A STUDY OF RELATIONSHIPS BETWEEN COUNSELOR PERSONALITY AND COUNSELING BEHAVIOR

Thesis for the Degree of Ph. D.

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William M. De Roo

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ABSTRACT

A STUDY OF RELATIONSHIPS
BETWEEN COUNSELOR PERSONALITY
AND COUNSELING BEHAVIOR

by William M. De Roo

The primary purpose of this study was to investigate relationships between personality characteristics of counselors and verbal behaviors displayed by them during counseling interviews. Theory proposes direct relationships between behavior elicited in the psychometric test situation and behavior in non-test situations, but such relationships have not been found consistently in counseling research.

The Holtzman Inkblot Technique (HIT) and the Rokeach Dogmatism Scale (RDS) were used to assess counselor personality. Counseling behavior was measured by the Counselor Response System (CRS), a method developed for use in this study but intended for wider use as well.

The CRS measures six theoretically relevant dimensions of counselor behavior. Each dimension is composed of two objectively defined categories, and every counselor statement is rated on all six dimensions. The dimensions are:

(1) Affective-Cognitive Content, (2) Affective-Cognitive Follow-Change, (3) Content (Topic) Follow-Shift, (4) Present vs. Past or Future (Temporal), (5) Restrictive-Expansive (of client response freedom), and (6) Client-Other Reference.

Interview data used in the study consisted of the first twenty responses occurring after the first five minutes of an initial interview with a female high school student. One tape recorded interview was obtained from each subject. Interview segments were rated by a single judge using the CRS.

The subjects were twenty-nine advanced graduate students enrolled in a year-long National Defense Education Act Counseling Institute at Michigan State University.

The data were analyzed in two phases. In the first, or predictive phase, ten hypothesized relationships were tested by computing Product-Moment correlation coefficients between psychometric and behavioral variables. In the second, or exploratory phase, inter-relationships among variables were investigated.

The ten hypotheses tested were:

Hypotheses concerning relationships between HIT and CRS variables:

H_1 A positive relationship exists between Color scores and Affective-Cognitive Content scores.

H_2 A positive relationship exists between Human Movement scores and Affective-Cognitive Follow scores.

H_3 A negative relationship exists between Form Appropriateness scores and Content Follow scores.

H_4 A positive relationship exists between Form Appropriateness scores and Restrictive scores.

H_5 A positive relationship exists between Form Definiteness scores and Restrictive scores.

H_6 A positive relationship exists between Human Movement scores and Client Reference scores.

Hypotheses concerning relationships between RDS scores and CRS variables:

H_7 A negative relationship exists between RDS scores and Present Reference scores.

H_8 A negative relationship exists between RDS scores and Client Reference scores.

H_9 A positive relationship exists between RDS scores and Restrictive scores.

H_{10} A negative relationship exists between RDS scores and Content Follow scores.

Statistical support at the two and one-half percent level was found for hypothesis H_6. All other hypotheses were not supported at the five percent level and were therefore

rejected.

In the exploratory phase, significant but unpredicted relationships were found between the Barrier and Integration scores of the HIT and the Client Reference scores of the CRS. Multiple regression analyses identified psychometric variables which appeared to be associated with variation in several CRS variables, but identified no variables which were highly related to the Content Follow score or the Affective-Cognitive Follow score. The multiple regression analyses were not exhaustive, nor were they intended to be.

The results were discussed in a context of theory. Statistical support seemed to have been found for the relationship between the perception of human movement in inkblot stimuli and the capacity of empathy. Other theoretical relationships were suggested but lacked statistical significance. Although the results furnished only partial support for theory, no results were found which suggested relationships opposing theory. The failures to achieve statistical significance were attributed to extraneous factors and to error variance present in the measurement instruments used.

The results were viewed as a contribution to knowledge of the validity of the HIT. Few previously reported studies of normal persons had found behavioral differences associated with scores on this instrument. To a lesser extent,

evidence for the validity of the RDS was suggested.

Characteristics of the interview data were also reported because several response types were tentatively identified through use of the CRS. The results suggest that the CRS is a potentially useful tool for research in counseling.

A STUDY OF RELATIONSHIPS BETWEEN COUNSELOR PERSONALITY AND COUNSELING BEHAVIOR

By

William M. De Roo

A THESIS

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DEDICATION

To my wife, Carlene.

The most wonderful woman in the world....

TABLE OF CONTENTS

Page

ABSTRACT

ACKNOWLEDGMENTS ii

DEDICATION iii

TABLE OF CONTENTS iv

LIST OF TABLES AND FIGURES vi

LIST OF APPENDICES viii

Chapter

I. THE PROBLEM 1

Purpose of the Study
Theory
Hypotheses and Assumptions
Organization of the Study

II. REVIEW OF THE LITERATURE 22

Studies of Counselor Personality and Behavior
Interview Content Analysis
Instruments for Personality Assessment
Summary

III. DESIGN OF THE STUDY 49

The Sample
Instrumentation
Collection and Preparation of Data
Analysis of the Data
Statistical Hypotheses
Summary

Page

IV. ANALYSIS OF THE RESULTS 83

Results of the Predictive Phase of the Study
Results of the Exploratory Phase of the Study
Discussion
The Predictive Phase
The Exploratory Phase
Discussion of the Counselor Response System
Summary

V. SUMMARY, CONCLUSIONS, AND IMPLICATIONS FOR FURTHER RESEARCH 128

Summary
Conclusions
Discussion
Implications for Further Research

BIBLIOGRAPHY 145

APPENDICES 153

LIST OF TABLES AND FIGURES

Table or Figure		Page
I-1.	Schematic Representation of Variables in the Counseling Process . . .	6
III-1.	Age and Sex of Subjects	50
III-2.	Subjects' Places of Previous Residence . .	51
III-3.	Academic Test Performance of Subjects . . .	52
III-4.	Interscorer Reliability of CRS Dimensions	56
III-5.	Reliability of Rater	57
III-6.	Name, Abbreviation, and Theoretical Range of Total Score for Each HIT Variable	61
IV-1.	Correlation Coefficients for Hypothesized Relationships Between Measures of Counselor Personality and Interview Behavior	87
IV-2.	Correlation Matrix of Personality and Behavioral Measures	90
IV-3.	Multiple Correlation Coefficients for Affective-Cognitive Dimension	92
IV-4.	Multiple Correlation Coefficients for Affective-Cognitive Follow-Change Dimension	93
IV-5.	Multiple Correlation Coefficients for Content Follow-Shift Dimension	94
IV-6.	Multiple Correlation Coefficients for Present vs. Past and Future Dimension . .	95

Table or Figure	Page

IV-7. Multiple Correlation Coefficients for Restrictive-Expansive Dimension . . . 96

IV-8. Multiple Correlation Coefficients for Client-Other Referent Dimension . . . 97

IV-9. Means and Standard Deviations of CRS Categories 118

IV-10. Product-Moment Correlation Coefficients Between CRS Categories 119

LIST OF APPENDICES

Appendix Page

A. The Counselor Response System with Rating Sheets and Examples 153

B. Means and Standard Deviations Obtained for all Variables 182

C. Frequency Distributions of Counselor Response System Scores 183

D. Intercorrelation Matrix of Holtzman Inkblot Technique Variables and Rokeach Dogmatism Scale Scores 186

CHAPTER I

THE PROBLEM

That the personality characteristics of a counselor or psychotherapist may influence his behavior during counseling or psychotherapeutic interviews, and consequently influence the outcome of the relationship, has long been acknowledged. As early as 1912 Freud mentioned the possible negative effects of unresolved conflicts in the analyst.[1] He developed the concept of countertransference to account for these problems and prescribed the personal analysis of analysts to eliminate or control such problems.

More recently, Rogers has discussed the relevance of counselor personality characteristics to the establishment of effective counseling relationships.[2] He maintains that "whether we are speaking of a guidance counselor, a clinical psychologist, or a psychiatrist" that person should be

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[1]Sigmund Freud, The Dynamics of Transference (Collected Papers, Vol. II; New York: Basic Books, 1959), pp. 312-322. [Original German edition: 1912]

[2]Carl R. Rogers, "The interpersonal relationship: the core of guidance," Harvard Educ. Rev., XXXII, 4, (1962), pp. 416-429.

"warm, spontaneous, real, understanding, and non-judgmental."[1] Clearly, the question of counselor personality characteristics is neither of recent origin nor has it been the sole concern of only one school of counseling theory.

The relationship of counselor personality characteristics to behavior while counseling is but a specific case of a much broader theoretical problem, namely, that of the determination of behavior in general. The literature abounds with studies in which behavioral correlates of personality measurements have been investigated, but relatively few studies have dealt with behavioral correlates of counselor personality characteristics.

Several studies have attempted to distinguish counselors or psychologists from people-in-general on the basis of interest or personality inventories. Others have attempted to predict counseling competence, but these have met with limited success. Still others have attempted to relate specific personality characteristics to specific counseling behaviors, but few studies have succeeded in obtaining evidence for predicted relationships between personality characteristics as assessed by standard psychometric tests and behavioral differences observed in actual

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[1] *Ibid.*, p. 417.

counseling or psychotherapeutic interviews.

Further support for such predicted relationships would be of theoretical importance because it would contribute to the knowledge of behavioral causation and to the knowledge of psychometric test validity. It might also contribute to the understanding of counseling and personality theory.

Of more practical importance, an increased knowledge of the personality correlates of counselors' behavior could provide a basis for developing improved methods of counselor selection and improving counselor education curricula.

Purpose of the Study

It is the purpose of this study to investigate the relationship between selected personality characteristics of counselors and their verbal behavior while counseling. The findings of the study will constitute the basis for further research recommendations on the problem.

Theory

Counseling theory and personality theory are two related areas of behavioral science theory which are relevant to the present study. Pertinent aspects of each will be discussed in the following portions of this chapter.

Counseling Theory

Many definitions of "counseling" have been proposed. A relationship involving two people, one of whom is attempting to help the other solve a problem, is usually implied, but "counseling" may refer to anything from advice-giving to psychoanalysis.[1] Rogers has proposed a definition of the "helping relationship" which is sufficiently broad to include what is usually regarded as counseling. He states:

> By this term [i.e. "helping relationship"] I mean a relationship in which at least one of the parties has the intent of promoting the growth, development, maturity, improved functioning, improved coping with life, of the other....To put it another way, a helping relationship might be defined as one in which one of the participants intends that there should come about, in one or both parties, more appreciation of, more expression of, more functional use of, the latent inner resources of the individual.[2]

Rogers adds the comment that this definition "includes almost all counselor-client relationships," such as educational, vocational, and personal counseling.[3] Although Rogers' definition might include relationships which are not usually considered to be counseling relationships, e.g.,

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[1]Horace B. English and Ava Champney English, A Comprehensive Dictionary of Psychological and Psychoanalytic Terms (New York: Longmans Green & Co., 1958), p. 127.

[2]Carl R. Rogers, "The characteristics of a helping relationship," Personnel and Guid. J. XXXVII, 1, (1958), p. 6.

[3]Ibid.

parent-child relationships, it appears to adequately define counseling.

Rogers' definition is accepted for use in this study, but with particular reference to formal counseling relationships. His client-centered theory of counseling is accepted in principle, but not without cognizance of potential value to be derived from other theoretical orientations.

Counseling, then, is considered to be a process involving two persons in which the desired outcome is altered behavior. This process is illustrated in Figure I-1 and discussed below.

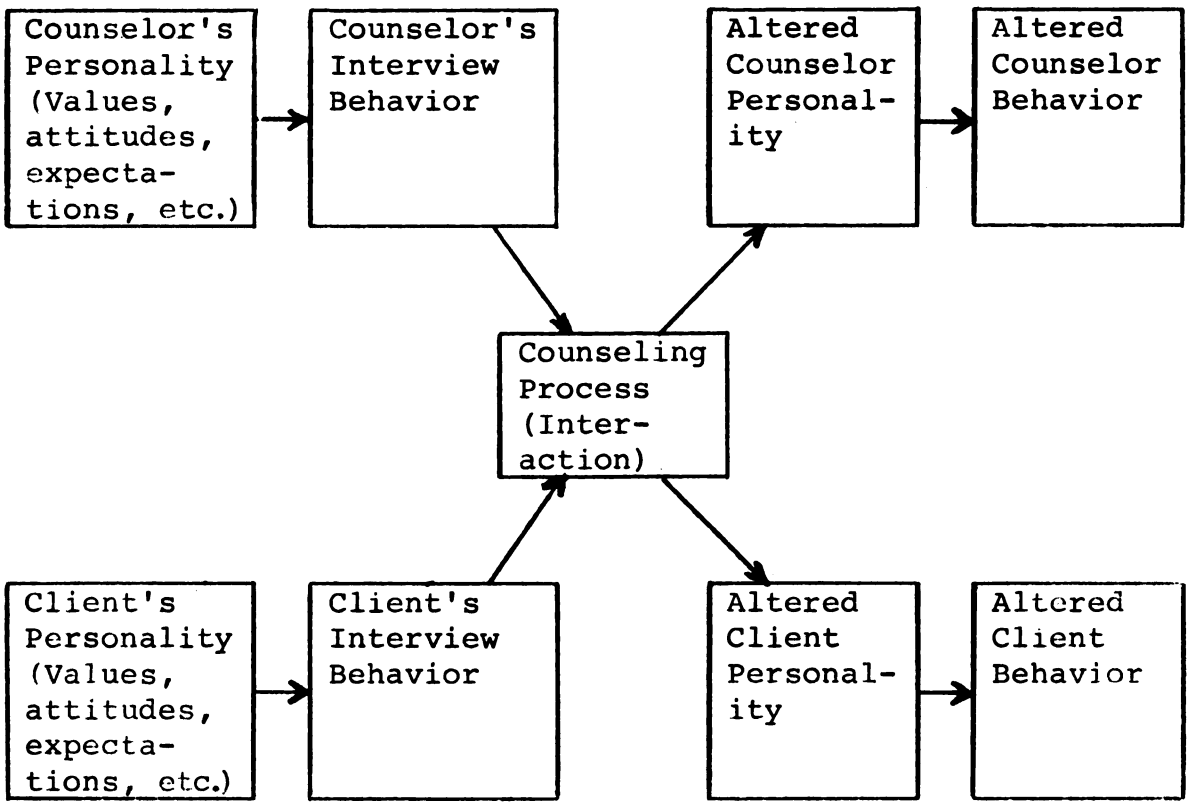
The variables in the counseling process may be grouped as independent and dependent. The independent variables are counselor and client behavior in counseling which are in turn determined by counselor and client personality characteristics. The dependent variables are altered personality characteristics which cause altered behavior.

Personality and behavior are considered to be inseparable, since personality characteristics are manifested through behavior and all of an individual's behavior is determined by his personality. The relationship between personality and behavior will be discussed in greater depth in later portions of this chapter.

Figure I-1

Schematic Representation of Variables

in the Counseling Process[1]



[1]This diagram was adopted, in part, from one used by R. C. Rank, "The Assessment of Counselor-Trainee Perceptions of Interview Protocols Before and After an Intensive Practicum Experience" (Unpubl. Ph.D. dissertation, University of Minnesota, 1964). Rank operated from a communication theory frame of reference. The diagram was modified on the basis of Rogers' description of the counseling process ("A theory of therapy personality, and interpersonal relationships, as developed in the client-centered framework," Psychology: A Study of a Science, Vol. III, ed. Sigm. Koch, New York: McGraw-Hill, 1959), pp. 188ff.

In Figure I-1, both counselor and client personality are shown to be altered by the counseling process. While changes are sought in the client primarily, it is assumed that the counselor will not be unaffected by the relationship, although changes in the counselor would be expected to be considerably smaller and perhaps of a different nature than those occurring in the client. It is change in the client that is considered to be the most desired outcome of counseling, of course, but possible counselor changes must be included in any theoretical representation of the process.

The ultimate criterion of counseling effectiveness is desirable change in client behavior. Some researchers have attempted to demonstrate that desirable personality change results from counseling by administering psychological tests or "Q" sorts to counseling clients.[1] But seldom have changes in everyday behavior been studied by the same rigorous research methods. It has been suggested that since personality changes are not always reflected in everyday behavior, personality changes should be considered to be intervening variables between the independent variables operating in the counseling interaction and the ultimate dependent variables.[2]

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[1]Carl R. Rogers and Rosalind F. Dymond (eds.) Psychotherapy and Personality Change (Chicago: Univ. of Chicago Press, 1954).

[2]Rank, p. 4.

If theory is correct in postulating a relationship between counseling interaction and later client behavior, then it should eventually be possible to specify which counseling behaviors are most appropriate for causation of desired behavioral changes. Unfortunately, such specific cause-and-effect relationships have not been readily established. There are several reasons for this. First, behavior in everyday life is difficult to measure. Second, what is a desirable behavior for one person (e.g. college attendance) may not be for another. Third, counseling interaction is very complex and is therefore difficult to measure.

