 3 of 5 comparisons by rank-difference method.

H_{3.4}: A positive relationship will be found:

- a. When each clientpercept evaluativeactivity factor
 score is compared
 with every other
 client-percept
 evaluativeactivity factor
 score ("1-7"
 procedure)
- 1 of 10 client-percept comparisons was found to be significant by rankdifference method. 2 of 10 relationships were in the predicted direction.
- b. When each clientpercept evaluativeactivity factor
 score is compared
 with the total
 evaluativeactivity score
 ("1-7" procedure).

A positive relationship was found and confirmed in 4 of 5 comparisons by rank-difference method.

CHAPTER V

ANALYSIS OF DATA: VALIDITY HYPOTHESES

Chapter III hypothesized relationships were grouped under two headings; (1) Person Perception Test hypotheses and (2) validity hypotheses. Person Perception Test data were analyzed in the preceding chapter and included hypotheses for internal consistency, differences among client-percepts, and counselor-trainee "generalized meaning."

This chapter will analyze the data generated by the validity hypotheses. Relationships between various PPT scores and counselor-trainee interview responses as recorded on the Counselor Response System will be reported. The chapter discusses: (1) approach-avoidance hypotheses-evaluative factor; (2) approach-avoidance hypotheses-interrelated factors; (3) scale-checking style hypotheses; (4) rigidity and stereotopy hypotheses; (5) exploratory analyses; (6) discussion of results; and (7) summary.

The two counselor-trainee groups comprised the experimental (Group I) and replicating (Group II) groups.

A relationship found to be significant at or beyond the .05 level for both groups was accepted as evidence for rejecting the null hypothesis.

APPROACH-AVOIDANCE: EVALUATIVE FACTOR

Because Osgood linked the evaluative factor with a measure of attitude, it was hypothesized that a significant positive relationship would be found between the generalized evaluative meaning counselor-trainees had for the filmed-client-percepts (i.e. total factor score using the "1-7" procedure) and selected counseling behavior displayed with a particular client as recorded on the Counselor Response System. Specifically, the following hypotheses were tested:

- H_{04.1}: No relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{4.1}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{04.2}: No relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Expansive responses recorded on the CRS.
- H_{4.2}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Expansive responses recorded on the CRS.
- H_{04.3}: No relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{4.3}: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.

- H_{04.4}: No relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.
- H4.4: A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.

The Spearman rank-difference procedure was used and coefficients were computed to test the hypothesized relationships. The resultant correlation coefficients (rho), using the "1-7" procedure are presented in Table 5.1.

No significant correlations were found for either the experimental or the replicating group for any of the four hypothesized relationships. Therefore, null hypotheses 04.1, 04.2, 04.3, 04.4 were not rejected.

APPROACH-AVOIDANCE: INTERRELATED FACTORS

In Chapter II it was reported that the evaluative factor alone was not enough for predicting behavior--that the addition of other semantic dimensions could improve predictability. Therefore, the following hypotheses were tested:

- H_{05.1}: No relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{5.1}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.

TABLE 5.1--Correlation coefficients for hypothesized relationships between Counselor Response System Scores and Person Perception Test evaluative scores using the "1-7" procedure.

Counselor Response System	Person Perception Test		
	Group I	Group II	
Content: Follow	12	04	
Control: Expansive	02	.11	
Referrent: Client	17	.07	
Reinforcing	08	08	

- H_{05.2}: No relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.
- H_{5.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.
- H_{05.3}: No relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{5.3}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{05.4}: No relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.
- H_{5.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.

A multiple correlation analysis (R) was computed to test each hypothesis. The resultant correlation coefficients, using the "1-7" scoring procedure are presented in Table 5.2.

Neither the experimental nor the replicating group found significant relationships between the PPT and the four CRS dimensions. Therefore null hypotheses 05.1, 05.2, 05.3, and 05.4 were not rejected.

TABLE 5.2--Multiple correlation coefficients between Counselor Response System scores and Person Perception Test scores using the "1-7" scoring procedure.

Councilor Boaronse Sustan	Person Perception Test		
Counselor Response System	Group I	Group II	
Content: Follow	.29	.40	
Control: Expansive	.30	.39	
Referrent: Client	.39	.41	
Reinforcing	. 4 2	.49	

SCALE-CHECKING STYLE

In Chapter II it was reported that subjects'
emotionality toward semantic differential concepts affected
which scale positions were checked. Osgood suggested
three judgmental levels: (1) a dogmatic choice (positions
1 and 7), (2) an avoidance choice (scale position 4), and
(3) a discriminatory choice (scale positions 2,3,5,6).
Based upon the findings of these studies the following
scale-checking style hypotheses were tested using the
frequency scoring procedure:

- H_{06.1}: No relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{6.1}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Content: Follow responses recorded on the CRS.
- H_{06.2}: No relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Control: Expansive responses recorded on the CRS.
- H_{6.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Control: Expansive responses recorded on the CRS.
- H_{06.3}: No relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Referent: Client responses recorded on the CRS.

- H_{6.3}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Referrent: Client responses recorded on the CRS.
- H_{06.4}: No relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Reinforcing responses recorded on the CRS.
- H_{6.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Reinforcing responses recorded on the CRS.

A multiple correlation analysis (R) was computed to test each hypothesis. The resultant correlation coefficients, using the f_{2356} scoring procedure are presented in Table 5.3.

No significant relationships were found by either the experimental or the replicating groups. So the null hypotheses 06.1, 06.2, 06.3, and 06.4 were not rejected.

STEREOTOPY AND RIGIDITY

In Chapter III the use of available semantic space was linked with the extent a counselor-trainee was open to stimuli. The less use of the semantic space, the more rigid the respondent and the more stereotyped his reactions.

Variance factor scores were computed to signify use of the semantic space and the following hypotheses were tested:

H_{07.1}: No relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Content: Follow responses recorded on the CRS.

TABLE 5.3--Multiple correlation coefficients between Counselor Response System scores and Person Perception Test scores using the $\rm f_{2356}$ scoring procedure.

	Person Perception Test		
Counselor Response System	Group I	Group II	
Content: Follow	.36	.28	
Control: Expansive	.30	.34	
Referrent: Client	.46	.24	
Reinforcing	.43	.27	

- H_{7.1}: A positive relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Content: Follow responses recorded on the CRS.
- H_{07.2}: No relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Control: Expansive responses recorded on the CRS.
- H_{7.2}: A positive relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Control: Expansive responses recorded on the CRS.
- H_{07.3}: No relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Referrent: Client responses recorded on the CRS.
- H_{7.3}: A positive relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Referrent: Client responses recorded on the CRS.
- H_{07.4}: No relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Reinforcing responses recorded on the CRS.
- H_{7.4}: A positive relationship will be found between counselor-trainee interrelated PPT variance factor scores and the frequency of Reinforcing responses recorded on the CRS.

A multiple correlation analysis (R) was computed to test each hypothesis. The resultant correlation coefficients, using the variance scoring procedure, are presented in Table 5.4.

Again, no significant relationships were found by either the experimental or the replicating group. The null hypotheses 07.1, 07.2, 07.3, and 07.4 were not rejected.

TABLE 5.4--Multiple correlation coefficients between Counselor Response System scores and Person Perception Test scores using the variance scoring procedure.

	Person Perception Test	
oup	I Group II	
.19	.36	
.29	.49	
.27	. 42	
.17	.55	
	.19	

EXPLORATORY ANALYSES

Several non-hypothesized relationships were explored and are presented briefly here:

- 1. Using the "1-7" procedure, the PPT evaluative-activity, emotional, and potency total factor scores were compared with each of the four CRS dimensions by the product-moment (\underline{r}) . No relationships were found significant for either the experimental or the replicating group. (See Appendix J for the complete data.)
- 2. Using the f_{2356} scoring procedure, each of the four PPT total factor scores was compared with each of the four CRS dimensions by the product-moment (\underline{r}) . No relationships were found significant for either the experimental or the replicating group. (See Appendix K for the complete presentation of data.)
- 3. Using the f_{1,7} scoring procedure, each of the four PPT total factor scores was compared with each CRS dimension by the product-moment (<u>r</u>). Also, interrelated total factor scores were compared with each of the four CRS dimensions by the multiple correlation (R). (See Table 5.5.) The experimental group found a significant negative relationship between the evaluative-activity factor score and the frequency of Control: Expansive responses. But the relationship was not confirmed by the replicating group. On the other hand, the replicating group found a significant positive relationship (not confirmed) between the potency

TABLE 5.5--Person Perception Test total factor scores (f_1 , procedure) compared with Counselor Response System dimensions by product-moment (\underline{r}) and by multiple correlation (R).

Counselor Response System	Person Per	ception Test
• •	Group I	Group II
	Evaluati	ve Factor
Content: Follow	17	03
Control: Expansive	19	06
Referrent: Client	19	08
Reinforcing	.15	.10
	Emotiona	l Factor
Content: Follow	.06	.20
Control: Expansive	15	03
Referrent: Ĉlient	06	.10
Reinforcing	.08	.20
	Potency	Factor
Content: Follow	09	.23
Control: Expansive	29	.23
Referrent: Ĉlient	26	.10
Reinforcing	04	.39*
		e-Activity
	Fa:	ctor
Content: Follow	16	.24
Control: Expansive	41*	.01
Referrent: Client	26	.13
Reinforcing	.04	.06
	Interrela	ted Factors
Content: Follow	.39	.42
Control: Expansive	.53	.35
Referrent: Client	. 43	.29
Reinforcing	.25	.69**

** = significant at .01 level;
* = significant at .05 level. Legend:

factor score and the frequency of reinforcing responses and between the PPT interrelated factor scores and the frequency of reinforcing responses.

- 4. Using the f_4 procedure, each of the four PPT total factor scores was compared with each of the four CRS dimensions by the product-moment (\underline{r}) . Moreoever, interrelated total factor scores were compared with each of the four CRS dimensions by multiple correlation (R). (See Appendix L for complete presentation of the data.) No significant relationships were found by the experimental group, although the replicating group found a significant negative relationship between the evaluative-activity dimension and the frequency of reinforcing responses.
- 5. Using the variance scoring procedure, each of the four PPT total factor scores was compared with each of the four CRS dimensions by the product-moment (<u>r</u>). Though the experimental group found no significant relationships, the replicating group found significant positive relationships between the frequency of reinforcing responses and both the evaluative and evaluative-activity total factor scores.

 (See Table 5.6.)
- 6. Each of the PPT items was compared with each of the CRS dimensions by the product-moment (\underline{r}) . The experimental group found thirty-seven significant relationships of a possible 600 and the replicating group found thirty-two. Two significant relationships were confirmed: When

TABLE 5.6--Person Perception Test factor variance scores compared with Counselor Response Systems dimensions by product-moment (\underline{r}) .

Counselor Response System	Person Perception Test	
	Group I	Group II
	Evaluative Factor	
Content: Follow Control: Expansive Referrent: Client Reinforcing	.11 15 07 08	.25 .27 .25 .38*
	Emotional Factor	
Content: Follow Control: Expansive Referrent: Client Reinforcing	13 16 18 .15	.05 .03 .15 .08
Content: Follow Control: Expansive Referrent: Client Reinforcing	05 12 22 .01 Evaluativ	.30 .28 .35 .17
	Factor	
Content: Follow Control: Expansive Referrent: Client Reinforcing	.00 24 12 06	.04 15 03 .50**

** = significant at .01 level;
* = significant at .05 level. Legend:

weak-strong (both potency scales) were negatively related with the Control: Expansive dimension. (See Appendix M for a complete presentation of the data.)

DISCUSSION

No significant predicted relationships were found by either the experimental or the replicating group.

Moreover, over half the coefficients computed, although non-significant, were in the opposite direction from that which was predicted.

In the exploratory phase of this study a significant inverse relationship was found by the experimental group between total evaluative-activity scores ($f_{1,7}$ procedure) and the frequency of Control: Expansive responses. Though it was in the predicted direction the relationship was not confirmed by the replicating group. The replicating group found significant relationships between the reinforcing dimension and:

- 1. interrelated factor scores (f_{1.7} procedure);
- 2. total potency scores (f_{1,7} procedure--relationship positive);
- 3. total evaluative-activity (f₄ procedure-relationship negative);
- 4. evaluative variance scores (relationship positive);

5. evaluative-activity variance scores (relationship positive).

But each of these relationships was unconfirmed.

It could be possible that the results of the validity hypotheses represent an accurate picture of real life-that there is, in fact, no relationship between the generalized meaning counselor-trainees have for clients and the behavior counselor-trainees display with specific clients. If this were true, then the theory upon which much of this study was based is inaccurate. But it is premature to conclude that the theory does not represent the real world. Or it may well be that the relationship between generalized meanings and behavior exists but that it is not linear as was assumed with the statistics used in this study. In fact, future studies of the relationship might find it to be circular in nature much as Schlosberg did with his sortings of the Frois-Wittman photos.

Since the PPT was developed especially for this study and because the primary interest of this investigator is with the further development of the instrument, the results of the validity hypotheses point to a need for further refinement of the instrument (before discarding it or the theory upon which it was based) in an attempt to bring out possible relationships. Refinement of the PPT will be the major consideration in the discussion of future research in Chapter VI.

Besides the need for PPT refinement, several other possibilities could explain the validity hypotheses results and these possibilities should be kept in mind and controlled for during further development of the PPT.

Future administrations of the PPT would be needed to offset the possibility that the two groups used in this study might have been uniquely homogeneous and that no "real" difference should have been expected. However, there is no reason to believe that either group was any more homogeneous than any other group of counselor-trainees that have been or might be studied.

Or perhaps the PPT was not administered in a standard manner to both groups. Besides the directions on the test booklet itself which were read by the test administrator, no additional standard testing procedures were written for the administrator to follow. But there is no evidence to support the notion that the two groups were administered the PPT such that the test results were differentially affected.

Another possibility is that perhaps the counselortrainees responded on the PPT as they thought they should
rather than as they honestly felt. In other words, the
PPT might be perfectly valid if only the subjects would
answer honestly. Of course, this argument can be used on
any test in which there are no wrong or right answers. The
researcher must rely on faith that his subjects were honest.

It could also be argued that the statistics used to test the hypotheses were inappropriate for the data and that a different statistic might have yielded significant results. However, this argument seems weak in light of Garrett's suggestion that the Spearman rank-difference method be used when the number of subjects is small. Garrett stated that rho yields as adequate results as Pearson's product moment correlation while at the same time not needing to assume a normal bivariate distribution. And according to Borg, multiple correlation is often used in exploratory studies. The possibility of a non-linear relationship exists, however; and should be examined.

Perhaps the Counselor Response System did not measure counselor-trainee interview behavior adequately. But given the four behavioral dimensions used, three judges, rating independently, did agree quite well with other's judgments. However, thirty responses may have been better than twenty; or maybe responses from the entire interview may have been still better. Yet, at the time of rating there was no reason to believe, other than length alone, that thirty responses were essentially different from twenty. And tabulating the entire interview would have been

¹H. E. Garrett and R. S. Woodworth, <u>Statistics</u> (New York: Longmans, Green and Company, 1958), p. 372.

²W. R. Borg, <u>Educational Research</u> (New York: David McKay Company, Inc., 1963), p. 162.

prohibitive. Varying the number of responses tabulated to determine the most efficient number is subject to empirical verification and could well be a subject for further study.

CRS dimension variance might have been a factor contributing to the lack of significant relationships found. But the Content: Follow and the Referrent: Client dimensions compared favorably with DeRoo's findings. (See Table 5.7.) The Control: Expansive dimension did not, however. And although the Reinforcing dimension was not used by DeRoo, the very low standard deviation and the fact that very few of the counselor-trainees used reinforcing responses indicated its inappropriateness as a usable dimension for beginning counselor-trainees. Without variance in the dependent variable, few significant relationships should have been expected.

It is possible, of course, that other behavioral dimensions are more crucially related to counselor-trainee generalized meaning for clients. Also, it might be quite possible that more than one client interview tape per counselor-trainee was needed to demonstrate an existing relationship. Additional behavioral dimensions and the use of more than one client interview tape per counselor-trainee are both subject to empirical study.

TABLE 5.7--Counselor Response System dimension means and standard deviations for the experimental, the replicating, and the DeRoo groups.

Council on Degrange	Group	Ι.	Group	ΙΙ	DeRoo Group		
Counselor Response System	Mean	SD	Mean	SD	Mean	SD	
Content: Follow	11.67	3.87	11.27	3.89	16.10	4.14	
Control: Expansive	3.71	2.16	3.96	1.78	7.52	4.58	
Referrent: Client	13.08	4.02	12.54	4.12	13.21	3.63	
Reinforcing	1.08	0.83	0.58	0.76	*	*	

^{*}DeRoo did not use this dimension.

SUMMARY

Table 5.8 which follows contains a summary of the validity hypotheses including the statistics used and the results found.

Table 5.8--Summary of results of validity hypotheses tested.

Hypothesis Results A positive relationship will The null hypothesis $H_{4,1}$: be found between counselorwas not rejected using the ranktrainee total evaluative scores on the PPT ("1-7" difference method. procedure) and the frequency of Content: Follow responses recorded on the CRS. A positive relationship will The null hypothesis H_{A} 2: be found between counselorwas not rejected trainee total evaluative using the rankscores on the PPT ("1-7" difference method. procedure) and the frequency of Control: Expansive responses recorded on the CRS. A positive relationship will The null hypothesis H_{4.3}: be found between counselorwas not rejected trainee total evaluative using the rankscores on the PPT ("1-7". difference method. procedure and the frequency of Referrent: Client responses recorded on the CRS. A positive relationship will The null hypothesis H_{4.4}: be found between counselorwas not rejected trainee total evaluative using the rankscores on the PPT ("1-7" difference method. procedure) and the frequency of reinforcing responses recorded on the CRS. A positive relationship will The null hypothesis H_{5.1}: be found between counselorwas not rejected trainee interrelated PPT using multiple total factor scores ("1-7" correlation (R). procedure) and the frequency of Content: Follow responses

recorded on the CRS.

TABLE 5.8--(continued)

H_{5.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{5.3}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{5.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{6.1}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Content: Follow responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{6.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{6.3} A positive relationship will be found between counselortrainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Referent: Client responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

TABLE 5.8--(continued)

H_{6.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Reinforcing responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.1}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Content: Follow responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.2}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.3}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Referrent: Client responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.4}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Reinforcing responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

CHAPTER VI

SUMMARY AND CONCLUSIONS

In this chapter the study is summarized, conclusions are drawn, and a suggested future research procedure for the further development of the Person Perception Test is outlined.

SUMMARY

This study was a direct outgrowth of Rank's investigation of the relationship between "counselor perception" and "counselor effectiveness." Rank used a set of filmed counseling segments as stimulus material and an objective means for tabulating counselor-trainee perceptions and compared the tabulations with staff rankings of "counselor effectiveness."

The purpose of this investigation was to develop an instrument for measuring counselor-trainee perceptions of filmed client-percepts and to study the relationship between counselor-trainees' perceptions of the filmed client-percepts (the generalized "meaning" counselor-

¹R. C. Rank, "The Assessment of Counselor-Trainee Perceptions of Interview Protocols Before and After an Intensive Practicum Experience" (unpublished Doctoral thesis, University of Minnesota, Minneapolis, 1964).

trainees have for clients) and these counselor-trainees' subsequent counseling interview behavior with particular clients by: (1) creating a set of filmed counseling segments, (2) developing an objective means for tabulating counselor-trainee perceptions of filmed client-percepts using a semantic differential format, (3) taping samples of counselor-trainee interview behavior, and (4) comparing statistically counselor-trainee perceptions of the filmed client-percepts with selected interview behavior.

It was hypothesized that there exists a significant relationship between the generalized "meaning" a counselor-trainee has for filmed client-percepts and subsequent selected counseling interview behavior he displays with a particular client. "Generalized meaning" was defined as semantic differential judgments summed by factor across client-percepts.

The subjects in this study were thirty graduate students enrolled in the 1965-66 academic year guidance and counseling institute at Michigan State University (Group I) and thirty graduate students enrolled in the 1966 summer practicum at Michigan State University (Group II). For all analyses of the data Group I was considered the experimental group and Group II the replicating group.

The Person Perception Test (PPT), developed specifically for this study, was used as the independent variable. The PPT consisted of five filmed counseling

segments judged on a thirty scale graphic semantic differential. Factor analysis of the thirty scales revealed four judgmental dimensions: (1) evaluative, (2) emotional, (3) potency, and (4) evaluative-activity. Each scale was assigned a factor and the scale positions were numbered 1 through 7.

Three scoring procedures were used to tabulate PPT data: (1) checked scale position numbers were summed by factor ("1-7" procedure), (2) frequency of responses in various scale positions were summed by factor (f procedure), and (3) variance scores were computed using the five client-percept factor scores as the basic data.

Test-retest reliability estimates ranging from .55 to .80 were computed by product-moment (\underline{r}) . Item test-retest reliability was also computed by product-moment (\underline{r}) . Average absolute deviations of less than one scale unit for each of the four factors were found.

The Counselor Response System (CRS) was used as the dependent variable. Three judges, working independently and from interview tapes, rated the counselor-trainees' responses along the following dichotomous dimensions (interjudge reliability estimates in parentheses): (1) Content: Follow-Shift (.95), (2) Control: Expansive-Restrictive (.92), (3) Referrent: Client-Other (.73), and (4) Reinforcing-Nonreinforcing (.94).

PPT and CRS data were collected from both Group I and Group II subjects. Raw data were transferred to computer cards and submitted to the computer for factor analysis, scoring, and reliability and validity estimates.

Hypotheses tested for this study were grouped under two headings: (1) Person Perception Test hypotheses and (2) validity hypotheses. The first set of hypotheses tested the internal consistency of factor items with total factor scores and with client-percept factor scores; the differences among client-percept factor scores; and the theoretical notion of the perceiver's "generalized meaning." The second set of hypotheses tested the validity of the PPT by analyzing its relationships with the CRS dimensions. Specifically, they tested the relationship between PPT scores and approach-avoidance behavior, scale-checking style, and the degree of stereotopy and rigidity.

Seven sets of hypotheses were tested. The results are summarized as follows:

H_{1.1}: A positive relationship will be found between:

- a. Evaluative factor items and the total evaluative factor score ("1-7" procedure)
- b. Evaluative factor items and client-percept factor scores ("1-7" procedure).

A positive relationship was found and confirmed for 24 of 50 items using the product-moment (\underline{r}) .

A positive relationship was found and confirmed for 48 of 50 items using the product-moment (\underline{r}) .

H_{1.2}: A positive relationship will be found between:

- a. Emotional factor items and the total emotional factor score ("1-7" procedure)
- b. Emotional factor
 items and client percept factor
 scores ("1-7"
 procedure).

H_{1.3}: A positive relationship will be found between:

- a. Potency factor items and the total potency factor score ("1-7" procedure)
- b. Potency factor items
 and client-percept
 factor scores ("1-7"
 procedure).
- H_{1.4}: A positive relationship will be found between:
 - a. Evaluative-activity factor items and the total evaluative-activity factor score ("1-7" procedure)
 - b. Evaluative-activity factor items and client-percept factor scores ("1-7" procedure).
- H_{2.1}: A significant difference will be found among the five client-percepts when evaluative scores ("1-7" procedure) are used as the criterion.

A positive relationship was found and confirmed for 16 of 30 items using the product-moment (\underline{r}) .

A positive relationship was found and confirmed for 26 of 30 items using the product-moment (<u>r</u>).

A positive relationship was found and confirmed for none of the 20 items using the product-moment (r).

A positive relationship was found and confirmed for 17 of 20 items using the product-moment (r).

A positive relationship was found and confirmed for 9 of 45 items using the product-moment (\underline{r}) .

A positive relationship was found and confirmed for 41 of 45 items using the product-moment (\underline{r}) .

A difference was found among the client-percepts at .01 by analysis of variance. Differences were found between 4 of 10 client-percept comparisons by <u>t</u> test.

H_{2.2}: A significant difference will be found among the five client-percepts when emotional scores ("1-7" procedure) are used as the criterion.

H_{2.3}: A significant difference will be found among the five client-percepts when potency scores ("1-7" procedure) are used as the criterion.

H_{2.4}: A significant difference will be found among the five client-percepts when evaluative-activity scores ("1-7" procedure) are used as the criterion.

H_{3.1}: A positive relationship will be found:

a. When each clientpercept evaluative
factor score is
compared with every
other clientpercept evaluative
factor score
("1-7" procedure)

b. When each client percept evaluative factor score is compared with the total evaluative score ("1-7" procedure).

A difference was found among the client-percepts at .01 by analysis of variance.
Differences were found between 8 of 10 client-percept comparisons by t test.

A difference was found among the client-percepts at .01 by analysis of variance.
Differences were found between 7 of 10 client-percept comparisons by t test.

A difference was found among the client-percepts at .01 by analysis of variance. Differences were found between 8 of 10 client-percept comparisons by t test.

None of the ten clientpercept comparisons were found significant by rankdifference method. 9 of 10 relationships were in the predicted direction.

A positive relationship was found and confirmed in 5 of 5 comparisons by rank-difference method.

H_{3.2}: A positive relationship will be found:

a. When each clientpercept emotional
factor score is
compared with every
other clientpercept emotional
factor score
("1-7" procedure)

None of the ten clientpercept comparisons were found significant by rankdifference method. 8 of 10 relationships were in the predicted direction.

b. When each clientpercept emotional
factor score is
compared with the
total emotional
score ("1-7"
procedure).

A positive relationship was found and confirmed in 5 of 5 comparisons by rank-difference method.

H_{3.3}: A positive relationship will be found:

a. When each clientpercept potency factor
score is compared with
every other clientpercept potency factor
score ("1-7
procedure)

None of the ten clientpercept comparisons were found significant by rankdifference method. 2 of 10 relationships were in the predicted direction.

b. When each clientpercept potency factor score is compared with the total potency score ("1-7" procedure).

A positive relationship was found and confirmed in 3 of 5 comparisons by rank-difference method.

H_{3.4}: A positive relationship will be found:

a. When each clientpercept evaluativeactivity factor score
is compared with
every other clientpercept evaluativeactivity factor score
("1-7" procedure)

1 of 10 client-percept comparisons was found to be significant by rank-difference method.
2 of 10 relationships were in the predicted direction.

When each clientb. percept evaluative activity factor score is compared with the total evaluativeactivity score ("1-7" procedure).

A positive relationship was found and confirmed in 4 of 5 comparisons by rank-difference method.

A positive relationship will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.

The null hypothesis was not rejected using the rank-difference method.

A positive relationship H_{4.2}: will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using the rank-difference method.

A positive relationship $H_{4.3}$: will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.

The null hypothesis was not rejected using the rank-difference method.

A positive relationship H_{4,4}: will be found between counselor-trainee total evaluative scores on the PPT ("1-7" procedure) and the frequency of Reinforc ing responses recorded on the CRS.

The null hypothesis was not rejected using the rank-difference method.

A positive relationship H_{5.1}: will be found between coun- was not rejected using selor-trainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Content: Follow responses recorded on the CRS.

The null hypothesis multiple correlation (R). H_{5.2}: A positive relationship will be found between counselortrainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{5.3}: A positive relationship will be found between counselortrainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Referrent: Client responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{5.4}: A positive relationship will be found between counselortrainee interrelated PPT total factor scores ("1-7" procedure) and the frequency of Reinforcing responses recorded on the CRS. The null hypothesis was not rejected using multiple correlation (R).

H_{6.1}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Content: Follow responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{6.2}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{6.3}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Referrent: Client responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{6.4}: A positive relationship will be found between counselor-trainee interrelated PPT total factor scores (f₂₃₅₆ procedure) and the frequency of Reinforcing responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.1}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Content: Follow responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7,2}: A positive relationship will be found between counselor-trainee interrelated PPT variance scores and the frequency of Control: Expansive responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.3}: A positive relationship will be found between counselortrainee interrelated PPT variance scores and the frequency of Referrent: Client responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

H_{7.4}: A positive relationship will be found between counselortrainee interrelated PPT variance scores and the frequency of Reinforcing responses recorded on the CRS.

The null hypothesis was not rejected using multiple correlation (R).

Several exploratory analyses of the data were made but no consistent relationships were found.

CONCLUSIONS

The first three conclusions are based upon information obtained during the development of the Person Perception Test as described in Chapter III:

- Counselor-trainees judge clients along several dimensions with an evaluative dimension being the most dominant, followed by emotional and potency dimensions.
- 2. Counselor-trainees value more highly those clients who are most active as evidenced by the dependence of the activity factor on the evaluative factor for Group I and by its coalescence with the evaluative factor for Group II.
- 3. The PPT is an objective means for tabulating counselor-trainee perceptions of filmed clientpercepts as evidenced by the ease with which various scoring procedures can be applied.

The PPT data indicate that item judgments made by the counselor-trainees were internally consistent when client-percept factor scores were the criterion but had limited internal consistency when total factor score was the criterion. Test homogeneity was also attested to by the consistently significant relationships found between client-percept factor scores and total factor scores. Naive psychology suggests a striking parallel between PPT scores and possible referrents in the "real world." If an item is considered a particular judgment made by a perceiver of a person percept, if a client-percept factor score is considered the total judgment along a particular dimension made by a perceiver of a person percept, and if the total

factor score is considered the judgments made by the perceiver of person percepts in general, then several conclusions about the data may be expressed which seem to fit everyday experience:

- 4. The PPT total factor scores represent counselortrainees' generalized meaning for the clientpercepts as evidenced by the positive relationships found between client-percept factor scores and total factor scores.
- 5. If a perceiver's comparative particular judgment of a person percept were known, the perceiver's total judgment of the person percept could be predicted. But his comparative total judgment of people in general could not.
- 6. If a perceiver's comparative total judgment of a person percept were known, the perceiver's comparative total judgment of person percepts in general could be predicted. But his comparative total judgment of another person percept could not.

The data collected for this study did not support the validity hypotheses and, therefore, did not support the predicted relationship between counselor-trainees' generalized meaning for filmed client-percepts and their subsequent interview behavior with a specific client.

Therefore:

7. The PPT needs further refinement (before discarding it or the theory upon which it was based) in an attempt to bring out better possible relationships.

FUTURE PPT RESEARCH: A SUGGESTED PROCEDURE

The focus of this study was on the development of the Person Perception Test. The primary conclusions suggest that the PPT, in its present state of development, has promise as an instrument for measuring counselor-trainee perception. However, the PPT needs refinement as a predictor of counselor-trainee interview behavior. The following list represents a suggested procedure for continuing research with the PPT:

1. The least expensive and most practical next step in the development of the PPT would be to concentrate on its reliability. Obviously, before any test can be valid it must be reliable. The primary purpose of such studies would be to stabilize the factors, particularly the potency and evaluative-activity factors. What the PPT measures, at this point, would not be a concern. The investigator would have to experiment with many different scales in an attempt to obtain a clear definition of the factors present by administering the PPT to many counselor-trainee groups to determine which scales consistently loaded high on which particular factor. And while experimenting with new scales, the investigator would determine which scales "hold up" best from test to test. Once a consistent instrument is developed, one that clearly defines all factors present, the question of validity can be tackled.

- 2. The criteria used in this study was the frequency of certain counselor-trainee responses, as recorded on the Counselor Response System. With a more consistent PPT it seems reasonable to suggest replication of this study with a special focus on increasing CRS dimension variance (perhaps by using coached clients or even actors) and with a prime concern with the relationship's possible non-linear function. If the relationships are no better than were reported in this study, then it might be well to count more counselor responses or even to use complete interview tapes; or counselor-trainee responses to several clients might be indicated; or additional counselor response dimensions might be explored.
- 3. If a relationship between the PPT and some counselor-trainee interview behavior can be shown to exist, then it would seem profitable to explore the predictive validity of the PPT with

- the goal of someday using the instrument as one tool for selecting counselor-trainees.
- 4. Although expensive, different filmed clientpercepts might be tried. Perhaps, more extreme
 personality types might yield a more complete
 saturation of the semantic space.
- 5. When the PPT has been refined enough to predict counselor-trainee behavior, a series of causal-comparative studies comparing counselor-trainees with other graduate students, with their clients, and with their supervisors would be in order.

In closing, a goal of this thesis was to study the relationship between person perception and behavior in the context of the counseling activity. The validity results were disappointing, and indicated that the independent variable needs more study and the dependent variable needs more variance. But the results did indicate that counselor-trainees judged clients along several dimensions, and if these dimensions can be made more stable, perhaps the PPT can yet demonstrate a relationship between person perception and behavior.

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APPENDICES

APPENDIX A

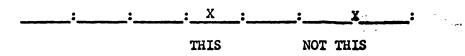
PERSON PERCEPTION TEST

PERSON PERCEPTION TEST

This test attempts to measure (1) how you assess people, and (2) how people make you feel. You will see filmed segments of counseling sessions after which you can rate what you saw. Please answer on the basis of what the client on the screen has communicated to you about himself, and on the basis of how this made you feel. On each page of this test you will find the name of the client to be rated and beneath it two sets of scales. You are to rate the client on the first set and your feelings in the second set.

you will find the of scales. You in the second se	e name	of the	client	to be ra	ated an	d benea	th it to	o sets
Here is how you	are to	use the	se scal	es:				
If you feel that you should place						to one	end of	the scale,
honest X								
honest	_ .	.:	-: <u></u>	.:	.:	<u> </u>	_: disho	nest
If you feel that end of the scale follows:								
strong	_:X						_	
strong	-:	.:	: <u>OR</u>	.;	:_X_	.;	_: weak	· · · · · · · · · · · · · · · · · · ·
If the client secother side (but i								
active								
active	_:	.:	<u>OR</u>	:_X_	·!	.:	_: pass	ive
The direction to scale seem most o								f the
If you consider to scale equally assummed to the space:	sociated	with t	he clie	nt, or	if the	scale :	is compl	<u>etely</u>
safe:		;-	<u>x</u> :		;	;	danger	ous \

IMPORTANT: (1) Place your check-marks in the middle of spaces, not on the boundaries:



- (2) Be sure you check every scale for every client -- do not omit any.
- (3) Never put more than one check-mark on a single scale.

Make each item a separate and independent judgment. Work rapidly through this test. Do not worry or puzzle over individual items. The best answer is your impression, the immediate "feeling" about the items. On the other hand, please do not be careless.

This study consists of five counseling segments. After viewing segment #1, turn the page and make your judgments of client #1.