It must be concluded that the present level of development of the behavioral sciences is such that direct causal relationships between specific counselor behaviors and client behavioral changes have not been adequately established. Thus past research does not provide an adequate basis for labeling specific categories of counselor behavior as "appropriate" or "inappropriate", as "effective" or "ineffective".

The counseling relationship itself develops from the interaction of two sets of initially independent variables, the behaviors of the counselor and those of the counselee. The outcome of the relationship, therefore, is not determined exclusively by either set of variables.

The position of the counselor in the relationship is such that his behavior must be considered to be most critical in determining the outcome. Counselor behavior, in turn, is determined by the personality characteristics of the counselor as modified by prior training and experience. By personality characteristics, in this case, are meant all of an individual's attitudes, expectations, and predispositions to action.

Thus, while counselor behavior is considered to be an independent variable relative to counseling outcomes, it may also be regarded as a dependent variable relative to counselor personality. The relationship of personality characteristics to behavior will be discussed further in a later portion of this chapter.

As has been mentioned above, prior research has not established which counselor behaviors are most appropriate. It is from counseling theory, rather than from research, that indications must be sought regarding relevant behaviors, and only after the appropriateness or inappropriateness of these behaviors has been established by research should such connotations be assigned them.

Rogers proposes that the counseling process should result in increased self-awareness and self-regard on the

part of the client.[1] He states that for the client to develop in this manner, the counselor must (1) be "congruent in the relationship" (i.e. be genuine, be "himself"); (2) experience "unconditional positive regard" for the client (be acceptant of, "prize" the client); (3) experience "empathic understanding of the client's internal frame of reference" and (4) communicate these conditions to the client.[2] Measurement of these aspects of counselor behavior has been difficult, but some success has been achieved.[3,4,5]

Robinson, proceeding from communication theory, has suggested the following as relevant dimensions for describing counselor behavior: (1) acceptance of the client, (2) dealing with the core of the client's remarks, (3) division of responsibility, and (4) amount of lead-

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[1]Rogers, in Psychology: A Study of a Science, Vol. III, p. 193 & ff.

[2]Ibid.

[3]C. B. Truax, "A scale for the measurement of accurate empathy," Psychiatric Institute Bull., I, 12 (Madison, Wisc.: Wisconsin Psychiatric Institute, Univ. of Wisconsin, 1961).

[4]Carl R. Rogers, Harvard Educ. Rev., XXVII, 4, pp. 416-429.

[5]C. R. Truax and R. R. Carkhuff, "Theory and research in counseling and psychotherapy" Personnel and Guid. J., XLII, (1964) pp. 860-866.

ing.[1] Studies in which these dimensions were used have yielded partial, but not complete, support for their relevance.[2]

It may be observed that Robinson's dimensions describe, at least in part, several of Rogers' desirable counselor characteristics. "Acceptance of the client" is similar to "unconditional positive regard", and "Dealing with the core of client's remarks" is related to "empathic understanding",for example. Furthermore, the client-centered approach implies a division of responsibility and leading.

Philosophical concepts such as those proposed by Rogers, and to some extent the dimensions proposed by Robinson, are not readily amenable to objective description. To adequately describe them for measurement purposes these concepts must be reduced to the form of specific behaviors which either are present or absent in a given sample of behavior. If these concepts are not sufficiently objectified, assessment of their presence in the interview situation must be based upon subjective

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[1]Francis P. Robinson, Principles and Procedures in Student Counseling (New York: Harper & Bros., 1950), p. 72.

[2]Robert L. Betz, "A Study of the Effects of Two Types of Group Counseling on the Counseling Performance of Counselor Candidates" (Unpubl. Ph.D. dissertation, Michigan State University, 1963), p. 28.

judgements, with a corresponding loss in reliability.

It appears that the description of counselor behavior may take one of the two approaches. If measurement of a single concept or dimension is sought, only those behaviors pertinent to that concept or dimension should be considered. On the other hand, if measurement of more than one concept is desired, then behaviors pertinent to several concepts or dimensions should be considered. Because counseling behavior is assumed to be multidimensional, the last approach was taken in this study.

The following descriptive dimensions of counselor verbal behavior are proposed as being more objective than broader concepts while remaining theoretically relevant. They do not carry a direct connotation of "appropriateness" or "effectiveness," however. Nor is it likely that they are all-inclusive.

The proposed dimensions are described as follows:

1. The extent to which the counselor verbalizes affect, both the client's and his own.
2. The consistency of affect level between client statements and counselor responses.
3. The extent to which topics of discussion are followed, rather than shifted, in counselor responses.

4. The extent to which the counselor restricts or expands the client's freedom to respond as he (the client) desires.
5. The extent to which the counselor refers to the present time or to the past and future.
6. The extent to which the counselor refers to the client or to other persons.

The above dimensions are derived primarily from both Rogers and Robinson. Verbalization of affect is considered to be an important dimension because communication of affect is essential to effective communication of empathic understanding. Verbalization of counselor affect is also considered to be an indication of counselor congruence. Affect level consistency is regarded as an indication of empathic understanding, dealing with the core of client remarks, and the degree of responsibility and lead assumed by the counselor. Counselor-initiated topic changes are considered to be primarily indicative of division of responsibility and amount of leading. The extent to which the counselor permits freedom of response is also indicative of the degree of responsibility and leading. It should also serve as a measure of the counselor's acceptance of the client, a component of unconditional positive regard. Temporal reference, the extent to which the counselor refers to

present events rather than to the past and future, may be an indication of acceptance and counselor congruence. This dimension is included primarily because it appears to have value for comparing levels and kinds of counseling. Reference to the client would seem to have similar value but is especially considered to be an indication of unconditional positive regard and counselor congruence.

These six dimensions, therefore, are considered to represent characteristics of counselor communication which are of theoretical importance. Because the counseling interview situation is such that it allows a range of verbal behaviors to occur, it is anticipated that these dimensions will reflect differences between counselors. Verbal behavior, like all behavior, is determined by an individual's unique personality, and therefore relationships should exist between verbal behaviors and personality characteristics.

Relevant aspects of personality theory will be discussed in the following section of this chapter.

Personality Theory

It is the purpose of this study to investigate relationships between personality characteristics of counselors and their behaviors while counseling. The appro-

priateness of such investigation to an increased understanding of the process and outcome of counseling was discussed in the previous section, Counseling Theory. In the present section the relationship of personality characteristics to behavior will be discussed in more detail.

The causal relationship between personality characteristics and behavior is not treated in depth by Rogerian theory. Rather, the relationship appears to be accepted as an implicit one. This relationship is accepted as a necessary basic assumption in the theory and design of the present study.

Interpreted broadly, the term personality refers to all those aspects of an individual which determine his unique adjustment to his environment. This would include all of the individual's values, attitudes, and expectations, whether or not they are well-defined or readily available to consciousness. Another way to define personality is to say that it is the individual's predispositions to actions.

Two important characteristics of personality are of particular relevance. First, personality is consistent. That is to say, although personality changes over time, it is relatively stable.

A second characteristic of personality is its inaccessability to direct observation and measurement.

Personality characteristics can only be inferred from behavior. The principle of psychological determinism maintains that all individual behavior is determined by that individual's personality characteristics.

These two characteristics of personality form the basis for psychological testing. By presenting an individual with certain tasks to be performed in the test situation, inferences can be made about that individual's personality. The extent to which inferences can be made is limited only by the precision and range of the tests used. It would not be possible to make such inferences, however, if there were not a relative consistency in behavior between the test situation and typical everyday behavior. The consistency in behavior results from the consistency of personality characteristics. Indeed, personality characteristics may be considered simply to be a succinct description of the consistent elements of man's behavior.

It almost goes without saying that the relationships to be investigated in this study are expected to exist simply because behavior in the test situation is expected to be to some extent consistent with behavior in the counseling situation.

The basis for projective personality assessment, the

projective hypothesis, derives directly from the principle of personality consistency. Sargent and Mayman state:

> The projective hypothesis assumes that not only what a person selects to perceive among the myriad stimuli which impinge upon him in daily life, but how he organizes or fails to organize, and the way in which he responds, reveal important aspects of character and pathology.[1]

The projective test situation seeks to elicit behavior from which can be inferred the typical perceptual and organizational activities of the individual. This is accomplished by presenting the individual with ambiguous stimuli to which responses are made, since the freedom to respond uniquely is inversely related to the degree of structure in the stimuli.

This inverse relationship is illustrated by the following examples. A military drill team presents a highly structural situation. The uniformity and precision demanded preclude any display of unique individual behavior. At the other extreme, a highly unstructured situation exists in a festival such as the Mardi Gras in which "anything goes".

Ambiguity and a relative lack of structure are characteristics common to both the projective test situation

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[1]Helen D. Sargent and M. Mayman, "Clinical Psychology" American Handbook of Psychiatry, Vol. II, ed. S. Arieti (New York: Basic Books, 1959), p. 1719.

and the counseling situation. The similarity between ambiguous inkblots and the many aspects of client responses which a counselor perceives, suggests that there may be relationships between responses to both.

Projective techniques such as the well-known Rorschach or the recently developed Holtzman use highly ambiguous stimuli and therefore elicit a wide range of behaviors from which a broad spectrum of personality characteristics can be inferred. Other personality assessment methods have been designed to measure specific aspects of personality. The Rokeach Dogmatism Scale, for example, seeks to measure only a particular configuration of personality characteristics.

Pertinent research studies in which these instruments were used will be reviewed in Chapter II, Review of the Literature. Expected relationships between counseling behavior and personality characteristics, as identified by these instruments, will be discussed in Chapter III, Design of the Study. They are presented in the present chapter as research hypotheses.

Hypotheses and Assumptions

Ten hypotheses concerning the relationships between test performance and counseling behavior are tested in this

study.

Hypotheses concerning projective test performance and counseling behavior:

H_1 The perception of color is positively related to verbalization of affect.

H_2 The perception of human movement is positively related to consistency of affect level between counselor statements and preceding client statements.

H_3 The perception of appropriate form is positively related to counselor-initiated changes in discussion topic.

H_4 The perception of appropriate form is positively related to restriction of client freedom of response.

H_5 The perception of definite form is positively related to restriction of client freedom of response.

H_6 The perception of human movement is positively related to reference to the client.

Hypotheses concerning the relationship of dogmatism to counseling behavior:

H_7 Dogmatism is negatively related to reference to the present time.

H_8 Dogmatism is negatively related to reference to the client.

H_9 Dogmatism is positively related to restriction of client freedom of response.

H_{10} Dogmatism is positively related to counselor-initiated changes in discussion topic.

Basic Assumptions

The basic assumptions which underlie the research are:

1. Behavior can be measured.
2. Counselor behavior can be validly judged from tape recorded samples of counseling interviews.
3. Twenty counselor statements or responses from an initial interview with a client reveal measurable behaviors which are unique to that individual counselor.
4. Extraneous elements such as differences between clients and the problems presented by them will

be evenly distributed among the interview samples.

5. The instruments used for personality assessment yield valid results from which personality characteristics can be inferred.

Organization of the Study

The general format of the study is as follows: In chapter two a review of pertinent literature is presented. The third chapter contains the methods used in data collection and organization, and states statistical techniques used for analysis. The results of the study are reported in chapter four, and the summary, conclusions, and implications for future research are reported in chapter five.

CHAPTER II

REVIEW OF THE LITERATURE

In this chapter prior research relevant to the present study is reviewed. Three areas of research are included, namely, studies of counselor personality and behavior, studies and methods of interview content analysis, and studies and instruments of personality assessment. The chapter is concluded with a summary of previous research findings.

Studies of Counselor Personality and Behavior

Numerous studies have been made of counselors and psychotherapists, often without distinguishing between the levels of counseling and psychotherapy practiced by the persons studied. In view of the definition of the term "counselor" proposed in Chapter I, The Problem, little distinction will be made in this review between "counselor" and "psychotherapist." While differences are implied between these two terms, it is assumed that there are greater similarities than differences between "counselors" and "psychotherapists." The terms are frequently used interchangeably in the literature.

In this portion of the review general studies of counselor personality and of counselor behavior, and studies seeking relationships between counselor personality and behavior, will be examined.

In 1953, Cottle reviewed previously published research pertaining to personality characteristics of counselors.[1] Most of the studies reviewed had sought to distinguish counselors from persons-in-general through use of questionnaires, rating scales, personality checklists and interest inventories. Some studies had attempted to distinguish between kinds of counselors by such methods. Although apparently meaningful differences had been found, Cottle concluded that:

> In the light of the above data it seems obvious that most of the attempts to evaluate the personal characteristics of counselors are sporadic and unrelated. Many reports are based on subjective judgments of a questionable nature.[2]

Shortly thereafter, Cottle published results of a study which purported to demonstrate significant differences on the Guilford-Zimmerman Temperament Scale between college

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[1] W. C. Cottle, "Personal Characteristics of Counselors: I," Personnel and Guid. J. XXXI, (1953), pp. 445-450.

[2] Ibid., p. 450.

counselors and college students.[1] However, this study was so poorly controlled that the results appear to be unreliable. More recently, Klein and others were able to discriminate between clinical psychologists, psychiatrists, and social workers using the Strong Vocational Interest Blank.[2]

Differences in the counseling behaviors of individual counselors have been found in a number of studies. One of the earliest was a study reported by Porter in 1943. He found that counselors differed in "directiveness".[3]

Later studies were reported by Danskin and Robinson and by Dipboye. Danskin and Robinson found differences between counselors in "degree of lead."[4] Dipboye found that individual counselors differed their counseling styles

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[1]W. C. Cottle and W. W. Lewis, Jr. "Personality characteristics of counselors: II Male counselors responses to the MMPI and GZTS," J. Counsel. Psychol., I, (1954) pp. 27-30.

[2]F. L. Klein, D. M. McNair, and M. Lorr, "SVIB scores of clinical psychologists, psychiatrists, and social workers," J. Counsel. Psychol., IX, (1962), pp. 176-179.

[3]E. H. Porter, "The development and evaluation of a measure of counseling interview procedures," Educ. Psychol. Measmt., III (1943) pp. 105-126, 215-238.

[4]D. G. Danskin and F. P. Robinson, "Differences in 'degree of lead' among experienced counselors" J. Counsel. Psychol., I, (1954), pp. 78-83.

according to the kinds of topics being discussed.[1]

Counseling behavior has also been studied in relation to other variables. Ellsworth found that counselors' verbalization of feeling was consistent between counseling interviews and a particular non-interview situation, i.e. case conferences.[2] Differences in counseling resulting from different training experiences have been reported by Betz[3] and by Parker and Kelly[4] while differences attributable to levels of experience have

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[1]W. J. Dipboye, "Analysis of counselor style by discussion units," J. Counsel. Psychol., I, (1954), pp. 21-26.

[2]Sterling G. Ellsworth, "The consistency of counselor feeling-verbalization," J. Counsel. Psychol., X, (1963), pp. 356-361.

[3]Robert L. Betz, A Study of the Effects of Two Types of Group Counseling on the Counseling Performance of Counselor Candidates (Unpubl. Ph.D. dissertation, Michigan State University, 1963).

[4]C. A. Parker and B. C. Kelly, "The Effects of Interpersonal Laboratory Experience on the Behavior of Counselors in Training," A paper presented at the American Personnel and Guidance Association Convention, Minneapolis, Minn., April 13, 1965.

been suggested by Feidler,[1] Rosenberg,[2] Strupp,[3] Russel and Snyder,[4] and by Abeles.[5] Behavioral differences accompanying differences in theoretical orientation were found by Strupp[6] in spite of Fiedler's earlier but less well controlled study.[7]

Psysiological correlates of verbal responses have been reported by Rigler[8] and by Russel and Snyder.[9]

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[1]F. E. Fiedler, "Quantitative studies on the role of therapists' feelings toward their patients," Psychotherapy: Theory and Research, ed. O. H. Mowrer (New York: Ronald Press, 1953).

[2]E. H. Rosenberg, "Correlations of a Concept of Therapeutic Sensitivity" (Unpubl. Ph.D. dissertation, Michigan State University, 1962).

[3]Hans H. Strupp, "Psychotherapeutic technique, professional affiliation, and experience level," J. Consult. Psychol., IXX (L955), pp. 97-102.

[4]Peter D. Russel and William U. Snyder, "Counselor anxiety in relation to amount of clinical experience and quality of affect demonstrated by clients," J. Consult. Psychol., XXVII (1963), pp. 358-363.

[5]Norman Abeles, "The concept of therapeutic sensitivity and its relationship to training," Amer. Psychologist, XVIII (1963), p. 427.

[6]Hans H. Strupp, "A multidimensional comparison of therapist activity in analytic and client-centered therapy." J. Consult. Psychol., XXI (1957), pp. 301-308.

[7]F. E. Fiedler, "The concept of the ideal therapeutic relationship," J. Consult. Psychol., XIV (1950), pp. 239-245.