Client #1: Peggy

A. Please make your judgments on the basis of what this client has communicated to you about herself.

The client is:

c losed		:	::	·	 :	_:open
transparent	:	:			 :	:opaque
near	:				:	:far
tired	:				:	:energetic
ac tive_		::			 :	:passive
fast	:	::	:		 :	:slow
yielding	•	::			 ·	:tenacious
defensive	•	::	:		 :	:agressi ve
ex cited		::				:relaxed
static	:	:				:dynamic
upset	_:	·:	:	:		:calm
unhappy	:	::	:	:		:happy
complex	:	===:	:	:		:simple
strong	::	::	:	:		:weak -
embarrassed	:	::	:	:		:smug —
controlled	:	::	:	:		:uncontrolled
hopeful	::	===:	:	:		:fearful
feminine	:	===:	:	:		:masculine
constrained	:	::	:	:		:free
honest	:	::				:dishonest -
profound		:	:	:		:superficial-

B. Please make your judgments on the basis of how you feel toward the client.

I feel:

supportive	::	·	.		·	}	:angry
perplexed	:						understanding:
di sagreeing	:		-	:	:		:agreeing
approving	::					3	:disapproving
s urprised	: :			:	:		:bored
unhurried	::						:harrassed
mild	::						:intense
patient							:impatient
satisfied							:dissatisfied

After viewing the next film segment, turn the page and make your judgments of the next client.

Client #2: Bill

A. Please make your judgments on the basis of what this client has communicated to you about herself.

The client is:

closed		:	;	:	:	;	: open
transparent		:	;	;	:		: opaque
near	:	:	;	:	:	:	: far
tired	:	;			;	;	i onorgatic.
active	:		:	:	:		: Passive
fast	:			:	:	:	: slow
yielding	:	:	:	:	:	:	: tenacious
defensive	:	:	:	;	:		: agreșsi ve
excited	:	:	:	:	<u> </u>	:	: relaxed.
static	:	:	:	:	:	`_:	: dynamic
upset	:	:		:	:		: calm
unhappy	:		:	:	_:		: happy
complex	:	;		:	;		: simple
strong		:	:	:	_:_	:	: weak
embarrassed		:	:_	:	:		: smug
controlled	:	:	:	:	:	:	: uncontrolled
hopeful	:	:	:	:		:	: fearful
feminine	:						masculine
constrained	:	:					: free
honest	;	:		:			: dishonest
profound					_;		: superficial

B. Please make your judgmentsoon the basis of how you feel toward the client.

I feel:

supportive	:	:	:	:	:	:	: angry
perplexed	:	;	:	:	_:		understanding
disagreeing	:	;	;	:			agreeing
approving	:	:	:	:	:	:	disapproving
surprised	;	:	:	:	:	_:	bored
unhurried	;	:	:	;	:	_:	harrassed
mild	:	:	:	:		:	intense
patient	:	:	:	:	;	:	impatient,
satisfied			:		:	_:;	dissatisfied

After viewing the next film segment, turn the page and make your judgments of the next client.

Client #3

A. Please make your judgments on the basis of what this client has communicated to you about herself.

The client is:

closed transparent near tired active fast yielding defensive excited static upset unhappy complex strong embarrassed controlled hopeful feminine constrained					open opaque far energetic passive slow tenacious agressive relaxed dynamic calm happy simple weak smug uncontrolled fearful masculine free
	<u>:</u>	<u>. </u>	 	 :	\
honest	<u>'</u>	•	 	 `	dishonest
profound	·	•			superficial

B. Please make your judgments on the basis of how you feel toward the client.

I feel:

	.:				·	·	angry	
perplexed	.;	•	:	·			: understandin	ıg
disagreeing	_:	:	:	:		·	: agreeing	
approving	-:	:	•	•			: disapproving	ś
surprised						·	: bored	
unhurried		:	:			:	: harrassed	
mild	·	:					: intense	
patient	_ :	•					: impatient	
satisfied	:	:	:				: dissatisfied	:
					$\overline{}$,	

After viewing the next film segment, turn the page and make your judgments of the next client.

Client #4: Lynn

A. Please make your judgments on the basis of what this client has communicated to you about herself.

The client is:

							· \
closed	:	:	:	:	:	_:	_:open
transparent	:	:	:	:	:	_:	_:opaque
near	:	:	:	:	:	_:	_:far
tired	:	:	:	:	:	_;	_:energetic
active	;	:	:	:	:	_:	_:passive
fast	:	:	:	;	:	_:	_:slow
yielding	:	:	:	:	: *	_:	_:tenacious
defensive	 :	:	:	;	:	_:`	_:agressi ve :
excited	:	:	:	:	:	-:	_:relaxed
static	:	:	:	:	:	_:	_:dynami¢
upset	:	:	:	:	:	_:	_:calm
unhappy	:	:	:	:	:	_:	_:happy
complex	:	:	:	:	:	_;	_:simple
strong	:	:	:	:	:	_:	:weak
embarrassed	:	:	:	:	:	:	_:smug
controlled	:	:	:	:	:	_:	:uncontrolled
hopeful	:	:	:	:	:	:	_:fearful
feminine	:	:	:	:	:	_;	:masculine
constrained	<u> </u>	:	:	:	:	_ :	_:free
honest	:	:	;	:	:		_:dishonest
profound	:	:		:	:	_:	_:superficial
•							- ;

B. Please make your judgments on the basis of how you feel toward the client.

I feel:

supportive_	::	:	:	·	:	angry
perplexed	:	:	:		:	:understanding
disagreeing	·	:	:		:	:agreeing
approving	·	:	:		:	:disapproving
surprised	:	:	::		:	:bored
unhurried_	·:	:	:		:	 :harrassed
mild	·	:	:		:	:intense
patient_	·:	:	:		:	:impatient
satisfied_	·:	:	:		·	 :dissatisfied

After viewing the next film segment, turn the page and make your judgments of the next client.

Client #5: Terry

A. Please make your judgments on the basis of what this client has communicated to you about herself.

The client is:							
c losed	_:	••	•	•	·;	:	open
transparent	_;		:	:	:;.	:	opaque
near	: 1		:	:	:;		far
tired	-;	:	:	•	:;		energetic
active	_;		:	·	:;.	:	passive
fast	_:	.:	:	·	:;	:	wola
yielding	_:		•	:	::.		tenacious
defensive	_;	-:	·	•	:;		agressi ve
excited		·	:	:			relaxed
static		:	:	•			dynamic
upset	_:	:	:	:	·	-	calm
unhappy	_:	:	:	:	::	:	happy
complex	_;	;		:		:	simple
strong	_;	:	:	:		_	weak
embarrassed	_;		:	:		:	smug
controlled	-		:	:	::		uncontrolled
hopeful	_;		:	:		:	fearful
feminine	-:	:		:	::	:	masculine
constrained	_;			•		:	free
honest	_:	:	:	:		:	dishonest
profound	_;	;	·	•			superficial

B. Please make your judgments on the basis of how you feel toward the client,

I feel:

supportive perplexed disagreeing	 	 	 	angry understanding agreeing
approvingsurprised	 	 		disapproving bored
unhurried mild				harrassed intense
patient satisfied			 	impatient dissatisfied

After viewing the next film segment, turn the page and make your judgments of the next client.

APPENDIX B

PERSON PERCEPTION TEST: RAW SCORES

TABLE B.1--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedure for Group I by subject: Evaluative factor.

Ch .: 4				Client	-Percep	ts	
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance
1	63	61	26	44	44	238	181.8
2	52	43	58	57	47	257	33.0
3	36	67	48	28	45	224	172.6
2 3 4 5 6	47	61	57	31	61	257	130.2
5	57	57	56	48	48	266	18.2
6	69	70	68	47	41	295	154.0
7	46	44	44	41	50	225	8.8
8	61	38	60	60	64	283	88.6
9	46	53	57	43	49	248	24.6
10	54	44	58	36	46	238	59.8
11	60	5 2	24	51	61	248	180.2
12	64	42	56	54	43	259	69.0
14	47	55	60	26	28	216	192.6
15	57	55	56	45	51	264	19.4
16	51	44	40	37	33	205	38.0
17	53	58	55	46	54	266	15.8
18	56	52	52	33	39	232	77.8
19	44	39	45	36	47	211	16.6
20	60	51	38	24	15	188	275.4
21	47	57	42	33	37	216	69.8
22	5 4	47	40	28	40	209	74.6
23	58	52	63	47	54	274	29.4
24	54	48	52	4 2	45	241	19.4
25	43	41	25	23	45	177	88.6
26	65	64	68	67	67	331	2.2
27	54	49	57	18	32	210	218.8
28	47	28	30	36	48	189	69.8
29	54	47	68	27	36	232	201.8
30	67	38	69	59	69	302	138.0
Mean	54.0	50.2	50.8	40.2	46.2	241.4	92.1

TABLE B.2--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedure for Group II by subject: Evaluative factor.

C 1 : 4		Client-Percepts										
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance					
1	51	62	4 7	21	48	229	182.2					
2	60	59	67	39	28	253	214.6					
3	47	45	42	29	32	195	51.6					
4	54	65	65	34	33	251	202.2					
5	45	51	57	27	4 5	225	100.8					
6	60	50	55	23	29	217	215.4					
7	59	63	41	31	33	227	175.0					
8	63	63	67	38	33	264	204.2					
9	5 7	40	41	28	30	196	106.2					
10	67	68	67	40	4 5	287	150.6					
11	51	5 2	35	24	40	202	109.0					
12	64	38	61	20	50	233	260.6					
13	60	56	62	27	30	235	232.8					
14	46	48	61	19	31	205	211.6					
15	4 5	67	60	24	25	221	309.4					
16	5 2	54	54	32	31	223	115.0					
17	59	66	53	43	36	257	116.2					
18	44	59	4 5	26	35	209	121.4					
19	5 5	5 7	54	35	31	232	122.2					
20	48	5 7	60	35	47	247	77.0					
21	5 5	47	47	27	23	199	156.2					
22	55	59	53	34	42	243	85.0					
23	52	53	51	28	49	233	88.2					
24	5 5	65	64	33	38	255	174.8					
25	48	51	58	22	53	232	159.4					
26	48	35	40	30	19	172	94.6					
27	41	51	4 5	40	40	217	17.8					
28	54	53	70	20	20	217	401.4					
29	47	51	56	40	43	237	32.2					
30	60	54	63	25	47	249	183.8					
Mean	53.4	54.6	54.7	29.8	36.2	228.7	155.7					

TABLE B-3--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" socring procedure for Group I by subject: Emotional factor.

Cubicat				Client	-Percep	ts	
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance
1	30	31	31	22	29	143	11.4
2	15	25	35	29	21	125	46.4
3	12	22	27	20	21	102	23.4
4	14	23	36	22	30	125	56.0
5	22	28	34	26	24	134	17.0
6	18	31	32	24	28	133	26.2
7	11	22	30	23	23	109	37.4
8	16	25	32	28	27	128	28.2
9	15	31	23	28	28	125	31.6
10	17	30	28	23	24	122	20.2
11	10	21	27	15	33	106	67.4
12	22	15	28	37	26	128	52.2
14	26	24	33	15	20	118	36.2
15	12	27	27	20	19	105	31.6
16	18	22	26	22	27	115	10.4
17	21	30	33	20	32	136	31.0
18	17	26	30	24	21	118	19.4
19	19	24	29	25	21	118	11.8
20	21	24	21	19	17	102	5.4
21	18	27	22	23	26	116	10.2
22	19	30	30	21	21	121	23.0
23	15	19	33	19	25	121	42.6
24	18	33	28	28	36	143	37.4
25	19	26	27	25	30	127	13.0
26	12	27	38	23	30	130	73.2
27	17	32	33	24	20	126	40.6
28	12	16	20	13	20	81	11.4
29	21	19	31	28	29	128	22.2
30	23	26	39	20	39	147	65.0
Mean	17.6	25.7	29.8	23.0	25.8	121.8	31.1

TABLE B.4--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedure for Group II by subject: Emotional factor.

Cubicat	Client-Percepts								
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance		
1	12	36	20	27	23	118	62.6		
2	27	32	37	16	30	142	49.0		
3	20	28	28	31	34	141	21.8		
4	15	32	37	26	25	135	54.8		
5	11	32	31	20	36	130	84.4		
6	19	28	35	32	35	149	35.8		
7	20	22	25	23	20	110	3.6		
8	29	35	39	23	25	151	36.2		
9	23	24	27	10	26	110	38.0		
10	18	26	31	25	19	119	23.0		
11	22	24	25	29	23	123	5.8		
12	17	23	30	30	25	125	23.6		
13	21	25	22	25	15	108	13.4		
14	17	22	35	33	30	137	46.6		
15	8	37	35	10	23	113	146.6		
16	13	25	31	24	18	111	38.2		
17	19	29	34	28	28	138	23.4		
18	26	30	34	23	23	136	18.2		
19	21	33	38	20	36	148	57.8		
20	20	33	36	31	28	148	29.8		
21	18	22	28	30	31	129	25.0		
22	30	37	36	26	34	163	16.6		
23	20	33	34	24	22	133	33.4		
24	22	39	38	27	21	147	59 .4		
25	22	27	31	16	16	112	35.4		
26	19	29	34	23	24	129	27.0		
27	17	23	26	19	25	110	12.0		
28	12	18	38	14	17	99	87.4		
29	17	28	33	22	23	123	29.8		
30	19	32	33	12	26	122	63.4		
Mean	19.1	28.8	32.0	23.3	25.4	128.6	40.1		

TABLE B.5--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedure for Group I by subject: Potency factor.

Cubicot				Client	-Percep	ts	
Subject 	Peggy	Bill	Bob	Lynn	Terry	Total	Variance
1	22	21	25	16	15	99	14.2
2 3 4 5	18	10	21	20	18	87	15.0
3	20	16	20	24	18	98	7.0
4	17	20	20	18	18	93	1.4
5	15	16	20	18	14	83	4,6
6	17	15	18	19	19	88	2.2
7	18	15	18	20	17	88	2.6
8	15	14	21	18	15	83	6.6
9	14	16	22	19	23	94	11.8
10	20	17	22	20	16	95	4.8
11	15	17	24	23	15	94	15.4
12	16	16	17	26	17	92	14.6
14	18	10	22	17	14	82	15.4
15	19	16	17	20	20	92	2.6
16	14	17	18	21	23	93	9.8
17	17	17	17	18	19	88	0.6
18	20	13	19	15	16	83	6.6
19	15	11	16	18	16	76	5.4
20	15	16	17	20	19	87	3.4
21	20	15	16	16	16	83	3.0
22	14	11	16	18	19	78	8.2
23	20	16	22	20	20	98	3.8
24	16	18	20	21	19	94	3.0
25	12	16	13	20	18	79	9.0
26	19	18	20	18	16	91	1.8
27	13	12	22	23	16	8 7	20.6
28	14	20	17	19	14	84	6.2
30	18	16	23	22	21	100	6.8
lean	16.8	15.5	19.4	19.6	17.6	88.8	7.4

TABLE B.6--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedure for Group II by subject: Potency factor.

Cubicat	Client-Percepts									
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance			
1	17	18	21	27	12	9 5	24.4			
2	22	17	22	16	18	95	6,4			
3	15	11	13	18	20	77	10.6			
2 3 4 5 6 7	21	20	21	16	15	93	6.6			
5	14	15	14	21	18	8 2	7.4			
6	21	14	22	19	20	96	7.8			
7	18	17	16	14	15	80	2.0			
8	19	20	22	12	15	88	13.0			
9	20	19	20	24	17	100	5.2			
10	18	15	21	18	16	88	4,2			
11	14	13	17	26	20	90	22.0			
12	23	13	21	10	23	90	29.6			
13	21	14	22	15	14	86	12.6			
14	16	16	22	25	21	100	12.4			
15	9	15	16	20	20	80	16.4			
16	21	17	19	18	16	91	3.0			
17	13	12	22	14	17	78	13.0			
18	18	15	19	20	16	88	3.4			
19	20	16	21	20	14	91	7.4			
20	16	15	17	18	13	79	3.0			
21	14	13	17	23	17	84	12.2			
22	17	17	13	19	18	84	4.2			
23	12	14	21	22	16	85	15.2			
24	17	16	23	16	19	91	7.0			
25	22	24	23	25	25	119	1.4			
26	16	12	16	23	22	89	17.0			
27	15	14	16	16	17	78	1.0			
28	13	8	19	18	17	75	16.4			
29	18	15	18	19	17	87	1.8			
30	22	14	23	10	27	96	39.0			
lean	17.4	15.3	19.2	18.7	17.8	88.5	10.9			

TABLE B.7--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedure for Group I by subject: Evaluative-activity factor.

Coole in a f		Client-Percepts									
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance				
1	55	23	51	37	42	208	127.0				
2	49	27	48	46	37	207	69.8				
3	38	43	39	25	35	180	36.8				
4	54	28	4 7	27	5 4	210	146.8				
5	41	44	50	19	34	188	113.0				
6	54	48	52	30	30	214	113.0				
7	38	25	40	29	37	169	33.4				
8	48	27	57	28	37	197	134.6				
9	4 5	36	50	23	32	186	91.0				
10	51	27	50	26	44	198	120.2				
11	37	31	40	34	4 5	187	23.4				
12	53	21	37	13	35	159	191.4				
14	33	22	45	14	12	126	152.6				
15	51	34	43	33	4 0	201	43.0				
16	42	32	35	24	30	163	35,0				
17	40	33	44	35	44	196	20.6				
18	52	27	41	25	28	173	107.4				
19	49	29	39	26	33	176	66.6				
20	51	29	33	16	30	159	126.2				
21	43	44	37	27	29	180	48.8				
22	44	25	32	17	19	137	96.2				
23	54	37	42	29	4 5	207	69.0				
24	41	34	4 5	29	36	185	30.8				
25	39	26	26	30	45	166	57.4				
26	60	38	51	45	52	246	54.2				
27	48	28	4 5	18	28	167	128.6				
28	44	19	29	29	39	160	76.0				
29	47	30	47	28	37	189	65.4				
30	58	21	59	38	48	224	199.8				
Mean	46.9	30.6	43.2	27.6	36.4	184.8	88.9				

TABLE B.8--Raw scores for the Person Perception Test by client-percept, total, and variance, using the "1-7" scoring procedures for Group II by subject: Evaluative-activity factor.

Cubicat				Clie	nt-Perc	epts	
Subject	Peggy	Bill	Bob	Lynn	Terry	Total	Variance
1	40	47	40	31	30	188	40.2
2	54	39	58	18	15	184	315.8
3	49	27	31	28	30	165	66.0
4	47	46	50	18	19	180	206.0
5	53	26	28	34	3 7	178	91.4
6	55	36	51	15	23	180	239.2
7	41	30	41	24	22	158	65.8
8	55	50	62	19	19	205	337.2
9	57	20	26	15	18	136	235.0
10	47	42	45	26	32	192	65.0
11	50	34	28	13	31	156	140.6
12	53	26	47	27	47	200	126.4
13	59	28	45	21	24	177	208.2
14	50	25	43	14	32	164	163.0
15	28	56	50	10	23	167	294.2
16	45	33	41	23	36	178	56.6
17	55	35	40	23	14	167	199.4
18	48	41	51	30	33	203	66.6
19	52	32	39	25	30	178	87.4
20	5 5	29	4 2	27	38	191	101.4
21	45	24	24	21	15	129	103.0
22	35	44	44	33	38	194	20.6
23	39	36	4 2	18	34	169	69.8
24	43	42	54	25	38	202	87.4
25	52	34	44	18	37	185	128.8
26	47	29	36	25	24	161	72.6
27	44	35	26	25	24	154	59.0
28	43	22	55	19	16	155	234.0
29	50	38	43	18	21	170	155.6
30	52	26	40	20	41	179	130.6
Mean	48.1	34.4	42.2	22.1	28.0	174.8	138.9

TABLE B.9--Frequency scores for the Person Perception Test by client-percept and total for Group I: Evaluative factor.

Cubicat	Client-Percepts											
Subject	Peggy	Bill	Bob	Lynn	Terry	Total						
1	4-5-1	7 - 3 - 0	9-0-1	6 - 4 - 0	9-1-0	35-13- 2						
2	9-0-1	2 - 0 - 8	8 - 1 - 1	7 - 1 - 2	3 - 2 - 5	29- 4-17						
3	6 - 0 - 4	3 - 7 - 0	9-0-1	3 - 3 - 4	6 - 1 - 3	27-11-12						
4	7 - 2 - 1	8 - 2 - 0	8 - 2 - 0	6 - 3 - 1	9-1-0	38-10- 2						
5	3 - 4 - 3	3 - 4 - 3	7 - 1 - 2	1 - 4 - 5	1 - 2 - 7	15-15-20						
6	1 - 9 - 0	10-0-0	2 - 8 - 0	1 - 5 - 4	1 - 3 - 6	5-35-10						
7	8 - 0 - 2	9-0-1	9-0-1	7 - 0 - 3	9 - 0 - 1	42 - 0 - 8						
8	9-1-0	8-1-1	8 - 2 - 0	8 - 2 - 0	6 - 4 - 0	39-10- 1						
9	7 - 1 - 2	9 - 0 - 1	8-1-1	7 - 1 - 2	7 - 1 - 2	38 - 4 - 8						
10	9 - 0 - 1	6 - 0 - 4	10-0-0	7 - 0 - 3	6 - 0 - 4	38 - 0 - 12						
11	7 - 3 - 0	9-1-0	2 - 8 - 0	5 - 5 - 0	5 - 4 - 1	28-21- 1						
12	3 - 7 - 0	10-0-0	10-0-0	4 - 4 - 2	8 - 0 - 2	35-11- 4						
14	10-0-0	10-0-0	10-0-0	4 - 5 - 1	2 - 4 - 4	36-9-5						
15	10-0-0	10-0-0	8 - 0 - 2	8 - 0 - 2	6 - 2 - 2	42 - 2 - 6						
16	7 - 0 - 3	6 - 0 - 4	6 - 0 - 4	6 - 0 - 4	4 - 2 - 4	29 - 2 - 19						
17	10-0-0	8 - 2 - 0	10-0-0	6 - 0 - 4	8 - 0 - 2	42-2-6						
18	9-0-1	8 - 0 - 2	9-0-1	6 - 0 - 4	6 - 0 - 4	38- 0-12						
19	7 - 0 - 3	5 - 0 - 5	7 - 0 - 3	7 - 0 - 3	5 - 1 - 4	31- 1-18						
20	9-1-0	8 - 0 - 2	10-0-0	6 - 2 - 2	4 - 6 - 0	37 - 9 - 4						
21	5 - 2 - 3	3 - 5 - 2	5 - 0 - 5	5 - 1 - 4	4 - 1 - 5	22- 9-19						
22	8-1-1	8 - 0 - 2	10-0-0	8 - 2 - 0	6-1-3	40 - 4 - 6						
23	9-1-0	7 - 0 - 3	7 - 3 - 0	9 - 0 - 1	8 - 0 - 2	40 - 4 - 6						
24	3 - 3 - 4	5 - 2 - 3	3 - 3 - 4	3-1-6	1-1-8	15-10-25						
25	9-0-1	7 - 0 - 3	10-0-0	8-1-1	5 - 0 - 5	39- 1-10						
26	1 - 9 - 0	2 - 8 - 0	1 - 9 - 0	0-9-1	0 - 9 - 1	4 - 44 - 2						
27	10-0-0	10-0-0	9-0-1	6 - 4 - 0	10-0-0	45-4-1						
28	9-0-1	6-1-3	10-0-0	8 - 2 - 0	8 - 1 - 1	41 - 4 - 5						
29	8 - 2 - 0	6-1-3	2 - 8 - 0	5 - 3 - 2	5 - 0 - 5	26-14-10						
30	2 - 8 - 0	5 - 0 - 5	1-9-0	4 - 6 - 0	1 - 9 - 0	13-32- 5						

TABLE B.10--Frequency scores for the Person Perception Test by client-percept and total for Group II: Evaluative factor.

Ch i a a t		Client-Percepts										
Subject	Peggy	Bill	Bob	Lynn	Terry	Total						
1	10-0-0	7 - 3 - 0	10-0-0	5-3-2	6 - 0 - 4	38- 6- 6						
2	3-6-1	10-0-0	3 - 7 - 0	4 - 2 - 4	3 - 3 - 4	23-18- 9						
3	7 - 0 - 3	5 - 1 - 4	6 - 0 - 4	7 - 0 - 3	7 - 0 - 3	32- 1-17						
4	6 - 2 - 2	5 - 5 - 0	5 - 5 - 0	6 - 2 - 2	4 - 2 - 4	26-16- 8						
5	6-3-1	6 - 2 - 2	10-0-0	6-3-1	8 - 0 - 2	36-8-6						
6	6-3-1	9 - 0 - 1	9-1-0	4 - 4 - 2	7 - 1 - 2	35-9-6						
7	9-1-0	4 - 5 - 1	9 - 0 - 1	5 - 2 - 3	7 - 1 - 2	34 - 9 - 7						
8	4 - 5 - 1	6 - 4 - 0	3 - 7 - 0	6 - 2 - 2	7 - 2 - 1	26-20- 4						
9	6 - 4 - 0	10-0-0	9 - 0 - 1	6 - 2 - 2	7 - 1 - 2	38 - 7 - 5						
10	2 - 8 - 0	1 - 9 - 0	2 - 8 - 0	4 - 1 - 5	8 - 0 - 2	17-26- 7						
11	7 - 1 - 2	6-1-3	7 - 0 - 3	2 - 4 - 4	3 - 2 - 5	25-8-17						
12	6 - 4 - 0	8-1-1	7 - 3 - 0	4 - 5 - 1	6-1-3	31-14- 5						
13	4 - 5 - 1	8 - 1 - 1	7 - 3 - 0	4 - 4 - 2	6-1-3	29-14- 7						
14	9-0-1	0 - 0 - 0	9-1-0	3 - 5 - 2	5-1-4	36 - 7 - 7						
15	8 - 2 - 0	3 - 7 - 0	4 - 6 - 0	7 - 2 - 1	5 - 3 - 2	27-20- 3						
16	8 - 0 - 2	6 - 2 - 2	10-0-0	8 - 0 - 2	8 - 0 - 2	40 - 2 - 8						
17	7 - 3 - 0	3 - 7 - 0	9-1-0	5 - 4 - 1	5 - 4 - 1	29-19- 2						
18	7 - 0 - 3	7 - 2 - 1	5 - 0 - 5	7 - 1 - 2	3 - 0 - 7	29 - 3 - 18						
19	4 - 3 - 3	5 - 3 - 2	5 - 3 - 2	5 - 2 - 3	3 - 2 - 5	22-13-15						
20	6 - 2 - 2	9-0-1	8 - 2 - 0	5-1-4	5-1-4	33- 6-11						
21	8 - 2 - 0	7 - 0 - 3	7 - 0 - 3	8 - 2 - 0	6 - 2 - 2	36 - 6 - 8						
22	6-3-1	7 - 2 - 1	7-1-2	0 - 2 - 8	1-0-9	21 - 8 - 21						
23	10-0-0	9-0-1	9-0-1	7 - 1 - 2	7 - 0 - 3	42-1-7						
24	5 - 3 - 2	2 - 7 - 1	3 - 7 - 0	1 - 2 - 7	5 - 1 - 4	16-20-14						
25	10-0-0	9-1-0	9-1-0	0-8-2	3 - 4 - 3	31-14- 5						
26	8 - 0 - 2	5-0-5	7 - 0 - 3	1-4-5	0 - 7 - 3	21-11-18						
27	6-0-4	8 - 0 - 2	8-0-2	7 - 0 - 3	6 - 0 - 4	35- 0-15						
28	6-3-1	4-5-1	0-10-0	3 - 5 - 2	6-3-1	19-26-5						
29	7 - 0 - 3	8 - 0 - 2	6 - 2 - 2	5 - 2 - 3	5 - 2 - 3	31 - 6 - 13						
30	7 - 3 - 0	9-1-0	4 - 5 - 1	0 - 5 - 5	4 - 4 - 2	24-18- 8						

TABLE B.11--Frequency scores for the Person Perception Test by client-percept and total for Group I: Emotional factor.

Cubicat			Clie	ent-Perc	epts	
Subject	Peggy	Bill	Bob	Lynn	Terry	Total
1 2 3 4 5 6 7 8	4-1-1 5-1-0 4-2-0 6-0-0 5-0-1 5-1-0 5-1-0	4-1-1 4-0-2 6-0-0 5-1-0 4-0-2 3-2-1 5-0-1	5-0-1 6-0-0 6-0-0 3-3-0 5-0-1 3-2-1 5-0-1 3-2-1	5-1-0 5-0-1 1-5-0 4-2-0 3-0-3 2-1-3 3-0-3 5-0-1	6-0-0 4-0-2 6-0-0 3-2-1 5-0-1 3-1-2 6-0-0 4-1-1	24 - 3 - 3 24 - 1 - 5 23 - 7 - 0 21 - 8 - 1 22 - 0 - 8 16 - 7 - 7 24 - 1 - 5 22 - 4 - 4
9 10 11 12 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	4-1-1 6-0-0 3-3-0 5-0-1 5-0-1 6-0-0 6-0-0 4-1-1 4-1-1 5-0-1 5-0-1 4-1-1 4-1-1 4-1-1 4-1-1 5-0-1 4-1-1 5-0-1 5-0-1 5-0-1	5-0-1 5-0-1 4-2-0 6-0-0 6-0-0 6-0-0 4-1-1 4-0-2 2-0-4 5-1-0 5-0-1 5-0-1 4-1-1 4-0-2 5-1-0 5-1-0 5-1-0 5-0-1 4-1-1 4-0-2	3-0-3 5-0-1 4-1-1 5-0-1 6-0-0 6-0-0 4-1-1 5-0-1 5-0-1 6-0-0 5-0-1 4-0-2 6-0-0 3-3-0 6-0-0 5-0-1 5-0-1	3-0-3 4-0-2 3-3-0 4-2-0 2-4-0 4-0-2 6-0-0 3-1-2 4-0-2 3-0-3 3-3-0 1-0-5 6-0-0 6-0-0 4-0-2 6-0-0 5-1-0 5-1-0 5-0-1	4-0-2 4-1-1 5-0-1 5-1-0 5-1-0 4-0-2 4-1-1 6-0-0 4-0-2 6-0-0 2-0-4 4-0-2 4-0-2 2-3-1 6-0-0 4-1-1 6-0-0 4-1-1 6-0-0 4-1-1	19-1-10 24-0-6 18-10-2 25-2-3 24-5-1 27-1-2 28-0-2 19-5-6 23-1-6 19-0-11 25-4-1 18-0-12 26-0-4 24-1-5 18-5-7 27-0-3 21-8-1 27-1-2 23-6-1 25-1-4

TABLE B.12--Frequency scores for the Person Perception Test by client-percept and total for Group II: Emotional factor.

	Client-Percepts										
Subject	Peggy	Bill	Bob	Lynn	Terry	Total					
1 2 3 4 5 6 7 8 9 10 11 12 13 14	2-3-1 2-2-2 4-0-2 4-2-0 3-3-0 4-1-1 5-1-0 3-3-0 5-1-0 6-0-0 2-2-2 2-3-1 6-0-0 2-4-0	3-2-1 5-0-1 3-0-3 5-0-1 3-2-1 5-0-1 6-0-0 4-1-1 4-0-2 5-0-1 4-1-1 5-1-0 5-0-1 6-0-0 2-3-1	6-0-0 2-3-1 4-0-2 2-3-1 5-1-0 4-1-1 5-0-1 0-5-1 5-1-0 3-2-1 2-1-3 2-3-1 5-1-0 3-3-0 5-1-0	4-1-1 4-1-1 4-0-2 1-1-4 5-0-1 3-2-1 5-0-1 3-0-3 3-3-0 1-0-5 2-2-2 2-2-2 6-0-0 2-3-1 1-4-1	5-0-1 5-0-1 5-0-1 6-0-0 2-3-1 3-2-1 5-1-0 4-0-2 5-1-0 6-0-0 1-3-2 4-1-1 4-2-0 4-1-1 5-1-0	20-6-4 18-6-6 20-0-10 18-6-6 18-9-3 19-6-5 26-2-2 14-9-7 22-6-2 21-2-7 11-9-10 15-10-5 26-3-1 21-7-2 15-13-2					
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	4-2-0 4-1-1 5-1-0 5-1-0 4-1-1 6-0-0 4-1-1 5-1-0 6-0-0 5-1-0 6-0-0 3-3-0 5-0-1 4-1-1	5-0-1 5-0-1 5-0-1 3-2-1 2-3-1 6-0-0 4-2-0 5-0-1 5-0-1 5-0-1 6-0-0 4-1-1 6-0-0 5-0-1	3-1-2 3-2-1 6-0-0 1-4-1 3-2-1 5-0-1 1-5-0 6-0-0 5-1-0 5-0-1 1-4-1 4-1-1 3-2-1	5-0-1 4-1-1 5-0-1 4-1-1 1-4-1 5-0-1 1-0-5 4-1-1 0-3-3 3-3-0 2-0-4 6-0-0 2-4-0 5-0-1 2-3-1	5 - 0 - 1 4 - 0 - 2 3 - 0 - 3 5 - 1 - 0 5 - 1 - 0 5 - 0 - 1 2 - 2 - 2 5 - 1 - 0 4 - 1 - 1 2 - 4 - 0 4 - 0 - 2 6 - 0 - 0 3 - 0 - 0 2 - 3 - 1	22- 3- 5 20- 4- 6 24- 1- 5 18- 9- 3 15-11- 4 27- 0- 3 16- 6- 8 23- 3- 4 10-15- 5 22- 7- 1 21- 2- 7 29- 0- 1 13-15- 2 26- 1- 3 16- 9- 5					

TABLE B.13--Frequency scores for the Person Perception Test by client-percept and total for Group I: Potency factor.