[8]D. Rigler, "Some Determinants of Therapist Behavior" (Unpubl. Ph.D. dissertation, University of Michigan, 1957).

[9]Peter D. Russel and William U. Snyder, J. Consult. Psychol., XXVII, pp. 358-363.

Differences in counselor verbalization as a function of clients and problem areas discussed by them have been suggested by Bandura and others,[1] Canon[2] and by van der Veen.[3]

Studies of the relationship of counselor behavior to measurable changes in clients have been reviewed by Rogers and Dymond[4] representing the nondirective school, and by Reznikoff and Toomey[5] representing a psychiatric orientation. Although neither reported changes in everyday behavior resulting from therapeutic intervention, measurable personality and physiological changes were found.

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[1]A. Bandura, D. H. Lipsher, and Paula E. Miller, "Psychotherapists' approach-avoidance reactions to patients' expression of hostility," J. Consult. Psychol., XXIV, 1 (1960), pp. 1-8.

[2]Harry James Canon, "Personality variables and counselor-client affect," J. Consult. Psychol., XI, 1, (1964), pp. 35-46.

[3]Ferdinand van der Veen, "Effects of the therapist and the patient on each other's therapeutic behavior," J. Consult. Psychol., IXXX, 1 (1965), pp. 19-26.

[4]Carl R. Rogers and Rosalind F. Dymond, eds., Psychotherapy and Personality Change (Chicago: Univ. of Chicago Press, 1954).

[5]Marvin Reznikoff and Laura C. Toomey, Evaluation of Changes Associated with Psychiatric Treatment (Springfield, Illinois: Thomas, 1959).

Several studies have investigated the relationship of various counselor personality attributes to counseling behavior. Bandura and others found that counselors who more readily verbalized hostility when among their colleagues tended to permit more client verbalization of hostility than did those counselors who less readily verbalized hostility when with colleagues.[1] Using somewhat similar methods, both Lerman and Barnes found that counselors tended to avoid discussing with clients those areas in which they themselves had personality conflicts.[2,3] In none of these studies were standarized personality instruments used to assess counselor personality. Rather, self ratings and peer ratings of self were used.

Standardized instruments have been used by others with partial success. Brams attempted to find correlates of judged "effective communication" using the Strong

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[1]A. Bandura, D. H. Lipsher, and Paula E. Miller, J. Consult. Psychol., XXIV (1960), pp. 1-8.

[2]Hannah Lerman, "A Study of Some Effects of the Therapist's Personality and Behavior and of the Client's Reactions in Psychotherapy" (Unpubl. Ph.D. dissertation, Michigan State University, 1963).

[3]E. J. Barnes, "Psychotherapists' Conflicts, Defense Preferences, and Verbal Reactions to Certain Classes of Client Expressions" (Unpubl. Ph.D. dissertation, Michigan State University, 1963).

Vocational Interest Blank, Millers Analogies Test, Minnesota Multiphasic Personality Inventory, Manifest Anxiety Scale, Bills Index of Adjustment and Values, and the Berkely Questionnaire, as well as number of graduate hours in counseling psychology.[1] The only significant relationship found was between the criterion and the Berkeley questionnaire, a measure of "tolerance for ambiguity."

Stefflre, King, and Leafgren found that counselor trainees judged by their peers to be potentially better counselors had more appropriate Strong scores, lower Dogmatism Scale scores and performed better academically than others, while no significant differences were found with such instruments as the Bills Index, Taylor Anxiety Scale, and Edwards Personal Preference Schedule.[2]

Mueller and Abeles, using ratings of interview recordings by counselor trainees and their peers, found a significant relationship between a measure of empathy and the movement score of the Holtzman Inkblot technique.[3]

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[1]Jerome M. Brams, "Counselor characteristics and effective communication in counseling," J. Counsel. Psychol., VIII (1961), pp. 25-30.

[2]Bufford Stefflre, B. King, and F. Leafgren, "Characteristics of counselors judged effective by their peers," J. Couns. Psych., IX (1962), pp. 335-340.

[3]William J. Mueller and Norman Abeles, "The Components of empathy and their relationship to the projection of human movement responses," J. Proj. Tech., XXVIII, 3 (1964), pp. 322-330.

Perception of movement in Rorschach-type projective techniques is said to be indicative of empathic ability. This study appears to be the only one reported in the literature in which a projective technique was used to assess a facet of counselor personality.

Only limited success has been achieved in predicting counseling effectiveness by use of paper and pencil tests. Kelly and Fiske's early study produced only a few adequate predictors of judged counseling competence from among the Millers Analogies Test, SVIB, MMPI, Allport-Vernon Study of Values, and the Guilford Martin Battery of Personal Inventories.[1] Similarly, Snyder was unable to construct a MMPI scale which could discriminate between clinical psychology students who had been rated as potentially good and poor clinicians.[2]

In contrast, Rank was able to predict success in a counseling practicum experience using a unique instrument called the Film Test of Counselor Perception.[3] In a dif-

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[1]E. L. Kelly and D. W. Fiske, The Prediction of Performance in Clinical Psychology (Ann Arbor, Michigan: Univ. of Michigan Press, 1951).

[2]William U. Snyder, "The personality of clinical students," J. Counsel. Psychol., II (1952), pp. 47-52.

[3]Richard C. Rank, "The Assessment of Counselor-trainee Perceptions of Interview Protocols Before and After an Intensive Practicum Experience (Unpubl. Ph.D. dissertation, University of Minnesota, 1964).

ferent, but equally unique, investigation Mueller attempted to predict counselor personality characteristics from ratings of interviews conducted by the counselors.[1] The attempt was not successful because of failure to achieve inter-judge reliability, however.

From the studies reviewed above, the conclusion must be drawn that not only do counselors vary in counseling behavior among themselves and from others, but also that these differences may be related to many variables including counselor personality characteristics. Results have not been consistently obtained, however. It appears that further research is needed to more firmly establish relationships between personality characteristics and counseling behavior.

Interview Content Analysis

The study of counseling behavior requires methods for analyzing that behavior. A few of the methods developed for this purpose have been mentioned earlier in this chapter in connection with studies of counselor personality and behavior. A more detailed review of counseling content analysis systems follows.

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[1]William J. Mueller, "The prediction of personality inventory responses from tape analyses," Personnel and Guid. J., XLII (1963), pp. 368-372.

Dittes has compiled an extensive history of the development of interview content analysis systems.[1] He divided the various systems into two groups, those with easily defined categories and those with theoretically based categories. Apparently it was assumed that a system soundly based on theory could not employ easily defined categories, but this assumption is open to criticism.

Early attempts to analyze interview content aimed at objectifying verbal data and hence tended to employ "easily defined" categories. The first content analysis study was that of Lasswell, in which references to the interviewer by the client were counted.[2] Thereafter, frequency of nouns, verbs, and pronouns were counted by several investigators.[3] Dittes concluded that "the authors of these simple systems have all tended to slight the problems of demonstrating a valid relation between the indicator and that which it is asserted to indicate."[4]

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[1]James E. Dittes, "Previous studies bearing on content analysis in psychotherapy," in John Dollard and Frank Auld, Jr., Scoring Human Motives: A Manual (New Haven: Yale University Press, 1959).

[2]H. D. Lasswell, "A provisional classification of symbol data," Psychiat., I (1938), pp. 197-204.

[3]Dittes, p. 429.

[4]Ibid.

Later studies have tended to develop categories of response analysis from theoretical constructs. Such systems generally require that inferences must be made by the judge or rater. The client-centered school of counseling and psychotherapy has made the greatest number of studies of this kind, but many of these have focused on client outcomes rather than on counselor-client interaction.[1,2]

Client-centered investigations were initiated in 1943 by Porter, who sought to measure "directiveness" of counselors through use of several categories which were relatively objective.[3] Shortly thereafter, Snyder developed a widely used analysis system which employs such categories as "lead taking," "reflective or re-educative," "relationship," and "supportive" responses.[4,5] Strupp,

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[1]Rogers and Dymond.

[2]D. S. Cartwright, "Annotated bibliography of research and theory construction in client-centered therapy," J. Counsel. Psychol., IV (1957), pp. 87-100.

[3]E. H. Porter, Jr., Educ. Psychol. Measmt., III, pp. 105-126, 215-238.

[4]William U. Snyder, "An investigation of the nature of non-directive psychotherapy," J. Gen. Psychol., XXXIII (1945), pp. 193-223.

[5]William U. Snyder, Dependency in Psychotherapy (New York: Macmillan, 1963).

although not claiming exclusive allegiance to client-centered theory, has been influenced by it. This influence is reflected in a system he developed after rejecting as unsuitable an adaptation of Bales' Interaction Process Analysis.[1,2,3,4] Interestingly, Bales' method, developed for studying group interaction, was itself influenced by previous client-centered methods.[5]

Strupp's content analysis system seeks to measure the "dynamic focus" of the counselor (acceptance of the client's formulation as opposed to redirection), "depth-directedness" (degree of inference), and "type of therapeutic activity", including such categories as clarification interpretation, structuring, and several others.

Psychoanalytic theory has contributed little to content analysis, other than indirectly.[6] However, an analy-

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[1]Hans H. Strupp, "An objective comparison of Rogerian and Psychoanalytic techniques," J. Consult. Psychol., IXX (1955), pp. 1-7.

[2]Strupp, J. Consult. Psychol., IXX, pp. 97-102.

[3]Hans H. Strupp, "A multidimensional comparison of therapist activity in analytic and client-centered therapy," J. Consult. Psychol., XXI (1957), pp. 301-308.

[4]Hans H. Strupp, "A multidimensional system for analyzing psychotherapeutic techniques," Psychiat., XX (1957), pp. 293-306.

[5]R. F. Bales, Interaction Process Analysis (Cambridge, Massachusetts: Addison-Wesley, 1950).

[6]Dittes, p. 334.

sis method developed by E. J. Murray,[1] and subsequently adopted by Dollard and Auld[2] has incorporated some psychoanalytic concepts. Particular attention is given to drive reduction by this system, which also appears to require a higher degree of inference-making by the scorer than does any other system.

Robinson, working within a framework of communications theory, has sought to measure "degree of lead" displayed by the counselor.[3] His system makes use of objectivity defined categories indicating varying amounts of lead-taking.

Since Dittes' review was published, several new approaches to content analysis have been attempted. Winder and Bandura have assessed approach to and avoidance of topics of discussion.[4,5] Representatives of the client-

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[1]E. J. Murray, "A content-analysis method for studying psychotherapy," Psychol. Monogr. LXX, 13 (1956), whole no. 420.

[2]John Dollard and Frank Auld, Jr., Scoring Human Motives: A Manual (New Haven: Yale University Press, 1959).

[3]Francis P. Robinson, Principles and Procedures in Student Counseling (New York: Harper & Bros., 1950.)

[4]Bandura, Lipsher, and Miller, J. Consult. Psychol., XXIV, pp. 1-8.

[5]C. L. Winder, F. Z. Ahmad, A. Bandura, and Lucy C. Rau, "Dependency of patients, psychotherapists' responses, and aspects of psychotherapy," J. Consult. Psychol., XXVI (1962), pp. 129-134.

centered school have attempted, with some initial success, to define and measure such abstract concepts as empathy, unconditional positive regard, and counselor sensitivity.[1,2,3,4] Further investigation of such concepts as "interpersonal exploration" and "specificity or concreteness of interaction" has been proposed by Truax and Carkhuff.[5]

A promising technique for analyzing counselor-client interaction has been developed by Amidon from a method used by Flanders to study teacher-pupil inter-

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[1]C. B. Truax, "A scale for the measurement of accurate empathy," Psychiat. Inst. Bull., I, 12 (1961), Wisconsin Psychiatric Institute, University of Wisconsin.

[2]Arnold Buchheimer and Sara Carter, "An analysis of empathic behavior of counselor trainees in a laboratory practicum," A paper presented at the American Psychological Association Convention, Aug. 29, 1958, Abstract in Amer. Psychologist, XIII (1958), p. 352.

[3]C. B. Truax, "Tentative scale for the measurement of unconditional positive regard," Discussion Papers, No. 23 (1962), Wisconsin Psychiatric Institute, University of Wisconsin.

[4]Jame S. O'Hern and Dugald S. Arbuckle, "Sensitivity: A measurable concept?", Personnel and Guid. J., XLII, 6 (1964), pp. 572-576.

[5]C. B. Truax and R. R. Carkhuff, "Theory and research in counseling and psychotherapy," Personnel and Guid. J., XLII (1964), pp. 860-866.

action.[1,2] Although not acknowledged as such by the author, this system appears to have been influenced by a non-directive orientation. Amidon divides interview content into three categories. These are "counselor talk", "client talk" and "other" (i.e., silence). The "counselor talk" category is further divided into "direct" and "indirect" influence.

Operating from social psychological theory, Foa has proposed analyzing behavior in any dyadic (one-to-one) relationship according to three categories or facets: (1) The content of the relationship (acceptance or rejection), (2) the object of the relationship (self or other), and (3) the mode of the relationship (emotional or social).[3] This approach has not yet been applied to counseling behavior, but the proposed categories appear to have theoretical relevance and further research use of this system seems warranted.

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[1]Edmund Amidon, "A technique for analyzing counselor-counselee interaction," Counseling and Guidance: A Summary Review, ed. James F. Adams (New York: Macmillan, 1965), pp. 50-56.

[2]N. A. Flanders, Interaction Analysis in the Classroom (Minneapolis: University of Minnesota Press, 1960).

[3]U. G. Foa, "The structure of interpersonal behavior in the dyad," Mathematical Methods in Social Group Processes, ed. Criswell, Solomon and Suppes (Palo Alto, California: Stanford University Press, 1962), pp. 166-179.

No review of content analysis methods would be complete without some mention of the techniques used to obtain and record samples of counseling interaction, because the accuracy of any analysis system will be largely determined by the accuracy with which the raw material is reproduced.

Note-taking by the counselor or therapist dates from Freud, but notes cannot possibly be made sufficiently accurate for precise investigation without interfering with counseling interaction. The use of phonographic techniques to record verbal behavior in interviews was initiated by Zinn in 1929.[1] In spite of the objections raised by Ferenczi, but with the apparent blessings of Freud himself, Zinn began to record psychoanalytic interviews he conducted in New York.

Symonds, in 1936, was one of the first to record counseling interviews with high school students. In that same year, Covner and Rogers began to record counseling interviews at Ohio State University.[2] Rogers has recorded extensively since then, readily adopting wire and tape recording techniques as these were developed. He and

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[1]Dittes, p. 345.

[2]*Ibid.*, pp. 348-349.

others have used motion pictures of interviews for analysis and teaching purposes. The recently developed closed-circuit television and video-tape recording techniques have already been utilized to effectively record non-verbal behaviors which are lost when sound recordings alone are used.[1,2]

Every method of interview recording requires placement of at least a microphone in the counseling room, and ethical considerations demand that permission to record be obtained from both the counselor and the client. Yet virtually all researchers have regarded the effect of these conditions upon interview behavior to be of little consequence. Recent research by Roberts and Renzaglia suggests, however, that knowledge that the interview is being recorded can significantly alter interview content.[3]

In view of the wide variety of content analysis systems which have already been developed, it might appear

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[1]Norman Kagan, David Krathwohl, and Ralph Miller, "Stimulated recall in therapy using video tape--A case study," J. Couns. Psychol., X (1963), pp. 237-243.

[2]G. R. Walz and J. A. Johnston, "Counselors look at themselves on video tape," J. Couns. Psychol., X (1963), pp. 232-236.

[3]Ralph R. Roberts, Jr., and Guy A. Renzaglia, "The influence of tape recording on counseling," J. Counsel. Psychol., XII (1965), pp. 10-16.

that a super-saturation exists. Further consideration of the matter suggests, however, that such is not the case. Differing theoretical orientations require measurement of different response characteristics. Some systems are simpler to use than others, a matter of no little concern when large numbers of interviews are to be analyzed. In spite of the proliferation of analysis systems in recent years, each may be criticized for what it does not measure. Auld and Murray, in their review of content analysis literature, discuss these problems, and in so doing, attempt to justify the state of affairs:

> The practicing clinician often feels that the measured part of the therapeutic transaction is pitifully small alongside the complex of stimuli that he senses as a participant observer. Yet it seems unfair to expect any single content-analysis system to describe all of this complex situation. We would probably make a fairer appraisal of content systems if we expected each system to deal with only a part of this complexity. An adequate descriptive and causal analysis of psychotherapy will most likely require a large number of measures, each of them shown to be reliable and valid for its limited purpose. Measures of the content of clients' and therapists' utterances will undoubtedly be supplemented by measures of other, nonverbal responses of client and therapist. By the combination of a variety of measures, each useful in its own domain, we may in time construct an adequate study of psychotherapy.[1]

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[1]Frank Auld, Jr., and E. J. Murray, "Content-analysis studies of psychotherapy," Psychol. Bull., LII (1955), pp. 377-395.