Cook in a d			Client-Percepts										
Subject	Peggy	Bill	Bob	Lynn	Terry	Total							
1	3 - 0 - 1	3-0-1	2 - 2 - 0	2 - 2 - 0	3 - 0 - 1	13- 4- 3							
2	1-0-3	2-1-1	3 - 0 - 1	4 - 0 - 0	1 - 0 - 3	11- 1- 8							
3	3 - 0 - 1	3-0-1	2-1-1	2 - 2 - 0	1 - 0 - 3	11- 3- 6							
4	3-1-0	4 - 0 - 0	2-1-1	2 - 0 - 2	2-1-1	13- 3- 4							
5	2 - 0 - 2	2 - 0 - 2	2 - 0 - 2	3 - 0 - 1	1-0-3	10-0-10							
6	3-0-1	3-0-1	1 - 2 - 1	0 - 1 - 3	0 - 1 - 3	7 - 4 - 9							
7	3-0-1	3-0-1	3 - 0 - 1	2 - 0 - 2	1 - 0 - 3	12-0-8							
8	2 - 0 - 2	4 - 0 - 0	3 - 1 - 0	3 - 0 - 1	2-1-1	14 - 2 - 4							
9	4 - 0 - 0	4 - 0 - 0	4 - 0 - 0	3 - 0 - 1	4 - 0 - 0	19-0-1							
10	3 - 0 - 1	3 - 0 - 1	3 - 0 - 1	4 - 0 - 0	2 - 0 - 2	15- 0- 5							
11	3 - 0 - 1	2-1-1	1 - 2 - 1	2 - 1 - 1	3 - 0 - 1	11- 4- 5							
12	2 - 0 - 2	4 - 0 - 0	3 - 0 - 1	2 - 2 - 0	3 - 0 - 1	14 - 2 - 4							
14	4 - 0 - 0	4 - 0 - 0	4 - 0 - 0	3 - 1 - 0	4 - 0 - 0	19-1-0							
15	3-0-1	2 - 0 - 2	3 - 0 - 1	3-0-1	4 - 0 - 0	15-0-5							
16	3-0-1	3-0-1	2 - 0 - 2	3-0-1	4 - 0 - 0	15-0-5							
17	3-0-1	3 - 0 - 1	3-0-1	3-0-1	3 - 0 - 1	15-0-5							
18	3-0-1	3-0-1	3 - 0 - 1	3 - 0 - 1	2 - 0 - 2	14-0-6							
19	1 - 0 - 3	4 - 0 - 0	4 - 0 - 0	2 - 0 - 2	2 - 0 - 2	13-0-7							
20	2 - 0 - 2	2 - 0 - 2	1 - 0 - 3	3 - 0 - 1	4 - 0 - 0	12-0-8							
21	3-0-1	3-0-1	4 - 0 - 0	2 - 0 - 2	0 - 0 - 4	12-0-8							
22	3-0-1	4 - 0 - 0	4 - 0 - 0	4 - 0 - 0	3 - 0 - 1	18-0-2							
23	3-0-1	3-0-1	4 - 0 - 0	3-0-1	4 - 0 - 0	17-0-3							
24	2 - 0 - 2	3-0-1	3 - 0 - 1	2-1-1	3 - 0 - 1	13-1-6							
25	4 - 0 - 0	2 - 0 - 2	3-0-1	4 - 0 - 0	2 - 0 - 2	15-0-5							
26	4 - 0 - 0	4 - 0 - 0	2-1-1	3-0-1	3 - 0 - 1	16-1-3							
27	3 - 0 - 1	4 - 0 - 0	4 - 0 - 0	4 - 0 - 0	4 - 0 - 0	19-0-1							
28	3 - 0 - 1	3 - 1 - 0	3 - 0 - 1	3 - 1 - 0	2 - 0 - 2	14 - 2 - 4							
29	4 - 0 - 0	4 - 0 - 0	2 - 0 - 2	2-1-1	1 - 0 - 3	13-1-6							
30	3-0-1	3-0-1	1 - 2 - 1	2-1-1	1-1-2	10-4-6							

TABLE B.14--Frequency scores for the Person Perception Test by client-percept and total for Group II: Potency factor.

Cubinat			Clie	ent-Perc	epts	
Subject	Peggy	Bill	Bob	Lynn	Terry	Total
1 2 3 4 5 6	3-0-1 2-1-1 1-0-3 3-0-1 3-0-1 3-0-1	4-0-0 3-0-0 4-0-0 4-0-0 2-0-2 3-0-1	3-0-1 2-1-1 2-0-2 4-0-0 3-0-1 4-0-0	1-3-0 2-1-1 3-0-1 2-1-1 2-1-1 3-1-1	3-0-1 3-0-1 2-0-2 4-0-0 3-0-1 1-2-1	14- 3- 3 12- 3- 5 12- 0- 8 17- 1- 2 13- 1- 6 14- 3- 3
7 8 9 10 11 12	3-0-1 3-0-1 3-0-1 2-0-2 2-1-1 2-1-1 3-0-1	3-1-0 4-0-0 3-0-1 2-1-1 4-0-0 3-0-1 3-0-1	3-0-1 2-1-1 3-0-1 2-1-1 4-0-0 3-0-1 4-0-0	4-0-0 1-2-1 1-2-1 4-0-0 2-2-0 0-2-2 4-0-0	3-0-1 2-0-2 4-0-0 2-0-2 4-0-0 2-1-1 3-0-1	16- 1- 3 12- 3- 5 14- 2- 4 12- 2- 6 16- 3- 1 10- 4- 6 17- 0- 3
14 15 16 17 18 19	4-0-0 3-1-0 4-0-0 3-0-1 3-0-1 3-0-1	4-0-0 2-1-1 1-0-3 4-0-0 1-0-3 4-0-0	3-0-1 2-1-1 3-0-1 2-1-1 3-0-1 3-1-0	3-1-0 1-2-1 2-0-2 4-0-0 2-0-2 3-0-1	4 - 0 - 0 4 - 0 - 0 2 - 0 - 2 2 - 0 - 2 0 - 0 - 4 3 - 0 - 1	18 - 1 - 1 12 - 5 - 3 12 - 0 - 8 15 - 1 - 4 9 - 0 - 11 16 - 1 - 3
20 21 22 23 24 25 26	3-0-1 3-0-1 1-0-3 3-0-1 3-0-1 4-0-0 4-0-0	2-0-2 3-0-1 1-0-3 4-0-0 3-0-1 4-0-0 4-0-0	3-0-1 3-0-0 0-1-3 3-0-1 4-0-0 4-0-0	3-0-1 3-1-0 0-1-3 4-0-0 2-0-2 0-3-1 1-2-1	3-0-1 4-0-0 1-0-3 4-0-0 3-0-1 2-2-0 0-2-2	14- 0- 6 16- 1- 3 3- 2-15 18- 0- 2 15- 0- 5 14- 5- 1 13- 4- 3
27 28 29 30	3-0-1 3-1-0 2-0-2 4-0-0	4-0-0 1-2-1 3-0-1 2-0-2	4-0-0 0-3-1 3-0-1 2-1-1	2 - 0 - 2 1 - 2 - 1 2 - 1 - 1 0 - 2 - 2	3-0-1 3-1-0 4-0-0 1-3-0	16- 0- 4 8- 9- 3 14- 1- 5 9- 6- 5

TABLE B.15--Frequency scores for the Person Perception Test by client-percept and total for Group I: Evaluative-activity factor.

Cubicot			Clier	nt-Perce	pts	
Subject	Peggy	Bill	Bob	Lynn	Terry	Total
1	8 - 0 - 1	8 - 0 - 1	7 - 2 - 0	4 - 5 - 0	9 - 0 - 0	36-8-1
2	5 - 2 - 2	6 - 0 - 3	8 - 0 - 1	5 - 0 - 4	3 - 0 - 6	27- 2-16
3	5 - 4 - 0	7 - 0 - 2	9 - 0 - 0	4 - 5 - 0	6 - 2 - 1	31-11- 3
4	5 - 4 - 0	8 - 0 - 1	8 - 1 - 0	3-6-0	8-1-0	32-12- 1
5	7 - 0 - 2	6 - 0 - 3	9 - 0 - 0	1-5-3	2 - 0 - 7	25- 5-15
6	4 - 5 - 0	6 - 3 - 0	6 - 3 - 0	0 - 2 - 7	0 - 2 - 7	16-15-14
7	8 - 0 - 1	8 - 0 - 1	8 - 0 - 1	5 - 0 - 4	4 - 0 - 5	33- 0-12
8	9-0-0	8 - 0 - 1	6 - 3 - 0	8-0-1	8 - 0 - 1	39 - 3 - 3
9	7 - 0 - 2	6 - 0 - 3	7 - 1 - 1	9 - 0 - 0	8 - 0 - 1	37 - 1 - 7
10	9-0-0	8 - 0 - 1	9 - 0 - 0	8-0-1	8 - 0 - 1	42 - 0 - 3
11	8-0-1	6-1-2	3-6-0	7 - 2 - 0	8 - 0 - 1	32 - 9 - 4
12	5 - 4 - 0	8-1-0	8-1-0	3-6-0	7 - 0 - 2	31-12- 2
14	4-4-1	9 - 0 - 0	9-0-0	2-6-1	3 - 6 - 0	27-16- 2
15	9-0-0	6-0-3	7 - 0 - 2	8 - 0 - 1	8 - 0 - 1	38 - 0 - 7
16	7 - 0 - 2	8 - 0 - 1	8 - 0 - 1	6-1-2	5 - 0 - 4	34 - 1 - 10
17	7 - 0 - 2	7 - 0 - 2	7 - 0 - 2	7 - 0 - 2	5 - 0 - 4	33- 0-12
18	6 - 3 - 0	8 - 0 - 1	9 - 0 - 0	7 - 0 - 2	8-1-0	38 - 4 - 3
19	8-0-1	7 - 0 - 2	5 - 0 - 4	6 - 0 - 3	2 - 0 - 7	28- 0-17
20	8-0-1	4 - 0 - 5	8 - 1 - 0	4 - 4 - 1	7-1-1	31 - 6 - 8
21	7 - 0 - 2	7 - 0 - 2	6 - 0 - 3	3-1-5	1-2-6	24 - 3 - 18
22	7 - 0 - 2	8 - 0 - 1	7 - 0 - 2	4 - 4 - 1	7 - 2 - 0	33- 6- 6
23	5-3-1	7 - 0 - 2	8 - 0 - 1	8-1-0	9 - 0 - 0	37 - 4 - 4
24	7 - 0 - 2	6-1-2	6-1-2	5 - 0 - 4	5 - 0 - 4	29- 2-14
25	9-0-0	9 - 0 - 0	9 - 0 - 0	7-1-1	9 - 0 - 0	43-1-1
26	3-6-0	8 - 1 - 0	4 - 5 - 0	9 - 0 - 0	7 - 2 - 0	31-14- 0
27	9-0-0	8 - 0 - 1	8 - 0 - 1	3-6-0	9-0-0	37 - 6 - 2
28	8 - 0 - 1	5 - 2 - 2	5 - 2 - 2	5 - 4 - 0	8-0-1	33 - 7 - 5
29	7-1-1	9 - 0 - 0	9 - 0 - 0	7 - 0 - 2	1-0-8	32-1-12
30	2-6-1	4 - 5 - 0	4 - 5 - 0	2 - 7 - 0	6 - 3 - 0	18-24- 3

TABLE B.16--Frequency scores for the Person Perception Test by client-percept and total for Group II: Evaluative-activity factor.

Subject			C1:	ient-Per	cepts	
	Peggy	Bill	Bob	Lynn	Terry	Total
1	7 - 2 - 0	8 - 0 - 1	8 - 0 - 1	4 - 3 - 2	8 - 0 - 1	35- 5- 5
2	5 - 4 - 0	8 - 0 - 1	5 - 4 - 0	4 - 4 - 1	3 - 5 - 1	25-17- 3
3	7 - 1 - 1	6 - 0 - 3	3 - 0 - 6	4 - 0 - 5	4 - 0 - 5	24 - 1 - 20
4	8 - 0 - 1	9 - 0 - 0	9 - 0 - 0	0 - 6 - 3	1 - 5 - 3	27-11- 7
5	4 - 5 - 0	7 - 0 - 2	8 - 0 - 1	6 - 2 - 1	6 - 0 - 3	31 - 7 - 7
6	6 - 3 - 0	8 - 0 - 1	6 - 3 - 0	0 - 7 - 2	4 - 4 - 1	24-17- 4
7	8-0-1	8 - 0 - 1	6 - 1 - 2	5-3-1	6 - 3 - 0	33 - 7 - 5
8	6 - 3 - 0	6 - 2 - 1	1-8-0	2 - 5 - 2	1-5-3	16-23- 6
9	5 - 4 - 0	8 - 1 - 0	8 - 0 - 1	0 - 7 - 2	5 - 4 - 0	26-16- 3
10	7 - 2 - 0	5 - 1 - 3	7 - 1 - 1	8 - 0 - 1	6 - 0 - 3	33 - 4 - 8
11	5 - 2 - 2	8 - 0 - 1	7 - 0 - 2	1 - 7 - 1	3 - 2 - 4	24-11-10
12	3-5-1	7 - 1 - 1	8 - 0 - 1	2 - 4 - 3	6-1-2	26-11- 8
13	3 - 6 - 0	9 - 0 - 0	8 - 0 - 1	4 - 3 - 2	6 - 3 - 0	30-12- 3
14	7 - 1 - 1	8 - 0 - 1	9 - 0 - 0	5 - 4 - 0	3 - 0 - 6	32 - 5 - 8
15	6 - 3 - 0	6 - 3 - 0	8 - 1 - 0	1 - 8 - 0	6 - 3 - 0	27-18 -0
16	6 - 2 - 1	7 - 0 - 2	6 - 0 - 3	4 - 3 - 2	7 - 0 - 2	30 - 5 - 10
17	5 - 4 - 0	7-1-1	9 - 0 - 0	6-2-1	4 - 5 - 0	31-12- 2
18	4 - 3 - 2	4 - 0 - 5	9 - 0 - 0	3-0-6	2-0-7	22- 3-20
19	5 - 4 - 0	8-1-0	6-1-2	5 - 2 - 2	2-1-6	26- 9-10
20	4 - 4 - 1	9-0-0	6-1-2	3 - 2 - 4	7-1-1	29 - 8 - 8
21	8-0-1	9-0-0	9-0-0	6-3-0	3-5-1	35 - 8 - 2
22	8-0-1	5-1-3	8-0-1	0-1-8	1-0-8	22- 2-21
23	8 - 1 - 0	8 - 0 - 1	7 - 0 - 2	4 - 4 - 1	7 - 0 - 2	34 - 5 - 6
24	5-3-1	6-1-2	4-5-0	1 - 4 - 4	5 - 0 - 4	21-13-11
25	6-3-0	9-0-0	9-0-0	0-6-3	5 - 2 - 2	29-11- 5
26	9-0-0	7 - 0 - 2	6-0-3	1-3-5	2 - 3 - 4	25-6-14
27	7 - 0 - 2	9-0-0	9-0-0	8 - 0 - 1	9-0-0	42 - 0 - 3
28	6-2-1	5-2-2	5 - 4 - 0	3-5-1	1-6-2	20-19- 6
29	8-1-0	9-0-0	7 - 1 - 1	6 - 2 - 1	5 - 2 - 2	35 - 6 - 4
30	7 - 2 - 0	9 - 0 - 0	7 - 0 - 2	1-5-3	4 - 3 - 2	28-10- 7

APPENDIX C

PERSON PERCEPTION TEST: DISTRIBUTION OF RESPONSES BY ITEM

TABLE C.-1--Person Perception Test: distribution of responses by item.

	đ n				Scal	e Po	siti	on		
Item	Group	1	2	3	4	5	6	7	Mean	SD
Closed-Open	•									
Peggy	I I I	0 0	0 0	1 1	0 2	5 2	17 15	6 10	5.93 6.03	.89 .98
Bill	I I I	0 0	3 1	6 6	2 0	8 5	7 12	3 6	4.66 5.30	1.54 1.49
Bob	I I I	1 0	2 1	3 4	0 0	9 5	11 13	3 7	5.03 5.53	1.54 1.38
Lynn	I I I	13 26	10	1 1	1 1	1 0	1 0	2 0	1.82 1.23	1.82 .66
Terry	I I I	7 13	4 3	1 2	4 8	3 3	6 1	4 0	3.90 2.60	2.22 1.62
Dishonest-H	ones	<u>t</u>								
Peggy	I I	0 0	0 0	0 0	1 2	8 7	14 9	6 12	5.86 6.03	.77 .95
Bill	I I I	1 0	0 0	1 1	3 2	7 1	12 13	5 13	5.45 6.17	1.29 1.01
Bob	I I I	1 0	4 1	1 2	2 2	7 6	7 12	7 7	5.03 5.57	1.79 1.28
Lynn	I I I	1 1	3 1	3 2	9 13	3 6	5 4	5 3	4.55 4.53	1.72 1.36
Terry	II	0 1	1 0	4 3	12 19	1 3	8 3	3 1	4.69 4.20	1.37 1.08
Superficial	-Pro	foun	d							
Peggy	II	0 0	7 5	9 9	3 4	5 6	5 6	0 0	3.72 3.97	1.44 1.40
Bill	I I I	0 1	5 10	9 10	6 6	4 1	3 2	2 0	3.90 3.07	1.47 1.25
Bob	II	2 5	8 7	6 8	3 3	4 5	5 2	1 0	3.62 3.07	1.71 1.50
Lynn	II	1 0	4 1	1 2	15 21	2 2	5 1	1 3	4.10 4.30	1.40 1.10
Terry	I II	0 1	4 0	3 2	15 20	6 2	0 2	1 3	3.93 4.33	1.10 1.22

TABLE C.1--Continued

					M. KLEPNAT		e propriede e			
	đr		Scal	le P	osit	ion				
Item	Group	1	2	3	4	5	6	7	Mean	SD
Angry-Suppo	rtiv	<u>e</u>								
Peggy	ΙΙ	0 0	0 0	0 0	1 2	5 9	12 12	11 7	6.14 5.80	.82 .87
Bill	I I I	0 0	0 0	0 1	2 2	10 6	8 12	9 9	5.83 5.87	.95 1.02
Bob	I I I	1 0	0 0	3 2	0 4	7 3	9 12	9 9	5.59 5.73	1.47 1.21
Lynn	I I I	1 3	1 3	4 8	2 12	8	5 1	8 0	5.14 3.40	1.66 1.20
Terry	I I I	1 1	0 3	2 5	4 8	8 7	9 4	5 2	5.24 4.23	1.38 1.48
Perplexed-Un	nder	stan	ding							
Peggy	I I I	0 0	0 0	2 1	0 0	5 5	14 14	8 10	5.90 6.07	1.03 1.01
Bill	I I I	0 0	0 0	4 3	6 2	6 4	7 11	7 10	5.41 5.77	1.39 1.26
Bob	I I	0 0	1 1	3 2	1 0	4 2	14 16	6 9	5.55 5.90	1.36 1.22
Lynn	I I I	2 11	6 6	4 8	1 2	2 0	8 3	6 0	4.48 2.43	2.10 1.52
Terry	I I I	3 7	1 7	0 4	4 1	3 5	11 5	7 1	5.21 3.30	1.84 1.95
Disagreeing-	-Agre	eein	g							
Peggy	I II	0 0	0 1	0 1	9 8	7 9	9 8	4 3	5.28 5.13	1.05 1.17
Bill	I	0 0	1 1	1 1	12 6	8 8	4 8	3 6	4.76 5.30	1.17 1.24
Bob	I II	0 1	1 1	5 7	5 5	3 1	11 9	4 6	5.03 4.83	1.45 1.73
Lynn	I II	0 1	0 5	6 6	11 15	6 3	2	4 0	4.55 3.47	1.27 .99
Terry	I II	0 1	1 2	0 5	12 18	2 2	11 2	3 1	5.07 4.03	1.23 1.17

TABLE C.1--Continued

							-			
Item	dn		Scal	le P	osit	ion				
	Group	1	2	3	4	5	6	7	Mean	SD
Disapprovin	g-App	rov	ing							
Peggy	II	0 0	0 0	1 2	6 5	6 6	11 10	5 12	5.49 6.67	1.10 1.69
Bill	I II	0 1	0 0	2 1	10 6	8 9	6 8	3 5	4.72 5.20	1.35 1.33
Bob	I I I	0 0	3 2	1 1	4 6	7 5	10 9	4 7	5.10 5.23	1.45 1.35
Lynn	I I I	0 1	2 8	9 8	6 11	5 1	4 1	3 0	4.31 3.20	1.47 1.08
Terry	I I I	1 2	1 6	1 4	11 8	4 4	8 5	3 1	4.79 3.83	1.42 1.61
Harrassed-U	nhurr	ied								
Peggy	II	0 0	0 1	4 6	7 8	10 4	4 7	4 4	4.90 4.73	1.21 1.44
Bill	I I I	0 0	0 0	1 0	7 5	6	10 14	5 5	5.38 5.63	1.08 .95
Bob	I I I	0 0	0 0	6 2	5 4	4 6	8 9	6 9	5.10 5.63	1.45 1.22
Lynn	I I I	2 7	6 9	6 2	7 5	3 1	3 4	2 2	3.69 3.13	1.64 1.95
Terry	II	1 2	2 7	5 9	7 4	6 3	4 2	4 3	4.48 3.57	1.59 1.71
Impatient-P	atien	t								
Peggy	I I I	0 0	1 3	3 7	0 1	7 4	9 6	9 9	5.61 5.00	1.37 1.93
Bill	I I I	0 0	1 1	2 2	2 0	5 4	13 11	6 12	5.55 5.93	1.27 1.29
Bob	I I I	1 0	1 1	3 4	1 2	9 3	8 10	6 10	5.21 5.57	1.54 1.50
Lynn	I I I	3 6	4 12	4 3	5 3	4 1	5 5	4 0	4.31 2.86	1.93 1.71
Terry	I I I	1 1	2 5	2 9	4 2	7 3	8 9	5 1	5.00 4.06	1.60 1.69

TABLE C.1--Continued

	ь Д		c	cale	Doo	i + i ^				
Item	Group									
	63	1	2	3	4	5	6	7	Mean	SD
Dissatisfie	ed-Sa	tisf	ied							
Peggy	II	0 0	4 2	4 1	4 4	7 10	4 9	6 4	4.72 5.17	1.67 1.29
Bill	I I	0 0	2 2	9 6	6 4	5 3	4 10	3 5	4.31 4.93	1.47 1.59
Bob	I I I	1 0	4 1	2 4	5 3	3 7	11 12	3 3	4.72 5.13	1.72 1.31
Lynn	I I I	7 16	6 7	5 4	4 2	1 1	3 0	3 0	3.23 1.83	2.01 1.10
Terry	I I I	3 6	6 9	4 4	8 8	1 2	3 1	4 0	3.72 2.80	1.88 1.37
Opaque-Tran	spar	ent								
Peggy	I I	0 0	1 3	5 2	0 3	14 10	5 11	4 1	5.00 4.90	1.31 1.33
Bill	I I I	1 0	5 4	14 8	2 1	3 10	3 6	1 1	3.48 4.30	1.43 1.46
Bob	I I I	1 0	5 6	3 5	5 3	5 7	8 7	2 2	4.38 4.20	1.69 1.62
Lynn	I I I	6 20	11 4	1 1	4 4	2 0	3 0	2 1	3.07 1.80	1.91 1.42
Terry	I I I	2 10	3 2	2 3	9 10	5 4	6 1	2 0	4.31 2.97	1.62 1.61
Far-Near										
Peggy	I I I	0 0	2 3	2 3	3 2	10 5	10 13	2 4	5.03 5.13	1.05 1.53
Bill	I I I	1 2	4 2	13 4	4 1	2 11	4 5	1 5	3.62 4.73	1.45 1.73
Bob	I I I	2 0	3 4	3 2	4 3	5 2	9 14	3 5	4.59 5.17	1.77 1.63
Lynn	I I I	12 23	11 5	1	2 2	1 0	1 0	1 0	2.17 1.37	1.56 .79
Terry	I I I	6 12	4 5	3 2	7 8	3 2	5 1	1 0	3.55 2.53	1.85 1.56

TABLE C.1--Continued

Item	ďn										
ı tem	Group	1	2	3	4	5	6	7	Mean	SD	
<u>Tired-Energetic</u>											
Peggy	I II	0 0	2 0	0 0	0 0	3 0	13 12	11 18	6.00 6.60	1.01	
Bill	II	0 0	2 4	13 8	6 8	7 7	1 3	0 0	3.72 3.90	1.01 1.19	
Bob	I II	0 0	0 1	1 3	2 7	9 6	15 9	2 4	5.52 5.03	.85 1.38	
Lynn	I	0 1	2 4	3 7	11 16	6 1	5 1	2 0	4.52 2.83	1.28 1.20	
Terry	ΙΙ	1 3	2 1	3 4	6 12	7 6	10 4	0 0	4.59 3.97	1.40 1.38	
Passive-Act	<u>ive</u>										
Peggy	I I I	0 0	1 2	0 1	0	3 0	15 10	10 16	6.10 6.10	1.26 1.42	
Bill	I I I	0 0	7 10	11 11	1	7 5	3 3	0 0	3.59 3.33	1.35 1.35	
Bob	I II	0 0	2 1	0 5	0 3	11 6	9 10	7 5	5.59 5.13	1.25 1.43	
Lynn	I II	6 11	2 9	7 1	3 7	6 1	4 1	1 0	3.59 2.37	1.58 1.43	
Terry	I I I	2 8	1 7	1 1	3 4	9 4	13 6	0 0	4.90 3.23	1.44 1.93	
Slow-Fast											
Peggy	I I I	0 1	0 0	0 1	4 2	5 2	11 15	9 9	5.86 5.83	1.01 1.32	
Bill	I II	1 0	6 8	12 13	6 4	3 3	1 2	0 0	3.48 3.27	1.16 1.17	
Bob	I II	1 0	1 2	7 8	2 5	8 9	7 4	3 2	4.66 4.37	1.56 1.36	
Lynn	I I I	1 7	8 7	4 5	5 9	5 0	5 2	1 0	3.83 2.80	1.64 1.42	
Terry	I I I	0 6	3 7	2 2	11 9	7 4	6 2	0 0	4.38 3.13	1.18 1.57	

TABLE C.1--Continued

Item	dno		Sca	le P						
ı cem	Group	1	2	3	4	5	6	7	Mean	SD
Defensive-A	ggres	siv	<u>e</u>							
Peggy	II	0 1	5 4	5 11	7 6	10	2	0 2	3.97 3.77	1.22 1.50
Bill	I I I	0 0	1 2	3 8	6 5	13 9	6 6	0 0	4.69 4.30	.97 1.24
Bob	I I I	4 3	11 13	4 7	1 0	5 3	2 3	2 1	3.21 3.00	1.82 1.63
Lynn	I I I	1 0	3 3	1 0	4 6	1 5	9 4	10 12	5.34 5.43	1.83 1.62
Terry	I I I	0 1	3 2	7 3	8 7	3 2	7 11	1 4	4.24 4.87	1.41 1.63
Static-Dyna	mic									
Peggy	I I	0 0	0 1	2 2	4 1	6 10	15 9	1 7	5.41 5.50	.99 1.26
Bill	I I I	0 1	9 3	9 13	7 6	2 4	2 3	0 0	3.28 3.60	1.17 1.22
Bob	I I I	0 0	1 2	1 2	2 4	13 11	11 9	1 2	5.34 4.97	1.01 1.28
Lynn	I I I	5 9	3 7	9 4	4 8	5 1	2 1	1 0	3.38 2.60	1.67 1.40
Terry	I I I	1 2	1 10	7 3	9 11	7 2	4 2	0 0	4.10	1.21 1.33
Unhappy-Hap	ру									
Peggy	II	1 0	1	2 4	4 2	10 8	8 11	3 4	4.97 5.20	1.40 1.33
Bill	I I I	1 0	5 2	10 13	9 7	3 4	1 2	0 2	3.38 3.90	1.10 1.30
Bob	I I	0 0	1 4	10 7	6 7	8 5	3 5	1 2	4.17 4.20	1.23 1.47
Lynn	II	7 4	6 8	6 4	9 11	1 3	0	0 0	2.62 3.03	1.23 1.25
Terry	I I I	1 3	4 7	9 7	9 11	3 2	2 0	0 0	3.41 3.07	1.17 1.17

TABLE C.1--Continued

Item	dno.			Sca	le P	osit	ion			
1.66111	Gro	1	2	3	4	5	6	7	Mean	SD
Constrained	-Fre	<u>e</u>				_				
Peggy	II	0 1	1 2	4 5	3 1	7 7	12 10	2 4	5.07 4.90	1.29 1.51
Bill	II	4 2	6 7	12 9	3 1	2 3	1 7	1 1	3.00 3.70	1.36 1.76
Bob	II	0 0	6 5	7 7	1 1	4 7	9 6	2 4	4.62 4.47	1.75 1.71
Lynn	II	12 17	11 3	2 4	2 5	0 0	2 0	0 1	2.07 2.07	1.37 1.48
Terry	II	2 12	8 5	8 6	7 3	2 0	0 3	2	3.24 2.57	1.46 1.76
Excited-Rela	axed									
Peggy	II	8 9	15 10	5 6	0 0	1 2	0 2	0 1	2.00 2.53	.48 1.65
Bill	ΙΙ	0 0	3 2	4 3	7 4	9 7	5 11	1 3	4.41 5.03	1.30 1.38
Bob	I II	0 0	1 2	10	2 5	8 8	8 8	0 4	4.41 4.97	1.30 1.40
Lynn	II	3 1	5 3	5 6	8 13	5 1	2 3	1 3	3.59 4.03	1.54 1.49
Terry	I I I	0 2	3 8	12 10	7 2	4 1	1 4	2 3	3.79 3.53	1.33 1.80
Upset-Calm										
Peggy	II	1 3	9 7	12 12	3 3	4 2	0 3	0 0	3.00 3.10	1.05 1.37
Bill	II	1 0	3 3	11 7	0 2	8 6	6 7	0 5	4.00 4.73	1.49 1.65
Bob	II	0 0	3 3	6 5	1 0	12 7	5 8	2 7	4.55 5.10	1.43 1.55
Lynn	II	8 4	1 7	10 3	4 5	5 2	1 5	0 4	3.00 3.83	1.51 2.03
Terry	I II	0 4	7 6	14 11	1 0	4 3	1 5	2 1	3.45 3.37	1.43 1.74

TABLE C.1--Continued

Item	đn			Sc	ale	Posi	tion			
	Group	1	2	3	4	5	6	7	Mean	SD
Embarrassed	-Smug	Ţ								
Peggy	I I I	0 0	0 0	2 5	7 9	15 14	5 2	0 0	4.79 4.10	.92 .91
Bill	I I I	0 0	0 0	3 2	12 20	8 4	6 4	0 0	4.59 4.33	.93 .79
Bob	I II	0 0	2 1	7 7	11 16	7 5	2 0	0 1	4.00	.95 1.13
Lynn	I I I	1 7	8 4	5 5	6 7	4 3	2 2	3 2	3.76 3.30	1.69 1.81
Terry	I I I	0 2	2 7	6 6	10 5	8 2	2 4	1 4	4.17 3.87	1.15 1.88
Uncontrolle	d-cor	itro	11ed							
Peggy	I I I	0 1	4 1	7 9	3 1	12 7	3 8	0 3	4.10 4.60	1.27 1.60
Bill	I I	0 0	0 1	2 2	2 0	9 8	12 17	4 2	5.48 5.23	1.04 1.53
Bob	I I I	0 0	0 0	0 2	2 1	7 5	15 13	5 9	5.79 5.87	.92 1.42
Lynn	I I I	0 4	1 0	2 0	1 7	6 4	12 8	7 7	5.62 4.97	1.27 1.89
Terry	I I I	0 0	1 2	8 4	2 3	6 8	9 11	3 2	4.79 4.94	1.46 1.36
Fearful-Hope	eful									
Peggy	II	0 1	2 6	3 8	2 1	8 6	13 4	1 4	5.03 4.10	1.28 1.66
Bill	I I I	0 4	0 4	5 5	3 0	9 5	9 10	3 2	5.07 4.20	1.24 1.99
Bob	I I I	3 11	12 9	6 3	3 2	1 2	4 3	0 0	2.97 2.47	1.45 1.65
Lynn	I I I	0 0	0 0	2 2	12 13	5 6	5 5	5 4	4.97 4.87	1.25 1.18
Terry	I I I	1 0	2 2	7 0	9 13	5 8	5 4	0 3	4.03 4.70	1.30 1.22

TABLE C.-1--Continued

Item	വ Scale Position										
1 tem	Group	1	2	3	4	5	6	7	Mean	SD	
Feminine-Masculine											
Peggy	I II	9 16	18 13	0 1	1 0	0 0	1 0	0 0	1.90 1.50	1.00 .57	
Bill	I II	0 0	0 0	2 0	1 0	13 6	10 16	3 8	5.38 6.03	.96 .68	
Bob	I II	0 0	0 0	0 0	1 0	5 1	17 12	6 17	5.97 6.53	.71 .76	
Lynn	I II	3 3	7 15	8 8	4 1	4 3	3 0	0 0	3.28 2.53	1.48 1.05	
Terry	II	0 0	0 0	1 0	2 1	6 6	12 13	8 10	5.83 6.03	1.02	
Simple-Compl	<u>lex</u>										
Peggy	I II	0 0	1 2	6 4	2 1	5 14	14 9	1 0	4.97 4.80	1.35 1.20	
Bill	I II	0 0	1 4	6 5	1 3	15 14	5 3	1 1	4.69 4.33	1.18 1.32	
Bob	I II	0 0	1 0	2 2	1 3	11 9	11 14	3 2	5.31 5.37	1.06 .98	
Lynn	I I I	0 0	1 1	2 3	10 11	4 5	9 3	3 7	4.93 4.90	1.28 1.45	
Terry	I I I	0 0	0 3	6 2	10 13	8 6	5 4	0 2	4.41 4.40	.98 1.28	
Weak-Strong											
Peggy	I I I	0 1	5 0	9 8	7 3	6 8	2 8	0 2	3.69 4.63	1.18 1.45	
Bill	I I I	0 1	4 2	12 13	2 3	9 4	2 6	0 1	3.76 3.97	1.22 1.49	
Bob	I II	0 0	2 1	2 2	0 3	10 5	9 14	6 5	5.38 5.47	1.37 1.26	
Lynn	I I I	1 3	1 2	5 2	3 11	7 6	9 4	3 2	4.83 4.17	1.53 1.59	
Terry	I I I	0 0	0 1	2 6	7 5	12 8	6 8	2 2	4.97 4.73	.97 1.30	

TABLE C.1--Continued

E				-		-				
T.4	Group			Sca						
Item	Gre	1	2	3	4	5	6	7	Mean	SD
Bored-Surpr	ised									
Peggy	I I I	0 0	0 0	2 4	22 19	5 5	0 2	0 0	4.10 4.17	.48
Bill	I I I	1 0	4 2	5 5	16 15	3 6	0 2	0 0	2.86 4.03	1.19 .95
Bob	I I I	0 0	0 0	3 4	20 17	3 5	3 3	0 1	4.21	.76 .95
Lynn	I I I	0 2	1 3	0 1	9 3	11 4	5 9	3 8	4.97 5.10	1.10 1.89
Terry	I I I	0 0	1 4	2 4	16 7	7 5	2 5	1 5	3.66 4.60	1.18 1.62
Mild-Intens	<u>e</u>									
Peggy	I I I	0 2	9 2	3 4	2 6	13 13	2 3	0 0	3.86 4.17	1.43 1.35
Bill	I I I	1 2	6 12	12 9	3 4	4 1	3 2	0 0	3.41 2.87	1.07 1.23
Bob	I I I	0 3	1 5	5 3	4 1	12 12	4 6	3 0	4.76 4.07	1.28 1.69
Lynn	I I I	0 3	2 2	2 4	3 3	14 7	5 6	3 5	4.97 4.57	1.26 1.87
Terry	I I	1 0	3 4	8 11	8 4	5 3	4 6	0 2	3.86 4.07	1.30 1.55
Yielding-Te	nacio	us								
Peggy	I I I	1 0	1 2	3 1	3 2	11 9	9 13	1 3	4.83 5.30	1.40 1.19
Bill	I I I	1 0	0 2	2 5	6 5	13 11	6 7	1 0	4.79 4.53	1.13 1.20
Bob	I I I	3 3	11 12	9 8	1 1	3 2	2 3	0 1	2.86 3.00	1.36 1.58
Lynn	I I I	9 12	12 7	3 5	4 6	0 0	1 0	0 0	2.21 2.17	1.21 1.16
Terry	I II	2 7	6 8	8	7 11	3 0	3 1	0 0	3.41 2.73	1.38 1.34

APPENDIX D

PERSON PERCEPTION TEST TEST-RETEST ITEM RELIABILITY ESTIMATES

TABLE D.1--Person Perception Test test-retest item reliability estimates for Group II by factor.