It therefore appears that new methods of analysis will continue to be proposed to fill gaps left by existing systems. The above review suggests possible directions for further development.

A desirable quality in content analysis systems is the capability for use with live or tape recorded interviews, since much data is lost if content must be reduced to typescript form. Another desirable quality is the use of objectively defined categories so that scorers need not make grossly subjective judgments.

Still another area for improvement exists. All existing methods either assign every counselor statement to one of several mutually exclusive categories or evaluate all statements on a single dimension. Foa's approach appears to have potential for use in counseling research. If it were followed, every statement would be assessed on each of a small number of theoretically relevant dimensions.

Another objective which should ultimately be sought is evaluation of counselor-client interaction, since the behaviors of both are so much interrelated in the counseling situation. Before this can be attempted, counselor and client response analysis systems must be improved beyond their present state.

Having reviewed methods of content analysis and implications for their further development, instruments showing potential value for assessment of counselor personality characteristics will be reviewed.

Instruments for Personality Assessment

Studies of counselor personality have used interest tests extensively as well as numerous paper-and-pencil personality instruments. While results of these have been found to correlate with criterion measures, none have proved suitable for predictive purposes. An ideal instrument would be one which not only measures certain theoretically relevant personality characteristics but also assesses a broad spectrum of personality.

This being the case, it seems unusual that projective techniques such as the Rorschach have not been used more extensively. A possible explanation for this may lie in the lack of appropriate statistical techniques for handling Rorschach data.

The major weaknesses of the Rorschach have been eliminated in the Holtzman Inkblot Technique.[1,2] The

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[1]H. Barclay, Review of Inkblot Perception and Personality, by Wayne H. Holtzman and others, J. proj. Tech., XXVI (1962), pp. 248-249.

[2]Wayne H. Holtzman and others, Inkblot Perception and Personality (Austin, Texas: University of Texas Press, 1961).

similarities between the two techniques permit testing hypotheses derived from Rorschach theory by use of the Holtzman, however.

Because the Holtzman was released for general use only recently, little research using it (other than standardization and normative studies) has yet been published. The Holtzman has been shown to be capable of discriminating between normal and psychotic groups.[1] Two studies have used the Holtzman with groups of normal subjects and have obtained significant results. In the first study, Fernald[2] found that the absolute number of "Human" percepts correlated with peer ratings of social interest among college students.

Mueller and Abeles are apparently the only researchers who have used the Holtzman to study counselor personality.[3] They found that production of "Human Movement" percepts on the Holtzman correlated with the degree to which counselors' interview behavior was accurately perceived by peer-observers. This was viewed as one component of accurate empathy.

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[1]Ibid.

[2]Peter S. Fernald, "The Human Content Response in the Holtzman Inkblot Technique" (Unpubl. Ph.D. dissertation, Purdue University, 1963).

[3]Mueller and Abeles, J. Proj. Tech., XXVIII, pp. 322-330.

Although Mueller and Abeles are the first to have studied them, several testable relationships between personality characteristics and counseling behavior are suggested by the vast Rorschach literature. For example, Schachtel has proposed that the perception of human movement is an indicator of the capacity for empathy, while the use of color in percepts is related to affectivity.[1,2] Rickers-Ovsiankina has summarized the various Rorschach determinants and content variables as well as their apparent personality correlates.[3] Other reviews of Rorschach literature have been assembled by Sherman, Klopfer and others, Rabin and Haworth, and Anderson and

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[1]E. G. Schachtel, "On color and affect," Psychiat., VI (1943), pp. 393-409.

[2]E. G. Schachtel, "Projection and its relation to character attitudes and creativity in the kinesthetic responses," Psychiat., XIII (1950), pp. 69-100.

[3]Maria A. Rickers-Ovsiankina, ed., Rorschach Psychology (New York: John Wiley & Sons, 1960).

Anderson.[1,2,3,4] There is general agreement that adherence to inkblot form, use of large and small areas of the blots, and the content of perceptions, can be meaningful for personality assessment.

A non-projective technique with apparent relevance for the study of counselor personality is the Dogmatism Scale developed by Rokeach.[5] This instrument is said to measure dogmatism, a phenomenological concept synonymous with the classical concept of defensiveness. It is thought to be more closely related to cognitive aspects of personality than affective aspects.

Stefflre and others found significant relationships between Dogmatism Scale scores and peer ratings of counsel-

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[1]M. H. Sherman, ed., A Rorschach Reader (New York: International Universities Press, 1960).

[2]Bruno Klopfer and others, Developments in Rorschach Technique, Vol. I: Technique and Theory (Yonkers-on-Hudson, New York: World Book Co., 1954).

[3]Albert I. Rabin and Mary R. Haworth, eds., Projective Techniques with Children (New York: Grune and Statton, 1960).

[4]Harold H. Anderson and Gladys L. Anderson, An Introduction to Projective Techniques (Englewood Cliffs, New Jersey: Prentice-Hall, 1951).

[5]Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960).

ing potential.[1] Less conclusive results were obtained by Russo Kelz and Hudson, who sought relationships between Dogmatism scores and measures of counseling effectiveness.[2] However, Kemp found that among counselor trainees, dogmatic individuals exhibited greater discrepancies between hypothetical and actual counseling responses than did non-dogmatic individuals.

In view of these findings, further use of both the Holtzman Technique and the Dogmatism Scale appears to be indicated. Not only do they hold promise of assessing important elements of counselor personality, but additional research with groups of normal individuals would also contribute to a more thorough knowledge of the validity and utility of these instruments.

Summary

In this chapter the development of methods used to study counselor personality and counseling behavior has been reviewed. It was observed that predicted relationships between personality characteristics and interview behavior

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[1]Stefflre, King and Leafgren, J. Couns. Psychol., IX, pp. 335-340.

[2]J. R. Russo, James W. Kelz, and G. R. Hudson, "Are good counselors open minded?", Counsel. Educ. and Supervis., III (1964), pp. 74-77.

have only recently been found. Establishment of these relationships has been hindered by weaknesses in instrumentation, suggesting the need for improved methods of personality assessment and interview content analysis.

Projective techniques, particularly the recently developed Holtzman Inkblot Technique, have not been used extensively in this area of research but further investigation of their utility seems to be warranted. Some precident has been established for assessment of counselors' cognitive functioning through use of the Rokeach Dogmatism Scale.

A number of interview content analysis systems were found to exist, but all suffer from limitations. The need apparently remains for the development of systems which are multidimensional, objective and reliable, yet relevant to theory and practicable for large-scale use.

Most of the studies reviewed assessed counselor personality through use of either objective instruments or ratings of one kind or another. Projective techniques were seldom used. Counseling behavior was measured by relatively objective methods in some cases and by subjective evaluations in others. A logical further step in the sequential development of research in this area seemed to be the prediction and testing of relationships between

counselor personality, as measured by a projective instrument, and objective measures of counseling behavior.

The design of the present study employed both a projective instrument and a more objective instrument to assess counselor personality, as well as relatively objective measures of counseling behavior. In the following chapter, "Design of the Study," is presented the research design by which predicted relationships were investigated and unpredicted relationships were explored.

CHAPTER III

DESIGN OF THE STUDY

Prior research relevant to the problem was reviewed in Chapter II, Review of the Literature. In the present chapter is presented the research design by which the problem was investigated further. It was the purpose of the study to investigate relationships between personality characteristics of counselors and their behavior while counseling.

The subjects who constituted the sample are described first. This is followed by a description of the instruments used, as well as data collection methods and statistical treatments. This chapter is concluded with a statement of the statistical hypotheses to be tested, and a summary of the chapter.

The Sample

A group of advanced graduate students enrolled in a full-year National Defense Education Act (N.D.E.A.) Counseling and Guidance Institute at Michigan State University were selected as subjects. Twenty-nine of the thirty students in the Institute constituted the sample, since it was

not possible to obtain interview data from one of the students. Unlike typical advanced graduate students at Michigan State University, the Institute students received a stipend, stayed together for classes, and carried a full course load. All had previously earned the master's degree and had had teaching and counseling experience in secondary schools. None had completed more than twelve term hours beyond the master's degree in the area of counseling and guidance.

Such a group can hardly be considered as representative of advanced graduate students in general, although they may resemble students in similar N.D.E.A. Institutes at other universities. To better understand the nature of the sample group, personal data is summarized in tables III-1, III-2, and III-3.

TABLE III-1

Age and Sex of Subjects

Age	Sex		Total
	M	F	
Above 47	0	0	0
44-47	0	1	1
40-43	2	0	2
36-39	6	1	7
32-35	2	0	2
28-31	11	0	11
24-27	5	1	6
Under 24	0	0	0
Total	26	3	29

Mean Age = 32.6 years., S.D. = 5.8

From the data in Table III-1 it is evident that although there was a difference of twenty-three years between the oldest and youngest subject, the group was relatively young. Males far outnumbered females, since there were 26 male and 3 female subjects.

TABLE III-2

Subjects' Places of Previous Residence

Area (by region)	Number
New England	1
Middle Atlantic	4
South	2
North Central	15
South Central	3
Rocky Mountain	2
Southwest	2
Northwest	0
Total	29

Table III-2 shows the places of residence of the subjects prior to enrollment in the Institute. It may be observed that nearly all regions of the United States were represented. That half of the subjects had resided in the North Central states is not unexpected because of the loca-

tion of the University. It might be added that all subjects were citizens of the United States. One male was Negro and one female was Oriental. The other subjects were Caucasian.

TABLE III-3

Academic Test Performance of Subjects

Test	Mean Score	S.D.
Miller Analogies Test	51.67	15.25
Test of Critical Thinking	38.07	6.63
NDEA Comprehensive Examination (total score)	63.37	10.72

The results of a battery of tests administered to the subjects are summarized in Table III-3. These results suggest that the group was fairly typical of advanced graduate students in the given area of study.

The subject group, therefore, appears to be more academically advanced than typical secondary school counselors, being roughly equivalent to beginning doctoral students. Their counseling experience, however, had been largely limited to the areas of educational and vocational counseling and guidance rather than long-term counseling or psychotherapy. The training the subjects received in the Institute included advanced counseling and personality theory courses together

with supervised counseling experiences in secondary school settings. Consequently, the counseling interviews conducted by the subjects tended to be primarily of an educational and vocational nature, although to some extent developmental, but not of an intensive and long-term nature.

Instrumentation

Three instruments were used to obtain two groups of data. The subjects' verbal behaviors during counseling were assessed through use of the Counselor Response System. Personality characteristics of the subjects were assessed by the Holtzman Inkblot Technique and the Rokeach Dogmatism Scale.

The Counselor Response System

The Counselor Response System (CRS) is a method for objectively analyzing the verbal statements of counselors during counseling interviews. It was designed for use in this study, but is intended for wider use as well. The CRS attempts to combine simplicity and ease of use with a high degree of sensitivity to theoretically relevant aspects of counselor behavior. It is intended to describe, but not to evaluate, counselor responses.

Each counselor statement is rated on six dichotomous dimensions. These dimensions are given next together with

a brief description of each.[1]

1. The Affective-Cognitive Content Dimension

   This dimension indicates whether or not expression of affect or reference to affect is present in a counselor response. It consists of the two categories "Affective" and "Cognitive".

2. The Affective-Cognitive Change Dimension

   This dimension deals with gross changes in feeling level between a counselor response and the preceding client statement. It consists of the two categories "Following" and "Changing".

3. The Content Follow-Shift Dimension

   This dimension deals with changes in the general topic of discussion between the client's preceding response and the counselor's response. Two categories, "Following" and "Shifting", constitute this dimension.

4. The Control (Restrictive-Expansive) Dimension

   This dimension deals with the extent to which the counselor limits or permits freedom of expression by the client. The two categories

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[1]The dimensions are defined and described more fully in Appendix A.

"Restrictive" and "Expansive" constitute this dimension.

5. The Temporal (Present vs. Past and Future) Dimension

   This dimension indicates the temporal reference of the counselor's response. The three tenses are dichotomized to form the two categories "Present" and "Past and Future."

6. The Client-Other Referent Dimension

   This dimension indicates whether or not the client is the primary referent of the counselor's response. It is divided into the "Client-Referent" and "Other-Referent" categories.

The theoretical basis for these six dimensions was presented and discussed in Chapter I "The Problem".

Reliability of the Counselor Rating Scale

Estimates of interscorer reliability were obtained prior to the use of the CRS in the present study. Eight advanced graduate students participated as raters in a reliability study in which were used portions of interviews conducted by a high school counselor, a beginning counseling student, and Carl Rogers. A total of forty-five counselor responses were rated. Interscorer reliability coefficients for total scores in the six dimensions ranged from +.63 to

+.99 and are presented in Table III-4. The median coefficient was +.88. These reliability estimates are regarded as conservative because the number of responses rated was not large and because the raters had been given only minimal prior training in the use of the instrument.

TABLE III-4

Interscorer Reliability of CRS Dimensions

Dimension	Affective Cognitive Content	Affective Cognitive Change	Content Follow Shift	Present--Past and Future	Restrictive Expansive	Client--Other Referent
Reliability Coefficient	+.99	+.79	+.87	+.99	+.89	+.63

Reliability of scoring over time by the same rater was also investigated. Three previously scored interview segments used in the study were randomly selected and scored once more after a one week delay. The two sets of scores were then compared by computing reliability coefficients. The results of this comparison not only served as estimates of the reliability of the CRS dimensions but also of the rater employed in the study. The correlation coefficients obtained are shown in Table III-5.

TABLE III-5

Reliability of Rater*

Dimension	Affective Cognitive Content	Affective Cognitive Change	Content Follow Shift	Present--Past and Future	Restrictive Expansive	Client--Other Referent
Reliability Coefficient	.97	.99	.64	.99	.80	.99

*Based on two ratings of three randomly selected interview segments (each containing 20 counselor statements) with an intervening delay between ratings of one week.

Reliability coefficients for the six dimensions ranged from .64 to .99, with a median coefficient of .98. Thus the rater appears to have been highly reliable on every dimension except Content Follow-Shift. Even on that dimension his reliability appears to be within an adequate range when it is considered that only three interview segments were used to estimate his reliability.

The Holtzman Inkblot Technique

The Holtzman Inkblot Technique was selected for use in this study for several reasons. One of the most compeling reasons was the existance of a vast Rorschach literature from

which could be developed testable hypotheses concerning relationships between test results and behavior.

The ambiguous nature of inkblot stimuli was also an important consideration. Theoretically, if ambiguous test stimuli can elicit meaningfully different response behaviors from different persons, then a relatively ambiguous counseling interview situation could be expected to produce meaningful different responses. An additional advantage of using a projective instrument with psychometrically sophisticated subjects is the relative immunity of such instruments from deliberate falsification.

If the above considerations were the only ones to be considered, the well-known Rorschach might have served equally as well as the HIT. However, an evaluation of the negative features of the Rorschach led to its rejection in favor of the more recently developed instrument.

Zubin states that the Rorschach does not have a sufficiently objective and reliable scoring system, and that it has not proved to be effective in discriminating between groups of normal persons.[1] In addition, the Rorschach does not lend itself well to group administration and, because the number of responses can vary considerably between subjects, results cannot be adequately treated by existing statistical methods.

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[1]J. Zubin and L. Eron, Experimental Abnormal Psychology (New York: New York State Psychiatric Institute, 1953).

In contrast, the HIT has a scoring system which is both objective and reliable. It controls the number of responses per inkblot. It can be easily administered to groups, and results obtained by group administration are highly comparable to results obtained by individual administration.

The ability of the HIT to distinguish between groups of normal subjects has not yet been adequately demonstrated. The few published studies of normal groups have yielded mixed results. Thus the present study may contribute to knowledge of the instrument's usefulness with such groups. This study should also contribute to the knowledge of the construct validity of the HIT.

Because the HIT is similar in principal to the Rorschach, it can be used to test hypotheses developed from the Rorschach literature and theory.

The HIT consists of forty-five inkblots which are presented to the subject one at a time. The subject associates to the inkblot, giving only one response for each blot. In group administration, the blots are projected onto a screen and subjects record their responses in a record booklet which contains outlines of the blots. These record booklets are published by the publishers of the HIT.[1]

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[1]Holtzman Inkblot Technique Record Form (New York: The Psychological Corporation, 1958.

Responses are scored in the same manner whether the technique is administered individually or in groups. Each response is scored on twenty-three variables. These variables were derived from various Rorschach scoring systems, but are more highly refined and objective. Only one variable, Reaction Time, is lost under conditions of group administration.

In Table III-6 are given the names of the variables scored and the theoretical range of scores for each.