C = -1 -		(Client-	Client-Percepts				
Scale	Peggy	Bill	Bob	Lynn	Terry			
Evaluative Factor								
closed-open dishonest-honest superficial profound angry-supportive perplexed-understanding disagreeing-agreeing disapproving-approving harrassed-unhurried impatient-patient dissatisfied-satisfied	.24 .69 .49 .34 .53 .29 .42 .13 .65	.20 07 .28 .47 .40 .32 .77 07 .40 .23	.32 .71 .31 .62 .63 .42 .64 .53	.78 .54 .52 .41 .55 .13 .27 .53 .59	.54 .23 .70 .72 .32 .57 .68 .65 .44			
Emotional Factor	• • •		.00	• • •	• • •			
excited-relaxed upset-calm embarrassed-smug uncontrolled-controlled fearful-hopeful feminine-masculine	.26 .61 .49 .25 .40	.28 .52 .57 .44 .37	.44 .79 02 .44 .49	.36 .44 .62 .19 .20	.41 .60 .48 .58 .24			
Potency Factor								
<pre>simple-complex weak-strong bored-surprised mild-intense</pre>	.27 .46 .24 .37	.52 .47 .64 .59	.28 .58 .58	.60 .45 .16 .77	.33 .58 .67			
Evaluative-Activity Factor	<u>or</u>							
opaque-transparent far-near tired-energetic slow-fast defensive-aggressive passive-active static-dynamic unhappy-happy constrained-free	.37 .53 .08 .29 .55 .23 .68 .72	.27 .52 .56 .52 .60 .63 .28 .61	.53 .77	.33 .36 .10 .34 .53 .54 .32 .72	.22 .40 .57 .62 .37 .57 .17 .52			
Unnamed Factor								
yield-tenacious	02	.39	.54	.34	.41			

APPENDIX E

COUNSELOR RESPONSE SYSTEM

COUNSELOR RESPONSE SYSTEM

of the

BEHAVIOR INTERACTION DESCRIPTION SYSTEM

Ъу

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The Counselor Response System (CRA) is a method for analyzing verbal responses (or statements) of counselors during counseling interviews. This System combines comparative simplicity and ease of use with a high degree of sensitivity to theoretically relevant aspects of counselor behavior. The system is designed to describe, but not evaluate, counselor responses.

Each counselor statement is rated on six dichotomous dimensions:

- 1. Affective Cognitive Content
- 2. Affective Cognitive Change
- 3. Content Follow Shift
- 4. Present vs. Past or Future
- 5. Restrictive Expansive
- 6. Client Other Referent

Evaluation of each statement involves making six dichotomous judgements, one for each dimension*. With this system, a counselor response could have 16 different descriptive profiles. One person can adequately judge two dimensions at one time. Judges need only to be familiar with counseling practice and theory.

The six dimensions do not provide a complete description of all theoretically relevant dimensions, but rather are highly relevant to the counseling process, and are amenable to objective description. They have been derived from counseling theory, but not exclusively from any single theory. No attempt has been made to determine which response characteristics are "good" or "bad," "effective" or "ineffective." Theoretical and research literature have not as yet provided adequate guidelines for judging "good" or "bad" responses.

^{*}See attached rating sheets.

The Affective - Cognitive Contant Dimension

This dimension indicates whether or not client expression of affect of reference to affect is present in a counselor response. The presence of affective content is denoted by the "affective" category, and the absence of affective content is denoted by the "cognitive" category.

The categories are more explicitly defined as follows:

A. Affective Responses

An affective response is one in which the counselor deals cirectly with expressed or apparent mood, feeling, or emotion by paraphrasing or reflecting client expressions of mood, feeling or emotion, or by calling attention to or remarking about mood, feeling, or emotion on the part of the client or anyone else. Note: Counselor expressions of his own mood, feeling, or emotion are considered to be affective responses, as are statements about mood, feeling or emotion on the part of any person as related by either the client or counselor.

An affective response must refer to or incorporate an expression of affect. It is the presence of affective content that is of importance and not the level of feeling evidenced by the response.

Particular care should be used when judging responses containing the verb "to feel". Some counselors indiscriminantly use this word in reference to opinions rather than true feeling. Only when "feel" is used to refer to true feeling, mood, or emotion, should the response be categorized as "affective". By "feeling" is meant strong feelings. Mere likes or dislikes are not strong feelings, and responses dealing with them are not considered affective.

Examples:

- 1. "That seems to make you angry."
- 2. "You seem Yery happy today."
- 3. "How do you feel when they ignore you?"
- 4. "It annoys me when you arrive late for your appointment."
- 5. "Did that make your parents happy?"

E. Cognitive Responses

A cognitive response is any statement or question which does not refer to or incorporate expressions of feeling, mood, or emotion on the part of the client or anyone else. Cognitive responses often deal with cognitive material or content, but may be found to follow empressions of affect by the client <u>if</u> the counselor does not deal directly with such expressions of affect.

Examples:

- 1. "How are you today?" (If intended in a general sense)
- 2. 'What do you think about your grades in Mathematics?"
- "You did quite well on the test!"
- 4. "So you feel you should look more seriously at teaching as a possible career."

II. The Affective - Cognitive Change Dimension

This dimension deals with gross changes in feeling level between a counselor response and the preceding client statement. More specifically, if the client's statement was primarily cognitive, does the counselor follow with a response that is also largely at the cognitive level of feeling, or does he change to a more affective feeling level? And if the client's statement was primarily affective, does the counselor follow at this level of feeling or does he change to a more cognitive level?

This dimension, while somewhat related to the Affective-Cognitive Content dimension, does not deal so much with expressions of, and references to affect, as it does with differences in the general feeling level between client and counselor statements. For example, it is possible for the counselor to refer to client affect without really responding at the same feeling level; it is also possible to deal with strong client affect in a non-emotional, objective manner and still remain at the client's level of feeling.

General consistency in feeling level between client affect and counselor responses is denoted by the "following" category, and gross differences in feeling level are denoted by the "changing" category. More explicit definitions follow:

A. Following Responses

A following response is one in which the counselor responds at the same, or nearly the same, feeling level as that of the client's previous statement. A response at an affective level to an affective statement is a following response, as is a response at a cognitive level to a cognitive statement.

- 1. Cl: "Every time he says that, I could just sit down
 and bawl!" (affective statement)
 - Co: "It really makes you feel worthless." (An affective statement: if the counselor responds with the same level of feeling, this would be a following response)
- 2. Cl: "I just wondered if you had any tests I could take to see if I should try a tougher English course next semester." (Cognitive statement)
 - Co: "I have several tests which might help you, but your performance in Freshman English is probably the

best indicator of your ability." (Cognitive response)

B. Changing Responses

a grossly different feeling level than that of the client's previous statement. A response at an affective level to a cognitive statement is a changing response, as is a response at a cognitive level to an affective statement.

Examples:

Co: "Have you tried to talk it over with him?" (Cognitive Response)

2. Cl: "Well, I flunked another Math. test today!" (Cognitive statement)

Co: "That must make you feel pretty bad."

(Affective response)

II. The Content Follow - Shift Dimension

This dimension deals with changes in the general topic of discussion between the client's preceding statement and the counselor's response. More specifically, does the counselor follow the client's general topic of discussion or does he change or shift to a different topic?

A. Topic Following Responses

A topic following response is one in which the counselor deals with the same general topic as the client's previous statement. The counselor may choose to respond to a specific aspect of the general topic, but the response is considered to be "following" if he does not depart from the general topic.

Examples:

- 1. Cl: "I always seem to do poorly on History tests."
 - Co: 'What was your grade on the last one?"
- · 2. Cl: 'My father says I should be an engineer."

Co: "Now does it make you feel when he tries to tell you to do something you don't want to do?"

B. Topic Shifting Responses

A topic shifting response is one in which the general topic of the counselor's response is different from that of the preceding client statement. Included in this category are counselor responses in which the topic is the same as in the last previous <u>counselor</u> statement <u>if</u> the client has shifted to a different topic in the intervening statement.

Examples:

- 1. Cl: "I've been gatting low grades in Math."
 - Co: "How are your grades in English?" (Note: this would be a "following" response if there had been a discussion of grades in general, but if the client's progress in Mathematics has been the general topic, this is a shifting response)
- 2. Co: "So you think you might talk to her about your grades?"
 C1: "Before I forget, I want to ask you if I could take one of those interest tests."

Co: "You were saying you thought you might talk to Miss Jones about your History grades..."

IV. The Control Dimension (Restrictive - Expansive)

This dimension deals with the extent to which the counselor limits or permits freedom of expression by the client. It should be noted that the counselor can focus on specifics and still permit the client to express

himself freely. In determining whether a response should be judged as "restricting" or as "expanding" the chient's Freedom, the specific question should be asked: "Within the area focused upon by the counselor's response, does the response restrict or expand the client's freedom to lapress himself?"

A. Restricting Responses

Restricting responses are those in which the range of possible client responses is narrowly limited or specified. A "pat answer" is given the client to explore or expand, or to express himself freely.

Examples:

- 1. "What is your average in English so far this year?"
- 2. "You really want to get good grades, don't you?"

B. Expanding Responses

Expanding responses are those in which the counselor gives the client a high degree of freedom to respond, even though he may focus on a specific topic. Such responses are often open ended and allow the client to explore his own feelings and to expand upon them. Sometimes these responses employ a tentative statement to which the client is free to agree or disagree, to develop further or not to develop further.

- 1. "You said you were having particular difficulty getting along with your younger brother. Could you tell me some more about it?"
- 2. "Perhaps you went ahead and did that just to prove to your-self that you really could."
- 3. "And then how did you feel?"

V. The Temporal Dimension (Present vs. Past or Future)

This dimension indicates the temporal reference of the counselor's response. Does the counselor refer to or focus upon, something in the past, the present, or the future?

In order to maintain consistency with the other dimensions, two categories are formed by combininh past and future into one category, present reference constituting the other category.

If a response contains reference to past or future as well as to the present, the category assigned is that to which the most emphasis was given in the response.

A. Past - Future Responses

These are responses in which the primary emphasis is on a past or future event, condition, or feeling.

Examples:

- 1. "How old were you when you moved to Detroit?"
- 2. "How did you feel about it at that time?"
- 3. 'What do you think you will do after you graduate?"

B. Present Responses

These are responses in which the primary emphasis is placed on an event, condition, or feeling existing or occurring at the present time.

- 1. "Now do you feel about it now that you no longer live at home?"
- 2. "You talked last time of going to college when you finish school; what are your plans?" (Note that although the counselor beings this response with reference to a past event, and then refers to a future event, he focuses on

the present, i.e., the client's present plans).

VI. The Client - Other Radoment Dimension

A response may deal directly with the client or with another person, it may refer to something said, done or thought by the client or by some other person. This dimension deals with whether or not the client is the primary referent of the response.

A. Client - Referent Responses

In this category are included responses referring to thoughts, feelings, activities, and self-references of the client, as well as responses which in any way focus upon the client rather than upon any other person.

Examples:

- 1. "How do you feel about that?"
- 2. "Now do you feel when your parents argue with each other?"
- to you."

B. Other - Referent Responses

In this category are included responses dealing primarily with actions, feelings, or statements of any person other than the client. If reference is made to other persons as well as to the client, the main emphasis of the statement determine the category. References to non-humans (e.g. places, things, animals), are included in the other - referent category if such reference is primary.

- 1. "Mow does your sister feel about that?"
- 2. "How does your father feel about you?"

- 3. "I'm very glad you told me about that."

 (Counselor's feeling seems predominant here, although it is a bit difficult to judge out of context.)
- 4. "And then what happened after your dog chased the neighbor's cat?"

This method is presented only as a mound by which some significant dimensions of interview content can be objectively described.

The Counselor Response System is part of a larger system currently being developed. This system, the Behavioral Interaction Description System (DIDS), is a method for analyzing both counselor and client responses, as well as their inter-relationship.

APPENDIX F

COUNSELOR RESPONSE SYSTEM: RATING SHEET

CRS RATING SHEET

POLLOW EXPANSION TO THE POLLOW TH	SIVE NO	PRES		CLIENT YES	FOCUS	S REINFO YES	
2 3 4 5 6							
3 4 5 6							
4 5 6							
5							
6							
7							
				· ·			
8						·	
9							
10							
11						``	•
12							
13					·		
14							
15						;	
1.6					# 1	\	
17							
18							
19							
20						,	

APPENDIX G

COUNSELOR RESPONSE SYSTEM: FREQUENCIES BY SUBJECTS

TABLE G.1--Frequency scores for the Counselor Response System dimensions for Group I.

	Cou	nselor Resp	onse System Di	mensions
Subject	Follow	Expansive	Client/Focus	Reinforcing
1	15	3	17	2
2	* *	* *	**	* *
3	* *	**	**	* *
4	12	1	14	1
5	12	8	16	0
6	* *	* *	* *	* *
7	19	6	18	2
8	12	5	18	0
9	11	3	7	3
10	9	3	16	1
11	15	5	12	1
12	* *	* *	**	**
14	12	3	14	1
15	12	3	13	1
16	17	1	17	1
17	10	6	12	0
18	12	6	16	1
19	19	6	20	1
20	17	3	15	1
21	7	1	8	1
22	* *	* *	**	**
23	6	1	9	1
24	11	6	10	0
25	8	1	12	0
26	4	3	6	3
27	11	5	6	1 2
28	9	5	15	2
29	12	5	9	1
30	18	0	14	1
Mean	12.08	3.71	13.08	1.08

^{**}No tape available for this subject.

TABLE G.2--Frequency scores for the Counselor Response System dimensions for Group II.

Subject	Со	unselor Res	ponse System D	imensions
Subject	Follow	Expansive	Client/Focus	Reinforcing
1	12	8	18	1
2 3	10	3 3	9	2
3	11		15	0
4	* *	* *	* *	* *
5	2	0	2	0
6	15	4	10	2
7	16	5	17	0
8	7	5 3 3	9	0
9	19		19	2
10	* *	* *	* *	* *
11	13	1	9	2
12	15	4	10	1
13	10	3 2 3 5 5	16	1
14	8	2	12	0
15	13	3	15	1
16	14	5	13	0
17	8	5	14	0
18	5	7	16	0
19	15	. 3	16	0
20	**	**	**	* *
21	12	5	9	1
22	12	3	11	0
23	7	5 3 4 5 3	12	0
24	16	5	18	0
25	7	5	5	1
26 27	9	4 5	10	0
	11	5 7	13	0
28 29	12 **	/ * *	12 **	1 **
30	14	5	16	0
Mean	11.27	3.96	12.54	0.58

 $[\]ensuremath{^{\star\star}}\xspace\ensuremath{^{No}}$ tape available for this subject.

APPENDIX H

COUNSELOR RESPONSE SYSTEM: DIMENSION FREQUENCIES

TABLE H.1--Counselor Response System: distribution of responses for both groups.

	Group	Content: Follow	Control: Expansive	Referent: Client	Reinforcing
20	I	0	0	1	0
19	I I I	0 2	0 0	0 0	0 0
	ΙΙ	1	Ö	1	0
18	I I I	0	0	2 2	0
17	I	0 2	0	2	0
	ΙΙ	0	0	1	0
16	I I	0 2	0 0	3 4	0 0
15	I	2	0		0
	ΙΙ	3	0	2 2	0
14	I I I	0 2	0 0	3 1	0 0
13	I	0	0	i	0
	ΙΙ	2	0	2	0
12	I I I	7 4	0 0	3 3	0 0
11	I	3	0	0	0
	ΙΙ	3 2	0	1	0
10	I I I	1 2	0 0	1 3	0 0
9	I	2	0	2	0
	ΙΙ	1	0	4	0
8	I I I	2 2	1 1	$\frac{1}{0}$	0 0
7	I	1	0	1	0
_	ΙΙ	3	2	0	0
6	I I I	$\frac{1}{0}$	5 0	2 0	0 0
5	Í	0	5	Ö	0
	ΙΪ	1	7	1	0
4	I I I	1 0	0 4	0 0	0
3	I	ő	7	Ö	0 2
2	ΙΙ	0	9	0	0
2	I I I	0 0	0 1	0 1	3 4
1	I	0	5	0	14
0	ΙΙ	1	1	0	7
0	I I I	0 0	1 1	0 0	5 15
Mean	II	11.67 11.27	3.71 3.96	13.08 12.54	1.08 0.58

APPENDIX I

ITEM/TOTAL FACTOR SCORE CORRELATIONS ("1-7" PROCEDURE)

TABLE I.1--Item/total factor score correlations using the "1-7" procedure for both groups: Evaluative factor.

	Client-Percepts							
Scales	Group	Peggy	Bill	Bob	Lynn	Terry		
closed-open	I I I	.40	.18	.59	.43	.44		
dishonest-honest	I I I	.57	.17 .49	.65 .49	.74	.49 .40		
superficial-profound	II	.38	10 .48	.52	.50	.52		
angry-supportive	III	.33	.18	.46 .61	.69 .20	.58 .40		
perplexed-understanding	ΙΙ	.32	.52	.67 .59	.63	.53		
disagreeing-agreeing	II	.56 .16	.44	.56 .55	.62 .37	.47		
disapproving-approving	II	.48	.36	.51	.62 .29	.49		
harrassed-unhurried	II	.35	.17	.59 .55	.45	.41 .50		
impatient-patient	II	.36	.30	.53	.57	.49		
dissatisfied-satisfied	II	.64	.43	.66	.70 .24	.69		

TABLE I.2--Item/total factor score correlations using the "1-7" procedure for both groups: Emotional factor.

	Client-Percepts					
Scales	Group	Peggy	Bill	Bob	Lynn	Terry
excited-relaxed	II	.46	.43	.45	.40	.55
upset-calm	I II	.54 .65	.52 .59	.48 .57	.39 .51	.38
embarrassed-smug	I II	.34	.38	.44	.16 .07	.23
uncontrolled-controlled	I II	.64 .18	.11	.43	.42	.35
fearful-hopeful	II	.43	.49	.50 .41	.53 .37	.66 .63
feminine-masculine	II	19 .00	.04	.27	21 .10	.49

TABLE I.3--Item/total factor score correlations using the "1-7" procedure for both groups: Potency factor.

	Client-Percepts					
Scales	Group	Peggy	Bill	Bob	Lynn	Terry
simple-complex	I	.42	.61	.21	.10	.06
weak-strong	II	.22	.43	.35	.26	.32
bored-surprised	I I I	.01 .49	.33	.08 .26	.17	.33
mild-intense	II	.27 .62	.02	.04	.22	.17 .16

TABLE 1.4--Item/total factor score correlations using the "1-7" procedure for both groups: Evaluative-activity factor.

	Client-Percepts					
Scales	Group	Peggy	Bill	Bob	Lynn	Terry
opaque-transparent	I II	01 .03	.10	.28	.27	.58
far-near	I I I	.36	.28	.60 .53	.47	.59 .35
tired-energetic	II	.49	.30	.44	.48	.56 .29
slow-fast	I I I	.58 .18	.41	.49 .51	.31	.40
defensive-aggressive	I I I	.59 .01	.13	.32	.60 .07	.70
passive-active	I I I	.36	.30	.39	.51 .17	.48
static-dynamic	I I I	.52	.00	.34	.59 09	.41
unhappy-happy	II	.20	.40	.56 .40	.29	.47
constrained-free	I II	.18	.21	.32	.43	.53

APPENDIX J

PERSON PERCEPTION TEST-COUNSELOR RESPONSE SYSTEM: COMPARISONS

("1-7" PROCEDURE)

TABLE J.1--Person Perception Test total factor scores ("1-7" procedure) compared with Counselor Response System dimensions by product-moment (\underline{r}) .

Counselor Response System	Person Perception Tes			
	Group I	Group II		
	Emotional	l Factor		
Content: Follow Control: Expansive Referrent: Client Reinforcing	02 04 10 20	16 22 14 23		
	Potency Factor			
Content: Follow Control: Expansive Referrent: Client Reinforcing	.03 28 10 .24	.10 06 04 .34		
	Evaluative-Activity Factor			
Content: Follow Control: Expansive Referrent: Client Reinforcing	06 09 04 .20	29 06 17 28		

APPENDIX K

PERSON PERCEPTION TEST-COUNSELOR RESPONSE SYSTEM:

COMPARISONS

(f₂₃₅₆ PROCEDURE)

TABLE K.1--Person Perception Test total factor scores (f $_{2\,3\,5\,6}$ procedure) compared with Counselor Response System dimensions by product-moment (\underline{r}).

Counselor Response System	Person Perc	ception Test			
• ,	Group I	Group II			
	Evaluativ	ve Factor			
Content: Follow Control: Expansive Referrent: Client Reinforcing	.17 .12 .25 .04	.04 .10 .08 .08			
	Emotional Factor				
Content: Follow Control: Expansive Referrent: Client Reinforcing	12 01 01 04	14 .12 .04 15			
	Potency	y Factor			
Content: Follow Control: Expansive Referrent: Client Reinforcing	02 .04 .00 .32	09 21 03 .04			
	Evaluative-Activity Factor				
Content: Follow Control: Expansive Referrent: Client Reinforcing	.10 .19 .26 .18	21 05 13 18			

APPENDIX L

PERSON PERCEPTION TEST-COUNSELOR RESPONSE SYSTEM COMPARISONS

(f₄ PROCEDURE)

TABLE L.1--Person Perception Test total factor scores (f procedure) compared with Counselor Response System dimensions by product-moment (\underline{r}) and by multiple correlation (R).

,	Person Perception Test			
Counselor Response System	Group I	Group II		
	Evaluat	ive Factor		
Content: Follow Control: Expansive Referrent: Client Reinforcing	02 .11 .01 31	01 05 .04 26		
Content: Follow Control: Expansive Referrent: Client Reinforcing	.07 .19 .05 05	08 17 14 06		
	Potency	y Factor		
Content: Follow Control: Expansive Referrent: Client Reinforcing	.07 .12 .09 35	07 .06 .02 32		
	Evaluative-Activity Factor			
Content: Follow Control: Expansive Referrent: Client Reinforcing	.06 .23 02 24	04 .04 .08 39*		
	Interrelated Factors			
Content: Follow Control: Expansive Referrent: Client Reinforcing	.15 .25 .19 .42	.10 .28 .25 .46		

Legend: * = significant at .05 level.

APPENDIX M

PERSON PERCEPTION TEST-COUNSELOR RESPONSE SYSTEM ITEM VALIDITY

TABLE M.1--Person Perception Test item validity for both groups using the Counselor Response System dimensions as the criteria: Evaluative factor.

Person Perception	Counselor Response System					
Test	Group	Follow	Expan.	Client	Reinf	
Peggy						
closed-open	I I I	16 .16	44 * .04	20 .00	.41* 02	
dishonest-honest	I II	.02	21 24	16 .02	.02	
superficial-profound	I I I	.17 .37*	14 .09	.23	43* 13	
angry-supportive	I I I	06 06	.14	21 18	02 04	
perplexed-understanding	I I I	.08	.00	.02	.20 .25	
disagreeing-agreeing	I I I	07 .26	28 .18	15 .07	.03	
disapproving-approving	I I I	.08	04 05	07 22	.36	
harassed-unhurried	I I	29 .30	.02	25 .07	.05	
impatient-patient	I I I	.08	.25	.07	01 .10	
dissatisfied-satisfied	I I	.06 .38*	.14	03 .29	10 .28	
<u>Bill</u>						
closed-open	I I	35 05	09 .20	41* .09	.20 04	
dishonest-honest	II	13 29	.05	34 .00	29 38*	
superficial-profound	II			17 .22		
angry-supportive		40* 21				
perplexed-understanding		26 13				
disagreeing-agreeing	I I I	21 36	19 .18	37 * 12		

TABLE M.1--Continued

Person Perception		Counselo	r Respon	se Syste	m
Test	Group	Follow	Expan.	Client	Reinf.
Bill (continued)					
disapproving-approving	II	32 12	04 .02	28 .06	.23
harassed-unhurried	I I	21 .53**	06 .26	37 * .53 **	.30
impatient-patient	I I	05 .06	05 .13	41 * .33	.19 23
dissatisfied-satisfied	II	18 .12	.04	10 .57 **	.28
Bob					
closed-open	I I	24 .01	09 01	29 12	.01 .16
dishonest-honest	II	17 15	06 28	23 21	05 18
superficial-profound	I I I	13 24	.08	15 .01	09 14
angry-supportive	I I I	19 04	15 02	30 12	.03
perplexed-understanding	I I	12 23	.29	18 .05	.15 38*
disagreeing-agreeing	I I	23 19	19 12	34 36	.11
disapproving-approving	I I I	12 10	13 .04	29 29	.10
harassed-unhurried	I I I	16 .06	.24		05 .07
impatient-patient	I I	29 05			10 .00
dissatisfied-satisfied	II	31 .05	03 02		00 .33
Lynn					
closed-open	II	08 .03	.23	05 .13	.21
dishonest-honest	II	.16 34	02 09	.06 20	.09 20

TABLE M.1--Continued

Person Perception		Counselo	r Respon	se Syste	m
Test	Group	Follow	Expan.	Client	Reinf.
Lynn (continued)					
superficial-profound	I II	.30	.11	.15 10	10 15
angry-supportive	I II	.03	07 .01	.29	.06 21
perplexed-understanding	II	.02	.16 04	01 .14	.37 * .15
disagreeing-agreeing	I I	.13	08 05	.07	.32
disapproving-approving	II	16 .32	08 .08	08 .41*	.36 26
harassed-unhurried	I I	40 * 06	.01 10	19 02	.10 .05
impatient-patient	I II	16 09	.04	.03	.00
dissatisfied-satisfied	I I I	21 .18	06 .01	03 .08	09 39*
Terry					
closed-open	II	.05 36	10 24	.15 37*	06 .01
dishonest-honest	II	17 39*	23 23	18 16	10 35
superficial-profound	I I	09 28	23 06	.04	28 .52**
angry-supportive	I I	14 17	29 25	02 20	.23
perplexed-understanding	I I I	08 15	.25	.01	.27
disagreeing-agreeing	I I	.05	.03	03 23	.38** .16
disapproving-approving	ΙΙ	02 25	18	.12	.28
harassed-unhurried	I I	26 .16	.10	09 .04	.02 .14
impatient-patient	I II	14 .21	.12	.05 .14	.00 05
dissatisfied-satisfied	II	37 * .16	14 .14	26 .13	.03

** = significant at .01 level;
* = significant at .05 level. Legend:

TABLE M-2--Person Perception Test item validity for both groups using the Counselor Response System dimensions as the criteria: Emotional factor.

Danier Danier tier		Counselo	r Respon	ise Syste	m
Person Perception Test	Group	Follow	Expan.	Client	Reinf.
Peggy					
excited-relaxed	II	.29	23 .12	.31	24 08
upset-calm	I I	.24	11 25	.06 08	10 .03
embarrassed-smug	II	06 .36	26 .11	03 .19	.12
uncontrolled-controlled	I I	.08	07 10	.11 10	49 ** .28
fearful-hopeful	II	.28	.17	.22	19 06
feminine-masculine	I II	.09 28	.13	.17	16 34
Bill					
excited-relaxed	II	09 25	17 02	09 .15	.15 29
upset-calm	I II	16 23	.05	27 03	27 29
embarrassed-smug	II	19 02	03 13	19 .08	05 .04
uncontrolled-controlled	I I I	16 10	.01	24 .19	02 22
fearful-hopeful	I I I	19 .00	02 02	29 .09	.01
feminine-masculine	I I I	29 .14	.18	15 07	23 05
Bob					
excited-relaxed	I I I	.03		12 30	.04
upset-calm	II	12 12	.12	.01	07 16
embarrassed-smug	I I I	08 16	14 .23	26 .08	05 08
uncontrolled-controlled	I I I	.12	.02 10	03 .14	16 33

TABLE M-2--Continued

Person Perception	Counselor Response System				
Test	Group	Follow	Expan.	Client	Reinf.
Bob (continued)					
fearful-hopeful	I II	04 12	15 10	.04	09 11
feminine-masculine	I I	.00	.05 25	.15 05	20 .05
Lynn					
excited-relaxed	II	30 .22	.44* .22	36 06	08 07
upset-calm	I I I	31 .08	.39 * 01	30 .04	20 11
embarrassed-smug	ΙΙ	07 21	.07	.03	19 .10
uncontrolled-controlled	II	.31	04 01	.01	12 27
fearful-hopeful	II	19 14	.12	17 22	.00
feminine-masculine	I II	.45* 03	33 .10	.42* 05	.19 12
Terry					
excited-relaxed	II	.10 11	04 40*	19 24	41* .01
upset-calm	I I	12 13	15 26	26 15	18 24
embarrassed-smug	II	11 .28	.09	20 .10	.24
uncontrolled-controlled	II	.02 40*	30 21		.07 03
fearful-hopeful	I II	.03	36 39*	.04	04 03
feminine-masculine	ΙΙ	13 .18	14 50**		23 .27

TABLE M.3--Person Perception Test item validity for both groups using the Counselor Response System dimensions as the criteria: Potency factor.

Person Perception Test		Counselor Response System					
	Group	Follow	Expan.	Client	Reinf.		
Peggy							
simple-complex	II	12 .50**	23 .42*	.15	.12		
weak-strong	I I I	.16 .14	05 08	.27	23 .40		
bored-surprised	II	05 .19	.14	17 .01	.09 18		
mild-intense	II	29 01	17 15	21 02	.48 * 04		
Bill							
simple-complex	II	.09	.09	05 11	.21		
weak-strong	I I	25 07	14 12	31 .06	16 09		
bored-surprised	II	35 15	19 .18	07 11	.22		
mild-intense	II	.02	27 19	.33	.28		
Bob							
simple-complex	I I I	.16 .26	.02	.14 .37*	15 .29		
weak-strong	I I	.33	.08	.15	.01		
bored-surprised	II	13 .04	.00	24	.16 09		
mild-intense	II	26 .10	15 .11	42 * .07	.58 ** .20		

TABLE M.3--Continued

Person Perception Test	Counselor Response System					
	Group	Follow	Expan.	Client	Reinf.	
Lynn						
simple-complex	I I	.01 .16	.06 03	02 12	20 .62**	
weak-strong	I II	.17 16	.03	10 14	23 .22	
bored-surprised	I II	.03	.10 19	08 23	12 05	
mild-intense	II	.11	32 .03	20 .08	.40 * .06	
Terry						
simple-complex	I I	.02	43* 40*	.04	19 .28	
weak-strong	I II	.21	53 ** 61 **	12 26	.05	
bored-surprised	I II	.04	19 .26	07 24	.15	
mild-intense	II	.09 12	11 11	33 27	.18	

Legend: ** = significant at .01 level;
 * = significant at .05 level.

TABLE M.4--Person Perception Test item validity for both groups using the Counselor Response System dimensions as the criteria: Evaluative-activity factor.

Dangan Dangantian		Counselo	r Respon	se Syste	em
Person Perception Test	Group	Follow	Expan.	Client	Reinf
Peggy					
opaque-transparent	I I	02 42*	44 * 12	05 16	.20 .27
far-near	I I I	14 .03	61 ** 32	29 17	.29 .26
tired-energetic	I I I	12 .20	32 .05	13 .02	.22
slow-fast	I II	.08	.07	.02	.20
defensive-aggressive	I I I	02 07	14 09	.00	04 .16
passive-active	I I I	27 .17	12 14	.01	.20
static-dynamic	I I I	.00 .05	05 19	.22	.11
unhappy-happy	I I I	06 06	23 01	12 .02	.16
constrained-free	II	04 39*	01 51**	03 31	.47 * 12
Bill					
opaque-transparent	I I I	38 * 02	.09	21 01	.00
far-near	I I I	36 10	.05	30 .11	04 22
tired-energetic	I I I	08 17	20 .09	40* 06	.24
slow-fast	I I I	26 03	03 .10	44 * .05	.11
defensive-aggressive	II	30 .08	.16	26 .42*	25 14
passive-active	I I	22 01	10 .03	34 01	.04
static-dynamic	I I	10 05	.18	23 .04	07 .14

TABLE M.4--Continued

Daman Damanti	Counselor Response System				
Person Perception Test	Group	Follow	Expan.	Client	Reinf.
Bill (continued)					
unhappy-happy	I I	22 26	.04	33 08	31 08
constrained-free	II	30 19	.20	08 .11	16 06
Bob					
opaque-transparent	I I I	18 25	02 01	.00 11	.11 01
far-near	II	17 09	18 .20	21 .01	.17 08
tired-energetic	I I	01 .13	.12 .36	15 .13	22 .32
slow-fast	I I	.15 .18	.05 .38*	06 .27	.14
defensive-aggressive	I I I	.40* .11	.13	.30	21 .06
passive-active	I I I	.10 17	.15	.10	14 08
static-dynamic	I I I	.39 * 17	.31	.13	.13
unhappy-happy	I I I	18 30	24 .07	24 25	.10 .01
constrained-free	I I I	22 .09	.06	21 .15	.05 11
Lynn					
opaque-transparent	II	.08	17 .16	.14	.17 12
far-near	I I	.14	14 02	09 .08	12 24
tired-energetic	I I I	.18	.02	.04	.14
slow-fast	I I I	44 * 15	20 .19	20 .17	.20
defensive-aggressive	I I I	09 39*	.37 * .09	.11	.18

TABLE M.4--Continued

Person Perception		Counselo	r Respon	ise Syste	m
Test	Group	Follow	Expan.	Client	Reinf.
Lynn (continued)					
passive-active	I I	28 18	.12	34 19	.02
static-dynamic	II	.05 27	16 .21	.01 09	.27 29
unhappy-happy	II	22 12	.08	12 06	10 26
constrained-free	I I	27 .18	.18	28 .09	.34 43*
Terry					
opaque-transparent	II	.01	13 .11	.06	.21
far-near	I II	.02	24 12	.06 01	08 19
tired-energetic	I I	25 .36	24 12	26 .05	.18
slow-fast	I II	03 .10	16 11	04 .05	.12
defensive-aggressive	I I	02 03	34 07	09 .02	03 33
passive-active	I I I	37 * .05	19 22	03 07	12 26
static-dynamic	I II	49 ** 11	10 11	31 24	.39 * 36
unhappy-happy	I II	.07 45*	21 28	.01	12 22
constrained-free	II	33 07	.01 .06	10 .01	.08

Legend: ** = significant at .01 level;
 * = significant at .05 level.