The reliability of scores of individual variables of the HIT under conditions of group administration has been demonstrated to be within the range considered to be acceptable for psychometric tests.[1]

No evidence for the validity of the group administered HIT has been published. However, considerable evidence has been obtained for the individually administered HIT. This evidence includes significant correlations with comparable Rorschach scores when both instruments were administered to the same subjects.[2] Extensive normative data has been published.[3]

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[1]J. D. Swartz and W. H. Holtzman, "Group administration for the Holtzman Inkblot Technique," J. Clin. Psychol., IXX (1963), pp. 433-440.

[2]Wayne H. Holtzman and others, Inkblot Perception and Personality (Austin, Texas: University of Texas Press, 1961).

[3]Ibid.

TABLE III-6

Name, Abbreviation, and Theoretical Range of Total Score for Each HIT Variable

Variable	Abbreviation	Theoretical Score--Range
Rejection	R	0-45
Location	L	0-90
Space	S	0-45
Form Definiteness	FD	0-180
Form Appropriateness	FA	0-90
Color	C	0-135
Shading	Sh	0-90
Movement	M	0-180
Pathognomic Verbalization	V	0-180 plus
Integration	I	0-45
Human	H	0-90
Animal	A	0-90
Anatomy	At	0-90
Sex	Sx	0-90
Abstract	Ab	0-90
Anxiety	Ax	0-90
Hostility	Hs	0-135
Barrier	Br	0-45
Penetration	Pn	0-45
Balance	B	0-45
Popular	P	0-25
Human Movement*	HM	0-45

* Human Movement is not a standard HIT variable. It has been devised for use in this study and is derived from the Human and Movement variables.

The Rokeach Dogmatism Scale

The Rokeach Dogmatism Scale (RDS) was developed by Rokeach[1] to measure dogmatism. Dogmatism is a phenomenological concept virtually synonymous with the psychoanalytic concept of defensiveness. The final revision of the Dogmatism Scale, Form E, consists of forty items. Each item is a statement to which the subject responds by indicating agreement or disagreement on a six-point scale.

Rokeach reports split-half reliability coefficients of from .68 to .85 for several groups of American college students, and a test-retest reliability coefficient of .71 for one group of college students with an intervening delay of from five to six months.[2] These results suggest that the Dogmatism Scale is adequately reliable where used with samples of college students.

Rokeach has reported apparent support for the validity of the Dogmatism Scale.[3] Significantly different mean scores were obtained from groups judged by their peers to be high and low dogmatic persons. Most of the subjects in these groups were college students. These groups also showed

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[1]Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960).

[2]Ibid., pp. 89-91.

[3]Ibid., pp. 101-108.

significant differences on the California F Scale and Ethnocentrism Scale which are measures of authoritarianism and intolerance. Evidence that the Dogmatism Scale measures a general dogmatic orientation regardless of political and religious belief, while the F and Ethnocentism Scales measure this only in conservative and right-wing groups, has also been reported.[1]

Collection and Preparation of Data

This study was designed to investigate relationships between two groups of data. The verbal responses made by counselors during interviews with high school students as measured by the Counselor Response System were compared with personality characteristics of these counselors as measured by two standard psychometric instruments.

Counseling Interview Data

One tape-recorded interview was obtained from each subject in the previously identified sample. In order to obtain interview data which would maximize identification of the effects of individual personality differences between counselors, the following instructions were given to the counselor-subjects:

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[1]*Ibid.*, p. 121.

Please choose your client carefully. Your client should meet the following requirements:

a. The client should be a girl.
b. She should be in the 9th or 10th grade.
c. She should have expressed an interest in going to college.
d. This should be your first interview with her.
e. She should not have requested to talk to you; you should make the first contact with her.

The subjects were also assured that the recorded interviews would not be used in any way for evaluation of their counseling skills.

Requirements a, b, and c were included to control for sex, age, and academic ability of clients. Requirements d and e were specified in order to minimize the opportunity for imposing any external structuring upon either the counselor or the client. If and how the counselor chose to structure the interview was his own choice. The kind and degree of structuring that occurred was considered to be primarily determined by the personality characteristics of the counselor, although modified both by the counselor's previous training and by whatever the client introduced into the counseling situation.

Counselor-initiated interviews are common in the secondary school setting. To request an unsolicited interview with a student is not inconsistent with the role of the school counselor, and to do so would not be expected to

adversely affect development of the relationship.

Because the counselor-subjects had previously made tape recordings of counseling interviews as a part of their training, recording for the study was not a new or "artificial" element. Both the counselors and the counselees were assured that the recordings would only be used in a professional context.

All of the counselor-subjects had been assigned to work in schools as a part of their training experience, and it was in these schools that interview data was obtained. At the time the recordings were made, the students and faculty of the schools were accustomed to the presence of the counselors in the schools.

Selection and Preparation of Interview Segments for Rating

In order to maintain consistency of treatment between subjects and to facilitate analysis, the number of counselor responses studied was held constant rather than selecting interview segments on the basis of fixed amounts of elapsed time. It was also decided to omit the first five minutes of each interview, since this time is usually devoted to introducing the counselor to the client, explaining the presence of the tape recorder, and similar routine matters.

Interview segments used in this study began at the end of the fifth minute and continued until the counselor had

made twenty responses or statements. These segments were found to range in length from five to forty-four minutes, with a mean length of thirteen minutes and a standard deviation of 8.7 minutes.

Portions of initial interviews were used in order to obtain counselor responses which were made while the interview situation was still relatively ambiguous. It was assumed that a counselor (or any person) would display more behavior that is unique to his personality while in an ambiguous, unstructured situation than in a less ambiguous and more highly structured situation. As interviews continue, the two participants communicate more to each other (both overtly and covertly), and the situation becomes less ambiguous.

Actual tape recordings of the interviews were rated. The use of interview typescripts had been considered, but this was discarded because voice inflection, tone, and other highly important elements of communication would have been lost.

A brief auditory tone was superimposed on the tape recordings following each counselor statement or response to indicate at which points judgments were to be made. This was necessary for two reasons. First, not all counselor verbal responses can be adequately rated by the method employed in this study. For example, "um hum" and single words cannot be rated well. In general, at least a noun and

a verb must be present or implied. Second, the rating instrument used contains six dimensions, only two of which can be adequately rated at one time. To rate all six dimensions the rater must listen to the interview segment three times. The tone signals ensure that the rater will not omit judgments when listening to the interview segments at different times.

The interview segments were re-recorded from the original tape recordings, assigned coded identification numbers, and placed in random order before ratings were made.

Rating Procedures

The Counselor Response System, described earlier in this chapter, was used to access counselor responses. Because the interscorer reliability of the CRS appears to be adequate, only one rater was employed. It must be acknowledged that some error may have been introduced by employing only one rater, but it was assumed that whatever error was introduced was constant across all subjects.

The rater employed in this study was a doctoral candidate in counseling psychology and an experienced counselor. He was not personally acquainted with any of the subjects nor had he associated with them in any way.

The rater was given training in the use of the CRS prior to rating the interviews and was instructed to closely

follow the definitions and examples given in the CRS manual.* In order to further reduce error, the rater was instructed to rate all of the interview segments on only two dimensions at a time, rather than to attempt to rate all six dimensions of the CRS at one time. A total of approximately twenty hours were required for him to rate the twenty nine interview segments on all six dimensions. The reliability of the rater was discussed earlier in this chapter. It appeared to be adequate.

Personality Data

Personality data was obtained by administering the Holtzman Inkblot Technique and the Rokeach Dogmatism Scale to the subjects.

The Holtzman Inkblot Technique

Form A of the Holtzman Inkblot Technique was administered to the subjects following standard group procedures.[1] Scoring errors were minimized by employing a highly trained and experienced psychologist to score the HIT records. No estimate of the psychologist's reliability in scoring the group administered HIT was determined, but reliability coefficients of .98 and .96 had previously been computed

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*See Appendix A

[1]Swartz and Holtzman, J. Clin. Psychol., IXX, pp. 433-440

between his scoring and scoring by two others for individually administered tests.[1] It is therefore assumed that the HIT scoring in this study was highly reliable.

One variable used in this study and listed in Table III-6 is not a standard HIT variable. This variable is Human Movement (HM), and is derived from the "Movement" and "Human" scores of the HIT.

The HIT scores "Movement" for any movement in a percept, regardless of whether human content is present. In contrast, most Rorschach scoring systems score "Movement" only if human or human-like movement is present in a percept.[2,3,4]

The perception of human movement is of theoretical importance. Beck states that it is representative of "innermost psychological activity."[5] Schachtel regards it as a measure of the capacity for "empathic projection."[6]

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[1]R. C. Reinehr, personal letter, March 22, 1965.

[2]Maria A. Rickers-Ovsiankina, ed., Rorschach Psychology (New York: John Wiley & Sons, 1960), p. 447.

[3]Samuel J. Beck and others, Rorschach's Test, I, Basic Processes (New York: Grune and Stratton, 1961), p. 72ff.

[4]Herman Rorschach, Psychodiagnostics: A Diagnostic Test Based on Perception (Bern: Hans Huber, 1942), pp. 184-216 (First edition, 1921).

[5]Beck and others, p. 72ff.

[6]E. G. Schachtel, "Projection and its relation to character attitudes and creativity in kinesthetic responses," Psychiat., XIII (1950), pp. 69-100.

For purposes of this study, a "Human Movement" score of "1" was given for each percept in which the "Human" variable was scored "1" or "2" in the HIT and in which "Movement" was scored "1" or higher. A "Human Movement" score of "0" was given to all other percepts. This is similar to the Rorschach "Movement" score developed by Beck.[1]

The Rokeach Dogmatism Scale

Form "E" of the Rokeach Dogmatism Scale was administered to the subjects as a group following standard procedures.[2] The forty items of the RDS were printed in random order in a booklet together with twenty-two items from another personality scale as well as fourteen "dummy" items which helped to disguise the purpose of the questionnaire. Only the RDS items were scored and tabulated for use in this study. Subjects recorded their responses on multiple choice answer sheets which were scored by machine.

Raw scores for each RDS item range along a 6-point scale from minus three ("I disagree very much") to plus three ("I agree very much"). A constant value of four was added to each raw score in order to eliminate negative values. This is consistent with procedures used in previous research using

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[1]Beck and others, p. 72.

[2]Rokeach, p. 72.

the RDS.[1] The total score obtained by each subject is the sum of the adjusted raw score for all forty items in the scale. The higher an individual's score, the more dogmatic he is assumed to be.

Schedule of Data Collection

This study was intended to investigate relationships at a given point in time between personality variables and responses while counseling. Certain considerations made it necessary, however, to obtain data over a five-month span of time.

The first consideration was a practical one. To have attempted to administer two personality instruments on the same date would have taken considerable time and would have interfered with the subjects' heavy schedules of learning activities. A second consideration was the nature of the psychometric instruments used. The Rokeach Dogmatism Scale can be falsely answered if a person is aware of its true purpose. If the RDS had been administered after the subjects had engaged in formal learning experiences, some of which included the study of attitude assessment, the results would probably have been less accurate. Results of the HIT were much less likely to be influenced by formal learning experiences because of the ambiguous stimuli used and because the

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[1] Ibid., p. 88.

subjects had not been trained in the use and interpretation of projective techniques. Furthermore, the test-retest reliability of the RDS is relatively high, even with an intervening time lapse of several months.

The RDS was administered to the subjects at the beginning of their studies in the Institute. The HIT was administered four months later. Tape recorded interviews were obtained from the subjects during the fifth month of the Institute, within approximately thirty days of the administration of the HIT.

Although formal learning experiences which occurred between the times data were gathered undoubtedly influenced the personalities and counseling behavior of the subjects, it is assumed that such influence was minimal and that the observed relationships between these two sets of data were indeed true.

Analysis of the Data

The hypotheses developed in this study predicted relationships between individual personality measures and individual behavioral measures. Because the characteristics of these measurements approximate those of interval scales, the product-moment correlation coefficient is an appropriate

statistic for estimating relationship between them.[1,2] A one-tailed test was used with significance set at the .05 level.

The use of non-parametric techniques, such as Chi-square analysis, was rejected because to do so would have required an artificial partitioning of the data with a resultant loss of precision. It is acknowledged that precision is lost when correlation statistics are applied to data in which relationships are non-linear. In the data of the present study linearity is assumed, but the possibility of curvilinearity is recognized. The product-moment correlation coefficient was selected as the most appropriate statistic among those which might have been used.

None of the proposed hypotheses predicted relationships between more than one personality and one behavioral variable. Personality theory suggests, however, that personality factors are inter-related. Therefore, it seemed desirable to explore the relative influence of various personality variables upon individual behavioral measures. Multiple regression analysis

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[1]M. M. Tatsuoka and D. V. Tiedeman, "Statistics as an aspect of scientific method in research on teaching," Handbook of Research on Teaching, ed. N. L. Gage (Chicago: Rand McNally & Co., 1963), pp. 146, 153-157.

[2]A. L. Edwards, Statistical Methods for the Behavioral Sciences (New York: Rinehart & Co., 1954), pp. 142-169.

is an appropriate statistical procedure for accomplishing this.[1]

In order to maximize the usefulness of multiple regression analysis, only those personality variables were selected for analysis which were found to correlate significantly with individual behavioral variables or which showed sufficient evidence of directionality by correlations of ±.20. Those variables were selected by examining an intercorrelation matrix containing product-moment correlation coefficients between all possible pairs of behavioral and personality variables. Multiple regression analyses were then performed to determine the contribution of selected predictor (personality) variables to the variation in each criterion (behavioral) variable. Multiple correlation coefficients were then computed to determine the effectiveness of the obtained weights for predicting observed scores.

The analysis of the data can therefore be described as a two-stage process. In the first stage, the hypotheses were tested by computing and analyzing product-moment correlation coefficients which estimated the relationships between pairs of personality and behavioral variables.

The second stage of the analysis was of an exploratory

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[1]Tatsuoka and Tiedeman, pp. 153-157.

nature. Multiple regression analyses were performed to assess the relative contributions of selected personality variables to variation in individual behavioral variables.

Statistical Hypotheses

Ten hypotheses were developed from theory as discussed in Chapter I, The Problem. These are presented below in null and alternate form together with a brief statement of the underlying rationale.

Hypotheses concerning the relationship between Holtzman Inkblot Technique variables and Counselor Response System dimensions:

H_{01} No relationship exists between HIT Color scores and CRS Affective Content scores.

H_1 A positive relationship exists between HIT Color scores and CRS Affective Content scores.

Rationale: Persons who make frequent use of color when responding to inkblots are considered to be more emotionally labile than those who make infrequent use of color.[1] It would therefore be expected that such persons would tend to verbalize affect more frequently during counsel-

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[1]E. G. Schachtel, "On color and affect," Psychiat., VI (1943), pp. 393-409.

ing than would others.

H_{02} No relationship exists between HIT Human Movement scores and CRS Affective-Cognitive Follow scores.

H_2 A positive relationship exists between HIT Human Movement scores and CRS Affective-Cognitive Follow scores.

Rationale: Persons who frequently perceive human movement in inkblots are considered to have greater capacity for empathy than have others.[1,2] It would therefore be expected that such persons would tend to respond at an affective level corresponding to that of the client.

H_{03} No relationship exists between HIT Form Appropriateness scores and CRS Content Follow scores.

H_3 A negative relationship exists between HIT Form Appropriateness scores and CRS Content Follow scores.

Rationale: Excessive use of appropriate form (similar to Rorschach "F") is considered to be an indica-

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[1]Schactel, Psychiat., XIII, pp. 69-100.

[2]William J. Mueller and Norman Abeles, "The Components of empathy and their relationship to the projection of human movement responses," J. Proj. Tech., XXVIII (1964), pp. 322-330.

tion of rigidity, pendantry, and defensiveness.[1] In the counseling relationship, therefore, persons with high scores would be expected to initiate changes of discussion topic rather than to follow clients' discussion topics.

H_{04} No relationship exists between HIT Form Appropriateness scores and CRS Restrictive scores.

H_4 A positive relationship exists between HIT Form Appropriateness scores and CRS restrictive scores.

Rationale: Persons who make excessive use of appropriate form are considered to tend to be rigid, pedantic, and defensive. These characteristics would be expected to produce restriction of client response freedom in the counseling relationship.

H_{05} No relationship exists between HIT Form Definiteness scores and CRS Restrictive scores.

H_5 A positive relationship exists between HIT Form Definiteness scores and CRS Restrictive scores.

Rationale: Form Definiteness is a variable unique to the HIT and has not been previously studied. It is a measure of the extent to which definite

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[1]Sheldon J. Korchin, "Form perception and ego functioning," Rorschach Psychology, ed. Maria Rickers-Ovsiankina (New York: John Wiley & Sons, 1960) pp. 109-129.

forms, e.g., "George Washington's profile", rather than indefinite forms, e.g., "clouds", are perceived. A person who uses excessive definite form in the projective test situation would be expected to tend to be rather rigid and exacting. Therefore, such persons would also be expected to tend to restrict client response freedom.

H_{06} No relationship exists between HIT Human Movement scores and CRS Client Referent scores.

H_6 A positive relationship exists between HIT Human Movement scores and CRS Client Referent scores.

Rationale: Perception of Human Movement in inkblot stimuli is said to be associated with the capacity of empathic understanding.[1,2] Empathic persons would be expected to refer more frequently to the client (rather than to other persons) than would less empathic persons.

Hypotheses concerning relationships between Rokeach Dogmatism Scale scores and Counselor Response System dimensions:

H_{07} No relationship exists between Dogmatism scores

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[1]Schachtel, Psychiat., XIII, pp. 69-100.

[2]Mueller and Abeles, J. Proj. Tech., XXVIII, pp. 322-330.

and CRS Present Reference scores.

H_7 A negative relationship exists between Dogmatism scores and CRS Present Reference scores.

Rationale: Dogmatic persons are said to be more concerned about the past and future than about the present.[1] It is therefore expected that this will be reflected in their counseling behavior.

H_{08} No relationship exists between Dogmatism scores and CRS Client Referent scores.

H_8 A negative relationship exists between Dogmatism scores and CRS Client Referent scores.

Rationale: Dogmatic persons are said to tend to accept others conditionally and to be highly influenced by the opinions of external authorities.[2] It would be expected that this would be evidenced in counseling by more frequent reference to persons other than the client.

H_{09} No relationship exists between Dogmatism scores and CRS Restrictive scores.

H_9 A positive relationship exists between Dogmatism scores and CRS Restrictive scores.

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[1]Rokeach, p. 52.

[2]Rokeach, p. 31ff.

Rationale: Rigid, inflexible thinking and deference to authorities are said to be characteristics of dogmatic persons.[1] In counseling, these characteristics should be reflected by restriction of client response freedom.

H_{010} No relationship exists between Dogmatism scores and CRS Content Follow scores.

H_{10} A negative relationship exists between Dogmatism scores and CRS Content Follow scores.

Rationale: Because dogmatism is said to be characterized by rigidity, inflexibility, and deference to external authorities, it would be expected that dogmatic persons would tend to initiate changes in discussion topic rather than to follow clients' discussion topics.

Summary

The objective of this study was to determine the relationship between selected personality measurements of counselors and their verbal behavior while counseling.

The Sample

The sample consisted of twenty-nine post-Masters students participating in a year-long National Defense Education

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[1] *Ibid.*

Act Counseling and Guidance Institute at Michigan State University.

Instrumentation

Personality data was obtained by use of the Holtzman Inkblot Technique and the Rokeach Dogmatism Scale. Interview data was obtained from tape recorded counseling interviews with high school students conducted by the subjects. One recorded interview was obtained from each subject. Instructions were given to the subjects to control several client characteristics and to create situations which maximize the opportunities for individual differences between counselors to emerge.

Portions of the counseling interviews were analyzed through use of the Counselor Response System. Each portion analyzed contained the first twenty counselor responses which occurred after the first five minutes of the interview had elapsed. Tape recorded interview segments were used in the rating process rather than typescripts of the interviews.

Because the Counselor Response System has previously been demonstrated to have adequate inter-judge reliability, the interview material was rated by one rater.

For practical and theoretical reasons, the Dogmatism Scale was administered at the beginning of the subjects'

Institute experience. Interview material was obtained later, but within thirty days of the administration of the Holtzman Inkblot Technique.

Analysis of the Data

The data were analyzed in two stages. In the first stage, hypotheses were tested by computing product-moment correlation coefficients which estimated the relationships between pairs of personality and behavioral variables. Significance was set at the .05 level.

In the second stage, the contributions of selected personality variables to variation in individual behavioral variables was explored by performing multiple regression analyses.

The results of the study, obtained according to the design developed in the present chapter, are reported in Chapter IV, Analysis of the Data.

CHAPTER IV

ANALYSIS OF THE RESULTS

In Chapter IV is presented an analysis of the results based on the methodological approach and statistical treatment stated in Chapter III "Design of the Study." The analysis consisted of two phases. In the predictive phase ten hypothesized relationships between measures of personality and measures of counseling behavior were tested for statistical significance. Scores from variables of the Holtzman Inkblot Technique and the Rokeach Dogmatism Scale were compared with scores from the Counselor Response System by computing Product-Moment correlation coefficients.

In the exploratory phase unpredicted but statistically significant relationships were identified. The relative contribution of selected personality measures to variation in dimensions of counseling behavior was investigated through use of multiple regression analysis.

In this chapter results of the predictive and exploratory phases are presented first and are followed by a discussion of each. Information derived from the use of the Counselor Response System is also reported and discussed. A summary of the analysis and discussion of the results

concludes this chapter.

Results of the Predictive Phase of the Study

Scores from several scales of the Holtzman Inkblot Technique and scores from the Rokeach Dogmatism Scale were compared with scores of the six dimensions of the Counselor Response System. Predicted relationships between HIT scores and CRS scores were derived primarily from projective theory, while predicted relationships between RDS scores and CRS scores were derived from more general personality theory.

The null and alternative hypotheses tested in the predictive phase were:

A. Hypothesized relationships between individual Holtzman Inkblot Technique scores and Counselor Response System scores.

Null and Alternative hypotheses:

H_{01} No relationship exists between "Color" scores and "Affective Content" scores.

H_1 A positive relationship exists between "Color" scores and "Affective Content" scores.

H_{02} No relationship exists between "Human Movement" scores and "Affective-Cognitive Follow" scores.

H_2 A positive relationship exists between "Human Movement" scores and "Affective-Cognitive Follow" scores.

H_{03} No relationship exists between "Form Appropriateness" scores and "Content Follow" scores.

H_3 A negative relationship exists between "Form Appropriateness" scores and "Content Follow" scores.

H_{04} No relationship exists between "Form Appropriateness" scores and "Restrictive" scores.

H_4 A positive relationship exists between "Form Appropriateness" scores and "Restrictive" scores.

H_{05} No relationship exists between "Form Definiteness" scores and "Restrictive" scores.

H_5 A positive relationship exists between "Form Definiteness" scores and "Restrictive" scores.

H_{06} No relationship exists between "Human Movement" scores and "Client Referent" scores.

H_6 A positive relationship exists between "Human Movement scores and "Client Referent" scores.

B. Hypothesized relationships between Rokeach Dogmatism Scale scores and individual Counselor Response System Scores.

Null and alternative hypotheses:

H_{07} No relationship exists between Dogmatism scores and "Present Reference" scores.

H_7 A negative relationship exists between Dogmatism scores and "Present Reference" scores.

H_{08} No relationship exists between Dogmatism scores and "Client Referent" scores.

H_8 A negative relationship exists between Dogmatism scores and "Client Referent" scores.

H_{09} No relationship exists between Dogmatism scores and "Restrictive" scores.

H_9 A positive relationship exists between Dogmatism scores and "Restrictive" scores.

H_{010} No relationship exists between Dogmatism scores and "Content Follow" scores.

H_{10} A negative relationship exists between Dogmatism scores and "Content Follow" scores.

Following procedures stated in Chapter III, Design of the Study, Product-Moment correlation coefficients were computed to test the hypothesized relationships. The resultant correlation coefficients are presented in Table IV-1.

TABLE IV-1

Correlation Coefficients for Hypothesized Relationships Between Measures of Counselor Personality and Interview Behavior

Counselor Response System Categories	Holtzman Inkblot Technique Categories				Rokeach Dogmatism Scale
	Color	Human Mov't	Form Approp.	Form Definit.	
Affective Content	-.016				
Aff-Cog. Follow		.088			
Content Follow			.102		-.132
Restrictive			-.074	-.096	.162
Client Reference		.368*			-.236
Present Reference					.154

*Significant at .025 level (P.025 = .367)

As evidenced by the results reported in Table IV-1, a statistically significant correlation was found between

the Human Movement score of the Holtzman Inkblot Technique and the Client Reference score of the Counselor Response System. Null hypothesis H_{06}, "No relationship exists between 'Human Movement' scores and 'Client Reference' scores," was therefore rejected and alternate hypothesis H_6, "A positive relationship exists between 'Human Movement' scores and 'Client Reference' scores" was accepted.

No other statistically significant relationships were found among those which had been hypothesized. Therefore, null hypotheses H_{01}, H_{02}, H_{03}, H_{04}, H_{05}, H_{07}, H_{08}, H_{09}, and H_{010} were accepted and the corresponding alternate hypotheses rejected. No statistical support was found for the predicted relationships between "Color" and "Affective Content" scores (H_1), "Human Movement" and "Affective-Cognitive Follow" scores (H_2), "Form Appropriateness" and "Content Follow" scores (H_3), "Form Appropriateness" and "Restrictive" scores (H_4), or between "Form Definiteness" and "Restrictive" scores (H_5), nor was support found for predicted relationships between Dogmatism Scale scores and "Present Reference" scores (H_7), "Client Reference" scores (H_8), "Restrictive" scores (H_9), and "Content Follow" scores (H_{10}). These results will be discussed in a later portion of this chapter.

Results of the Exploratory Phase of the Study

Although the primary purpose of this study was to

test predicted relationships, exploration of unpredicted relationships was considered to be of considerable importance. In accord with procedures stated in the preceding chapter, Product-Momement correlation coefficients were computed for all possible pairs of personality and behavioral variables. This was done to reveal significant but unpredicted relationships between pairs of variables and to provide a basis for the selection of variables to be submitted to multiple regression analysis. A matrix of these correlation coefficients is presented in Table IV-2.

It may be observed from Table IV-2 that only two correlation coefficients which were of statistical significance were not predicted in the initial phase of the study. Using a two-tailed test with significance set at the five per cent level, significant relationships were found between "Intergration" and "Client Reference" scores and between "Barrier" and "Client Reference" scores.

Because it was also desired to explore the relative relationship of several personality variables to each of the behavioral variables, multiple regression analyses were performed. For each CRS dimension those personality variables were selected for multiple regression analysis whose Product-Moment correlation coefficient with that dimension exceeded $\pm$ .20. The .20 level was arbitrarily selected as

TABLE IV-2

Correlation Matrix of Personality and Behavioral Measures[1]

Holtzman Inkblot Technique Categories	Counselor Response System Categories					
	Affective Content	Affective-Cognitive Follow	Content Follow	Present Reference	Restrictive	Client Reference
1. Rejection	-048	197*	-062	246*	196*	-224*
2. Location	150	-246*	114	123	-238*	-078
3. Space	-101	066	-049	015	-007	-073
4. Form Definiteness	038	024	-092	226*	-096	131
5. Form Appropriateness	217*	-171	102	145	-074	-190
6. Color	-016	240*	181	-165	-103	-072
7. Shading	197*	-031	260*	-171	-128	-040
8. Movement	166	089	090	114	017	324*
9. Path. Verbalization	157	129	019	325*	-189	-037
10. Integration	182	163	102	169	-026	456*
11. Human	254*	-032	-005	-017	-014	227*
12. Animal	241*	024	-064	223*	-105	298*
13. Anatomy	-228*	022	-116	-179	080	-256*
14. Sex	360*	043	-041	-026	-142	265*
15. Abstract	065	-039	099	207*	-049	-135
16. Anxiety	168	167	040	147	-086	150
17. Hostility	197*	174	-004	020	042	126
18. Barrier	246*	-157	-164	-236*	-035	472*
19. Penetration	176	126	258*	064	-212*	-217*
20. Balance	-059	108	019	-222*	062	-020
21. Popular	164	038	100	078	-189	132
22. Human Movement	167	088	064	032	061	368*
Rokeach Dogmatism Scale	-025	-064	-132	154	162	-236*

*Indicates variables selected for multiple regression analysis. Significant but unpredicted correlations are underlined. (P.05 = .367)

[1]Decimal points are omitted

suitable for identifying relationships which were not statistically significant yet possibly did not occur by chance. Multiple regression analysis permitted assessment of the contribution of variation in each personality variable to variation in each of the behavioral dimensions.

In Table IV-3 and the similar tables following, the personality variables selected are given in the left-hand column and the obtained multiple correlation coefficients in the right-hand column. The middle column lists individual deleted variables. By comparing the r^2 obtained through use of all variables (given in the first row of the table) with the r^2 obtained when any given variable was deleted (given in subsequent rows of the table), the relative contribution of the deleted variable to the multiple correlation may be observed. Since the purpose of this procedure was only to explore initially the inter-relationships between variables rather than to test hypotheses or to explore the inter-relationships in detail, no statistical tests of significance were applied nor were further exploratory procedures undertaken.

The following results were obtained:

<u>The Affective-Cognitive Dimension</u>. Form Appropriateness, Shading, Human, Animal, Sex, Hostility, and Barrier scores of the HIT were the variables selected for

analysis with this dimension. The results of the multiple regression analysis are given in Table IV-3.

TABLE IV-3

Multiple Correlation Coefficients for Affective-Cognitive Dimension

Variables	Variable Deleted	r^2
FA, Sh, H, A, At, Sx, Hs, Br	--	.447
Sh, H, A, At, Sx, Hs, Br	FA	.386
FA, H, A, At, Sx, Hs, Br	Sh	.246
FA, Sh, A, At, Sx, Hs, Br	H	.421
FA, Sh, H, At, Sx, Hs, Br	A	.359
FA, Sh, H, A, Sx, Hs, Br	At	.432
FA, Sh, H, A, At, Hs, Br	Sx	.425
FA, Sh, H, A, At, Sx, Br	Hs	.442
FA, Sh, H, A, At, Sx, Hs	Br	.446

It may be observed from Table IV-3 that the multiple correlation coefficient obtained through use of all selected variables was .447. Further examination of Table IV-3 reveals that the correlation was sharply reduced when either Form Appropriateness, Shading, or Animal were deleted. From these results it appears that variation in these three variables was most highly related to variation in the Affective-

Cognitive dimension.

The Affective-Cognitive Change Dimension. Only Rejection, Location, and Color were sufficiently correlated with this dimension to be selected for further analysis.

TABLE IV-4

Multiple Correlation Coefficients for Affective-Cognitive Follow-Change Dimension

Variables	Variable Deleted	r^2
R, L, C	--	.107
L, C	R	.080
R, C	L	.087
R, L	C	.090

As shown in Table IV-4 the multiple correlation coefficient obtained with no variables deleted was .107. Deletion of any one of the three variables reduced the correlation to about as great an extent as deletion of any other. Thus it appears that Rejection, Location, and Color contributed nearly equally to the correlation although the contribution of each was not significant.

The Content Follow-Shift Dimension. Shading and Penetration were selected for analysis with this dimension.

TABLE IV-5

Multiple Correlation Coefficients for
Content Follow-Shift Dimension

Variables	Variable Deleted	r^2
Sh, Pn	--	.105
Pn	Sh	.066
Sh	Pn	.068

The results shown in Table IV-5 indicate that the two variables combined produced a multiple correlation coefficient of .105. The contribution of these two variables is not significant.

The Present vs. Past and Future Dimension. Rejection, Form Definiteness, Pathognomic Verbalization, Animal, Abstract, Barrier, and Balance were analyzed for their relationship to this dimension.

As shown in Table IV-6, the coefficient produced by these variables together was .268. When variables were deleted little decrease in the correlation coefficient was found which could be ascribed to any single variable except perhaps to Barrier.

TABLE IV-6

Multiple Correlation Coefficients for Present vs. Past and Future Dimension

Variables	Variable Deleted	r^2
R, FD, PV, A, Ab, Br, B	--	.268
FD, PV, A, Ab, Br, B	R	.243
R, PV, A, Ab, Br, B	FD	.258
R, FD, A, Ab, Br, B	PV	.251
R, FD, PV, Ab, Br, B	A	.257
R, FD, PV, A, Br, B	Ab	.263
R, FD, PV, A, Ab, B	Br	.221
R, FD, PV, A, Ab, Br	B	.260

The Restrictive-Expansive Dimension. Rejection, Location, and Penetration were analyzed for relationship to this dimension.

The results of this analysis are shown in Table IV-7. Using all three predictors a coefficient of .176 resulted. The decrease in the coefficient when either Location or Penetration were deleted, and the moderate decrease resulting from deletion of Rejection, suggests that variation in these variables was most closely related to variation in the Restrictive score.

TABLE IV-7

Multiple Correlation Coefficients for Restrictive-Expansive Dimension

Variables	Variable Deleted	r^2
R, L, Pn	--	.176
L, Pn	R	.139
R, Pn	L	.092
R, L	Pn	.086

The Client-Other Referent Dimension. Eleven variables were selected for analysis with this dimension, more than for any other dimension. These variables were Rejection, Movement, Integration, Human, Animal, Anatomy, Sex, Barrier, Penetration, Human Movement, and the Dogmatism Scale score, as shown in Table IV-8.

It was only with the Client-Other Reference dimension that the Dogmatism score had shown even moderate correlation. Therefore it was only for this dimension that the Dogmatism score was included in the multiple regression analysis. Because the Dogmatism Scale is a separate instrument, a regression analysis was first performed in which it was included and a second analysis was performed in it was not included. Results of the second analysis are shown in the

extreme right-hand column of Table IV-8.

TABLE IV-8

Multiple Correlation Coefficients for Client-Other Referent Dimension

Variables	Variable Deleted	r^2 With RDS	r^2 Without RDS
R, M, I, H, A, At, Sx, Br, Pn, HM, RDS	--	.568	.472
M, I, H, A, At, Sx, Br, Pn, HM, RDS	R	.567	.471
R, I, H, A, At, Sx, Br, Pn, HM, RDS	M	.568	.471
R, M, H, A, At, Sx, Br, Pn, HM, RDS	I	.502	.426
R, M, I, A, At, Sx, Br, Pn, HM, RDS	H	.515	.451
R, M, I, H, At, Sx, Br, Pn, HM, RDS	A	.564	.471
R, M, I, H, A, Sx, Br, Pn, HM, RDS	At	.566	.471
R, M, I, H, A, At, Br, Pn, HM, RDS	Sx	.526	.450
R, M, I, H, A, At, Sx, Pn, HM, RDS	Br	.544	.419
R, M, I, H, A, At, Sx, Br, HM, RDS	Pn	.436	.393
R, M, I, H, A, At, Sx, Br, Pn, RDS	HM	.565	.469
R, M, I, H, A, At, Sx, Br, Pn, HM	RDS	.472	----

Taken together, the eleven variables yielded a coefficient of .568. Individual variables which appeared to contribute most were found to be Penetration, Dogmatism

Scale, and Integration as well as Human and Sex to a lesser extent. When the Dogmatism Scale was not included, the relative contributions of the other variables were not greatly changed. It appeared that the Dogmatism Scale contributed considerably to the correlation when used in conjunction with other variables although when used alone its relationship was low.

Discussion

Results of the Predictive and exploratory phases of the study are discussed individually. The predictive phase is discussed first.

The predictive phase. Of the ten hypotheses tested in the predictive phase of the study, one was supported by the results and nine were not. The results relevant to each hypothesis are discussed below.

H_1 A positive relationship exists between Color scores and Affective Content Scores.

This relationship was predicted because projective theory proposes a positive relationship between use of color

in percepts and affectivity. Perhaps the failure to obtain support for this relationship can best be explained by examining the dynamics of color responses to inkblot stimuli. Schachtel and Shapiro both consider the use of color to be a basically passive activity in which the individual reacts to the dominant feature of the stimulus.[1,2] Thus the affectivity found in persons with high Color scores is more of a reactive affectivity than it is an affectivity originating from within the individual.

In the context of the counseling situation such persons might be expected to react to client affect but to introduce little affect on their own. If clients presented little affect there would be little opportunity for the counselor to react to affect. In the present study the sizeable, but not statistically significant, correlation of .24 was found between Color and Affective-Cognitive Follow scores. This may suggest that persons scoring high on Color tended to passively follow the affective level of clients although not necessarily using affective content in their responses. While the results apparently do not offer support

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[1]E. G. Schachtel, "On color and affect," Psychiat., VI (1943), pp. 393-409.

[2]David Shapiro, "A perceptual understanding of color response," Rorschach Psychology, ed. Maria Rickers-Ovsiankina (New York: Wiley, 1960), pp. 154-201.

for theory, neither do they appear to offer sufficient reason to reject theory.

H_2 A positive relationship exists between Human Movement scores and Affective-Cognitive Follow scores.

This relationship was expected because theory proposes a positive relationship between the perception of human movement and the capacity for empathy. The perception of movement in motionless inkblot stimuli is considered to be similar to the perception of feelings of others because both require an individual to project his own feelings.[1] It was assumed that empathic understanding of the client would be reflected by high consistency between client and counselor affect levels as indicated by high Affective-Cognitive Follow Scores.

The failure to obtain statistical support for the hypotheses may be attributable to two factors. First, it is possible that empathy is only partially reflected by consistency of feeling level. That is, the Affective-Cognitive Follow score may be determined by several factors, of which empathy is only one. These extraneous factors might tend to negate the effect of empathy. In a similar manner, there may be behavioral correlates of HM which tend to negate the effect

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[1]E. G. Schachtel, "Projection and its relation to character attitudes and creativity in kinesthetic responses," Psychiat., XIII (1950), pp. 69-100.

of empathy.

A second possible reason for the results may be the nature of the Affective-Cognitive Follow-Change dimension. By definition, it measures only gross changes in feeling level, so that slight changes are ignored. It does not identify the direction of the changes, whether from affective to cognitive or from cognitive to affective, nor does it specify the level of affectivity when no change in level occurs. It therefore appears possible that this dimension lacks precision. That this may be the case is further supported by the failure of this dimension to correlate highly with any but a few of the personality variables.

H_3 A negative relationship exists between Form Appropriateness scores and Content Follow scores.

This relationship was expected because theory associates high Form Appropriateness scores with rigidity, defensiveness, and pendantry. These characteristics in a counselor would be expected to be associated with frequent changes in discussion topic, since threatening topics would be replaced with non-threatening topics and topics considered irrelevant would be quickly passed over by the counselor.

The failure to achieve statistical support for the hypothesized relationship may perhaps be attributable to the

very small variation found in the FA score.[1] Since individual differences were not large, the possibility of correlation with other variables apparently was reduced. It is possible that more meaningful differences would have appeared if only the frequency of high Form Appropriateness percepts (equivalent to Rorschach F+) had been considered, rather than total FA scores (equivalent to Rorschach F-, F, and F+).

H_4 A positive relationship exists between Form Appropriateness scores and Restrictive scores.

The theoretical basis for this hypothesis was similar to that of hypothesis three, above. It was expected that rigid, defensive, and pedantic counselors would restrict client response freedom. As in the case of the previous hypothesis, failure to obtain statistical support may have been attributable to insufficient variability in the independent variable. Although these results did not support the theory, they did not produce evidence for its refutation.

H_5 A positive relationship exists between Form Definiteness scores and Restrictive scores.

This relationship was predicted because it was thought that high FD scores would be produced by rigid, exacting persons. Such persons would be expected to restrict client

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[1]Means and standard deviations for all variables are given in Appendix B.

response freedom. The failure to obtain support for this hypothesis may be attributable to the lack of knowledge of personality correlates of the FD score. This variable is unique to the Holtzman and no studies using it have been reported in the literature. The results suggest that even though an individual may have tended to structure ambiguous situations in a definite and concrete manner for himself he may not necessarily have required others to do likewise. The need for further investigation of the FD variable seems evident.

H_6 A positive relationship exists between Human Movement scores and Client Reference scores.

This relationship was predicted because theory proposes a positive relationship between perception of human movement and the capacity for empathy. It was assumed that empathy would be reflected by frequent reference to the client.

That the results support this hypothesis may be regarded as support for theory and, to some extent, as confirmation of previous research.[1,2]

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[1]Schachtel, 1950.

[2]William J. Mueller and Norman Abeles, "The components of empathy and their relationship to the projection of human movement responses," J. Proj. Tech., XXVIII (1964), pp. 322-330.

H_7 A negative relationship exists between Dogmatism Scale scores and Present Reference scores.

The basis for this hypothesis was the asserted relationship between dogmatism and concern with the past and future rather than for the present. Failure to obtain support for this hypothesis may have been attributable to imprecision of the Present vs. Past and Future dimension resulting from its dichotomous nature. It may have been more precise to establish separate rating categories for past, present, and future reference.

H_8 A negative relationship exists between Dogmatism Scale scores and Client Reference scores.

This hypothesis was based on the theoretical relationship between dogmatism and deference to authority figures. It was expected that dogmatic counselors would make fewer references to the client and more references to authority figures as reflected by low Client Reference scores. Although statistical significance was not achieved, the resulting correlation was sizeable and in the expected direction.

It may be possible that these results were attributable to that characteristic of dogmatism on which the hypothesis was based, namely, deference to authority figures. Perhaps the most dogmatic counselors showed deference to their instructors (who were generally client-centered) by making

more frequent reference to clients, while the moderately dogmatic counselors did not. Whether or not this is correct, the results do not support rejection of theory but neither do they firmly support confirmation of it.

H_9 A positive relationship exists between Dogmatism Scale scores and Restrictive scores.

This relationship was predicted because dogmatism is associated with rigidity and deference to authorities. Dogmatic counselors would be expected to demand client deference and to be intolerant of opinions differing from their own. These characteristics would be reflected by restriction of client response freedom. As in the case of the previous hypothesis, the failure to achieve statistical support for this hypothesis may have been the result of deference to authority on the part of highly dogmatic counselors.

H_{10} A negative relationship exists between Dogmatism Scale scores and Content Follow scores.

The rigidity and intolerance associated with dogmatism was the basis for this prediction. A slight relationship in the expected direction was found, but without statistical significance. Deference to instructors may have been responsible for these results. It is also possible that the results were influenced by the time lapse of five months between

administration of the Dogmatism Scale and the time at which interview data was obtained. During the intervening period the subjects were almost continually involved in learning experiences intended to foster changes in attitude and counseling techniques. Although it is unlikely that drastic changes occurred as a result of the learning experiences, sufficient change may have occurred to influence the results of the study. If that is what actually occurred, all results involving the Dogmatism Scale may lack validity to an undetermined extent.

In general, the results of the study did not support the hypotheses at a statistically significant level. A notable exception was support for hypothesis H_6 "A positive relationship exists between Human Movement scores and Client Referent scores." The results were significant beyond the two and one-half percent level. A sizeable correlation in the expected direction but lacking statistical significance was found for hypothesis H_8 "A negative relationship exists between Dogmatism Scale scores and Client Reference scores."

The prevailing paucity of statistically significant relationships obtained in this study may have been partially the result of error variance in the measurements used. Taken individually the HIT, RDS, and CRS appear to be adequately reliable, suggesting that the error variance found in scores

of each is not unreasonably high. However, when scores from two or more instruments are compared, as was the case in this study, the effect of error variance is compounded. This tends to lower the correlations between measurements.[1] The results do not readily suggest to what extent the statistically insignificant relationships were the result of error variance or of other factors, but the possible effect of error variance should not be ignored.

Another possible reason for the general lack of statistically significant results may have been the non-normal distribution of scores found on several of the CRS dimensions in the sample. Frequency distributions of scores are given in Appendix C. Correlational statistics assume a normal distribution, but it became evident that this assumption was not met in several cases.

The distributions shown in Appendix C suggest that Affective Content scores were skewed toward the lower end of the distribution while Affective-Cognitive Follow, Content Follow, and Present Reference scores were skewed toward the higher ends of the distributions. Considerable spread was found in the distribution of Restrictive scores although it was skewed toward the lower end. The Client Reference score was least skewed but was relatively flat.

Since the Client Reference scores seemed to most nearly

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[1]Robert L. Thorndike, "Reliability," Educational Measurement, ed, E. F. Lindquist (Washington, D. C.,: American Council on Education, 1951), p. 563.

approach a normal distribution, and it was only with this dimension that significant relationships were found, it is likely that the failure to obtain significant relationships with the other dimensions may have been due, at least in part, to a failure to meet the assumption of normality.

It is also possible that nonlinear rather than linear relationships existed between the variables, and therefore were not identified. Significant relationships might have been identified through application of a nonlinear function, e.g., area transformation, to the counseling data before computing correlation coefficients. Such procedures were beyond the scope of the present study, however.

Although the results do not support theory in most of the cases, neither do they run counter to theory. That is, no results were found which suggest relationships opposite those predicted.

The relationships between personality measures and counseling behavior were investigated further in the second phase of the study. The results obtained are discussed in the following portion of this chapter.

The Exploratory Phase. Two statistically significant but unpredicted relationships were found between personality and behavioral variables. This number of significant relationships could occur by chance, but because of the exploratory nature of this phase of the study these relationships will be treated as though they were indeed significant. This

seems appropriate to further investigation of theory and to suggest future research.

The two significant but unpredicted relationships found were between the HIT Integration score and the CRS Client Reference score, and between the HIT Barrier score and the CRS Client Reference score. The HIT Integration score is similar to such Rorschach categories as Beck's Z and Hertz's g.[1] It is considered to be indicative of intellectual level and of the ability to organize and integrate concepts. That Integration and Client Reference were positively related suggests that high Integration scorers tended to synthesize client communication and therefore were more likely to focus attention on the client rather than upon themselves or others.

The Barrier score was originally developed for the Rorschach by Fisher and Cleveland and was later adopted as one of the standard HIT variables.[2] It is said to be an indication of the degree to which an individual is psychologically defended against external threats. High scorers are said to be over defended and low scorers under defended,

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[1]Marguerite R. Hertz, "The organization activity," Rorschach Psychology, ed. Maria Rickers-Ovsiankina (New York: Wiley, 1960), pp. 278ff.

[2]S. Fisher and S. E. Cleveland, Body Image and Personality (Princeton, N. J.,: Van Nostrand, 1958).

but a moderate level of defense would be necessary for effective social interaction.

Support for the validity of the Barrier score was obtained in a study by Ramer, and the results of that study seem relevant to the results of the present study.[1] Ramer studied behavior in a structured social situation, using as subjects college females who were high and low Barrier scorers on the Rorschach. It was found that the high scorers tended to attempt more communication, to assert themselves more, to be less self-depreciatory, and to express less discomfort in threatening situations than did the low scorers.

The social situations of the Ramer study differed from the counseling situations of the present study, but there appear to be similarities in the results. With the exception of self-assertion the characteristics displayed by Ramer's high barrier scorers appear to be those which could be expected to foster frequent client reference. Those characteristics were self-acceptance, self-confidence, and attempts to communicate.

The positive relationship between Barrier and Client Reference scores therefore appears to lend a degree of support to the results of Ramer's study. Support for the validity

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[1]John Ramer, "The Rorschach barrier scores and social behavior," J. Consult. Psychol., XXVII (1963), pp. 525-531.

of the Barrier score is also suggested.

Several multiple regression analyses were performed to more clearly reveal interrelationships between personality variables and behavioral dimensions. Since the analyses were not exhaustive, the results obtained were not considered to be definitive. Results pertaining to each behavioral dimension are discussed below.

The Affective-Cognitive Content Dimension. Shading, Animal, and Form Appropriateness were found to contribute most to variation in Affective Content scores. Although extremely high scores on these personality variables are associated with anxiety, a high level of unconscious tendencies to action, and defensiveness, respectively, variations within the normal range of scores are associated with less extreme personality characteristics. Shading is said to indicate sensitivity to environment and therefore, empathy.[1] Rorschach F, which Holtzman Form Appropriateness approximates, is associated with clearness of perception, recognition, and perceptual discrimination.[2] A characteristic of Animal responses is

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[1]Ewald Binder, "The Binder chiaroscuro system and its theoretical basis," Rorschach Psychology," ed. Maria Rickers-Ovsiankina (New York: Wiley, 1960), pp. 210&ff.

[2]Samuel J. Beck, "The Rorschach test: A multi-dimensional test of personality," An Introduction to Projective Techniques, ed. H. H. and Gladys Anderson (Englewood Cliffs, N. J.,: Prentice-Hall, 1951), pp. 105-106.

that they may reflect feeling but require a minimum of emotional involvement on the part of the respondent.[1]

Assuming that these personality correlates of the three variables do exist, it may be suggested that Shading, Animal, and Form Definiteness are related to the use of affective content because the use of affective content depends upon sensitivity to client affect, clear perception and recognition of feeling, and a tendency to reflect affective material back to the client without becoming emotionally involved. The results, therefore, appear to be consistent with theory.

The Affective-Cognitive Follow-Change Dimension. Taken together, the variables Rejection, Location, and Color were found to have a small degree of relationship to variation in the Affective-Cognitive Follow category. Each appeared to make approximately equal contributions, but the contributions were not great. Location was negatively related while Rejection and Color were positively related.

These results cannot be readily explained by theory although color is said to be related to affectivity. Perhaps interpretation is hindered by a lack of precision in the Affective-Cognitive Follow Score, as was discussed in a preceding portion of this chapter.

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[1]Beck, p. 108.

The Content Follow-Shift Dimension. The two variables Penetration and Shading were not found to contribute highly to variation in the Content Follow score when used together, although each appeared to contribute as much as the other. To the extent that causal relationships were suggested by these results, they could probably be explained adequately by theory, since Shading is considered to be an indicator of sensitivity and Penetration may be an indicator of passivity. A sensitive but passive counselor might be expected to follow discussion topics initiated by the client. However, because the results were not conclusive the explanation is regarded as extremely tentative.

The Present vs. Past and Future Dimension. Seven variables, Rejection, Form Definiteness, Pathognomic Verbalization, Animal, Abstract, Barrier, and Balance, were found to contribute nearly equally to variation in the Present Reference category. Barrier appeared to contribute slightly more than the others, but none contributed greatly. Taken together a moderate correlation was achieved. If casual relationships were implied by these results, the theoretical basis for them was not readily apparent.

The Restrictive-Expansive Dimension. Rejection, Location, and Penetration were found to be somewhat related to the Restrictive score. Location and Penetration were negatively

related and contributed most to variation, while Rejection was positively related and contributed less. High Rejection scores and low Location scores may be considered to be indicators of lack of involvement in the projective test situation, high Rejection being particularly associated with an obstinant refusal to become involved. Both suggest defensiveness in the ambiguous test situation. The personality correlates of Penetration scores have not been fully established, although high scores may be associated with passivity.

Assuming that persons who reacted defensively in the projective test situation reacted in a similar manner in the counseling situation, obstinacy and defensive avoidance of involvement would be expected. These characteristics might well be reflected by limitation of client response freedom. Thus theory suggests that the results may reveal causal relationships. As was the case with several other dimensions, however, the results were not conclusive. This explanation must therefore be regarded as tentative.

The Client-Other Reference Dimension. More personality variables were found to be directionally related to the Client Reference score than to scores of any other dimension. These findings alone are sufficient to suggest that the Client-Other Reference dimension is of importance.

Eleven variables were selected for multiple regression analysis, which revealed that Penetration, Dogmatism Scale, Integration, Human, and Sex contributed most to variation in

the dependent variable. Penetration and Dogmatism Scale scores were negatively related while the others were positively related.

The behavioral correlates of several of these variables were mentioned previously and will not be repeated at this point. The Human score is said to be indicative of social maturity and interest in others, while the Sex score is considered to be an indication of sexual impulse and fantasy level. Moderate Sex scores indicate a realistically controlled openness to one's drives and impulses. The Dogmatism Scale is said to measure that type of personality orientation and functioning characterized by strong defenses against one's own drives and impulses. This, in turn, is reflected by intolerance of differences in others and deference to external authorities.

Persons tending to score low on the Dogmatism Scale and Penetration but high on Integration, Human and Sex, would be expected to be non-judgmental, adequately but not highly defended, capable of integrating concepts, socially mature, and able to realistically acknowledge and deal with impulses and drives. In the counseling situation, persons possessing these characteristics would be expected to be acceptant of, and open to the client, and able to meaningfully integrate client communications. These conditions,

in turn would be reflected, at least in part, by frequent reference to the client rather than to the counselor or other persons.

These results therefore appeared to be consistent with theory, suggesting the possibility of causal relationships between the independent variables and the dependent variable.

Considering the results of the exploratory phase in general, it appeared that the direction of most of the suggested relationships could be satisfactorily explained by theory. It was not clear, however, to what extent causal relationships were actually indicated by the regression analyses.

Psychometric variables which had been found to correlate highly with counseling variables did not always contribute highly when used with other psychometric variables in the regression analyses. For example, the Human Movement score correlated significantly with the Client Reference score but contributed little in the regression analysis. Apparently HM was the best single correlate, but the variation among the other variables was such that variation in HM did not greatly increase the correlation above the level produced by the others when used in combination.

Somewhat similarly, the Dogmatism Scale score was

only moderately correlated with the Client Reference score but made a considerable contribution when used in combination with other variables. It is apparent, therefore, that much additional study will be needed if the inter-relationships of variables are to be more fully understood and adequate prediction is to be ultimately achieved. Implications for further research are discussed in the final chapter.

Discussion of the Counselor Response System. The Counselor Response System yielded considerable information which cannot be properly considered results of the study. This information is reported and discussed because it revealed important characteristics of the interview material used in the study and because it provided a basis for assessing the utility of the system for interview analysis.

Each of the six CRS dimensions consists of dichotomous categories. A measure of an individual's behavior on each dimension is therefore obtained by counting the frequencies in one of the two categories of each dimension. Since the interview segments used in the study consisted of twenty counselor statements, individual scores for each category could have ranged from zero to twenty.

TABLE IV-9

Means and Standard Deviations
of CRS Categories

	Mean	Standard Deviation
Affective Content	5.345	3.976
Affective-Cognitive Follow	16.207	3.599
Content Follow	16.103	4.135
Present Reference	16.209	3.959
Restrictive	7.517	4.580
Client Reference	13.207	3.630

Means and standard deviations of the six categories used are shown in Table IV-9.[1] These data indicated that the subjects tended to use Cognitive rather than Affective Content in their responses and that they tended to respond at the same affective level as that of the preceding client statement. They also tended to follow the content (discussion topic) of the preceding client statement rather than shifting to different content or discussion topics. They tended to expand client freedom of response slightly more than they tended to restrict client response freedom. Similarly, they tended to refer to the client slightly more than

[1]Obtained means and standard deviations for all variables used in the study are given in Appendix B.

they referred to other persons.

This configuration of counselor responses seems appropriate for interviews with basically normal high school students. To the extent that variation occurred within each category, differences between individuals appear to have been measured.

Inter-relationships between dimensions were revealed by computing Product-Moment correlation coefficients for all possible pairs of scores. A matrix of these coefficients is shown in Table IV-10.

TABLE IV-10

Product-Moment Correlation Coefficients between CRS Categories

	Aff. Content	Aff.-Cog. Follow	Content Follow	Present Reference	Restrictive	Client Reference
Affective Content	1.000	-.103	.308	.150	-.420	.359
Affective-Cognitive Follow		1.000	.426	.305	-.245	.147
Content Follow			1.000	.544	-.765	.260
Present Reference				1.000	-.644	-.035
Restrictive					1.000	-.138
Client Reference						1.000

As was expected, several dimensions were found to correlate highly with each other. The relationship of dimensions to each other suggested a number of response types.

The Affective-Cognitive score correlated positively with Content Follow and Client Reference scores, and negatively with Restrictive scores. This suggests responses which follow the discussion topic, deal with client affect, and expand client response freedom. Responses of this kind might be used to permissively explore client affect.

The Affective-Cognitive Follow score correlated positively with Content Follow and Present Reference scores, and negatively with Restrictive scores. This configuration seemed to describe responses which followed the discussion topic and feeling level of the client while referring to the present and expanding client response freedom. Such responses were probably those in which the client was allowed to expand upon the topic of his choice without seeking historical anticedents or projecting future outcomes.

The Content Follow score was found to correlate rather highly with all other scores. It was positively correlated with all but the Restrictive score. This configuration described responses which dealt with present client affect and which followed the client's discussion topic and level

of feeling, but which did not restrict freedom of response.

The Present Reference score correlated positively with Affective-Cognitive Follow and Content Follow scores, and negatively with Restrictive scores. This configuration was similar to that of the correlates of the Affective-Cognitive Follow score. Responses of this kind seemed to suggest passive conversation on the part of the counselor.

The Restrictive score correlated negatively and quite highly with all other dimensions. The resultant configuration is roughly the opposite of that found among the correlates of the Content Follow score. Particularly evident were the sizeable negative correlations with Content Follow, Present Reference, and Affective Content. With this kind of response the counselor could change the discussion topic by asking a specific question about some past event or future plan.

Sizeable positive correlations were found between the Client Reference score and Affective Content and Content Follow scores. A lesser positive correlation was found with Affective-Cognitive Follow as was a slight negative correlation with Restrictive scores. This configuration suggested responses in which the counselor followed the discussion topic but asked an open-ended question about client feelings, thereby shifting to a more affective level than that of the

preceding client statement. A response of this kind might have been used to actively probe client feelings.

Although further investigation certainly seemed warranted, grouping of categories on the basis of mutual correlation suggested that several types of responses were identified by the data.

One broad type included maintenance of discussion topic and feeling level, use of affective content, reference to the client and to the present time, and expansion of client response freedom. Another type was similar, but did not include reference to the client or use of affective content.

At the other extreme was a response type in which there was a change in affect level and discussion topic, reference to the past or future, and restriction of response freedom. Another type appeared to lie somewhere between the extremes. This type included changing affect level without changing discussion topic, while referring to the client and using affective content.

The first type of response might have been used in a permissive discussion of current client problems, while the second seemed more typical of permissive conversation. The third type seemed to characterize data-gathering, while the fourth type appears appropriate for probing client affect.

Whether or not these configurations would be found in different kinds of counseling relationships or with a different sample of counselors or clients, could not be determined at this point. It can only be stated that the response types suggested by the data seemed logically consistent. Implications for further research will be stated in the following chapter.

Because the CRS had not been used in any research prior to the present study, it was somewhat difficult to assess its potential utility for further interview research. The results of this study suggested that the instrument was capable of measuring differences between counselors' behaviors but that further refinement of the instrument would enhance its utility as a research tool.

In its existing form the CRS seemed to assess three pertinent aspects of counselor behavior: (1) degree of control of the interview (the Content Follow-Shift and Restrictive-Expansive dimensions), (2) the focus of counselor attention (the Client-Other Reference and Present vs. Past and Future dimensions) and (3) the counselor's handling of affect (the Affective-Cognitive and Affective-Cognitive Follow-Shift dimensions).

Summary

Results were analyzed in two phases corresponding to

the predictive and exploratory phases of the study. In the predictive phase, ten hypotheses were tested by computing Product-Moment correlation coefficients between appropriate pairs of variables. The results are summarized as follows:

H_1	A positive relationship exists between Color scores and Affective Content scores.	$p > .05$ Reject H_1
H_2	A positive relationship exists between Human Movement scores and Affective-Cognitive Follow scores.	$P > .05$ Reject H_2
H_3	A negative relationship exists between Form Appropriateness scores and Content Follow scores.	$p > .05$ Reject H_3
H_4	A positive relationship exists between Form Appropriateness scores and Restrictive scores.	$p > .05$ Reject H_4
H_5	A positive relationship exists between Form Definiteness scores and Restrictive scores.	$p > .05$ Reject H_5
H_6	A positive relationship exists between Human Movement and scores and Client Reference scores.	$p < .05$ Accept H_6

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H_7	A negative relationship exists between Dogmatism Scale scores and Present Reference scores.	$p > .05$ Reject H_7
H_8	A negative relationship exists between Dogmatism Scale scores and Client Reference scores.	$p > .05$ Reject H_8
H_9	A positive relationship exists between Dogmatism Scale scores and Restrictive scores.	$p > .05$ Reject H_9
H_{10}	A negative relationship exists between Dogmatism Scale scores and Content Follow scores.	$p > .05$ Reject H_{10}

All hypotheses except hypothesis H_6 were rejected at the five percent level. Hypothesis H_6 was accepted when the results were found to be statistically significant beyond the two and one-half percent level.

In the exploratory phase of the study, significant but unpredicted positive relationships were found between both the Barrier and the Integration scores of the HIT and the Client Reference score of the CRS. Multiple regression analyses of the relationship of selected personality variables to variation in each CRS category revealed the following:

1. The Shading, Animal, and Form Appropriateness scores of the HIT were most highly related to variation in the CRS Affective Content score.
2. The Rejection, Location, and Color scores of the HIT were not highly related to the CRS Affective-Cognitive Follow category.
3. The Penetration and Shading scores of the HIT were not highly related to the CRS Content Follow category.
4. Used together, the Rejection, Form Definiteness, Pathognomic Verbalization, Animal, Abstract, Barrier, and Balance scores of the HIT showed little relationship to the CRS Present Reference score.
5. The Rejection, Location, and Penetration scores of the HIT showed little relationship to the CRS Restrictive score. Location and Penetration were negatively related to the criterion and seemed to contribute most to variation.
6. The Penetration, Integration, Human, and Sex scores of the HIT, as well as Dogmatism Scale scores, contributed most to

variation in the CRS Client Reference Category. Penetration and Dogmatism Scale were negatively related to the criterion.

These results were discussed with regard to their theoretical relevance. While only partial support for theory was found, the results did not appear to run counter to theoretical predictions. Most of the exploratory results could be adequately explored by theory.

The paucity of significant results in the study was attributed to error variance, skewed distributions of scores on several CRS dimensions, and to the possible existence of nonlinear relationships which could not be identified without application of suitable transformations to the data.

The Counselor Response System and data obtained through its use were also reported and discussed. Although apparently in need of further development and refinement, the instrument appeared to have utility for assessing counselor interview behavior. Differences between individuals were found and several response types were tentatively identified through its use.

In the following chapter the study is summarized, conclusions based upon the results are stated, and implications for future research are given.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS FOR FURTHER RESEARCH

Summary

The primary purpose of this study was to investigate relationships between personality characteristics of counselors and verbal behaviors displayed by them during counseling interviews. Theory proposes direct relationships between behavior elicited in the psychometric test situation and behavior in non-test situations, but such relationships have not been found consistently in counseling research.

The Holtzman Inkblot Technique (HIT) and the Rokeach Dogmatism Scale (RDS) were used to assess counselor personality. Counseling behavior was measured by the Counselor Response System (CRS), a method developed for use in this study but intended for wider use as well.

The CRS measures six theoretically relevant dimensions of counselor behavior. Each dimension is composed of two objectively defined categories, and every counselor statement is rated on all six dimensions. The dimensions are: (1) Affective-Cognitive Content, (2) Affective-Cognitive Follow-Change, (3) Content (Topic) Follow-Shift, (4) Present vs. Past or Future (Temporal), (5) Restrictive-Expansive (of

client response freedom), and (6) Client-Other Reference.

Interview data used in the study consisted of the first twenty responses occurring after the first five minutes of an initial interview with a female high school student. One tape recorded interview was obtained from each subject. Interview segments were rated by a single judge using the CRS.

The subjects were twenty-nine advanced graduate students enrolled in a year-long National Defense Education Act Counseling Institute at Michigan State University.

The data were analyzed in two phases. In the first, or predictive phase, ten hypothesized relationships were tested by computing Product-Moment correlation coefficients between psychometric and behavioral variables. In the second, or exploratory phase, inter-relationships among variables were investigated.

The ten hypotheses tested were:

Hypotheses concerning relationships between HIT and CRS variables:

H_1 A positive relationship exists between Color scores and Affective-Cognitive Content scores.

H_2 A positive relationship exists between Human Movement scores and Affective-Cognitive Follow scores.

H_3 A negative relationship exists between Form Appropriateness scores and Content Follow scores.

H_4 A positive relationship exists between Form Appropriateness scores and Restrictive scores.

H_5 A positive relationship exists between Form Definiteness scores and Restrictive scores.

H_6 A positive relationship exists between Human Movement scores and Client Reference scores.

Hypotheses concerning relationships between RDS scores and CRS variables:

H_7 A negative relationship exists between RDS scores and Present Reference scores.

H_8 A negative relationship exists between RDS scores and Client Reference scores.

H_9 A positive relationship exists between RDS scores and Restrictive scores.

H_{10} A negative relationship exists between RDS scores and Content Follow scores.

Statistical support at the two and one-half percent level was found for hypothesis H_6. All other hypotheses were not supported at the five percent level and were therefore rejected.

In the exploratory phase, significant but unpredicted relationships were found between the Barrier and Integration

scores of the HIT and Client Reference score of the CRS. Multiple regression analyses identified psychometric variables which appeared to be associated with variation in several CRS variables, but identified no variables which were highly related to the Content Follow score or the Affective-Cognitive Follow score. The multiple regression analyses were not exhaustive, nor were they intended to be.

The results were discussed in a context of theory. Statistical support seemed to have been found for the relationship between the perception of human movement in inkblot stimuli and the capacity for empathy. Other theoretical relationships were suggested but lacked statistical significance. Although the results furnished only partial support for theory, no results were found which suggested relationships opposing theory. The failures to achieve statistical significance were attributed to extraneous factors and to error variance present in the measurement instruments used.

Data obtained through use of the CRS was also presented. The utility of this instrument as a research tool was discussed.

Conclusions

Within the limitations imposed by the nature of the sample, the following conclusions were reached:

1. Each of the three instruments used in the study revealed interpersonal differences within the sample.
2. Evidence suggests that through further refinement of the instruments and further research, adequate prediction of relevant aspects of counseling behavior may ultimately be achieved, although only one of ten predicted relationships was supported by the results of this study.
3. Although theory was only partially supported by the results of this study, theory was not disproved.
4. The theoretical relationship between perception of human movement in inkblot stimuli and the capacity for empathy was supported by the results.
5. Although the CRS may require further development and refinement, it appears to be capable of measuring meaningful counselor behaviors.

Discussion

An underlying theoretical assumption in this study was that human behavior is relatively consistent. In accord

with this assumption, relationships were predicted between behaviors elicited in the psychometric test situation and the counseling situation.

Although only one of the ten predicted relationships was supported by the results, it was found that several behavioral dimensions were related to test scores. With some minor exceptions, these findings were consistent with theory, and none appeared to be contrary to theory. Thus the study seems to provide additional evidence bearing upon the adequacy of projective theory and the validity of the Holtzman Inkblot Technique.

Several reasons may be suggested for the several statistically insignificant results. It seems quite likely that the dimensions of counseling behavior studied were determined by a configuration of personality characteristics rather than by unitary factors associated with individual psychometric variables. For this reason, individual variables might not be significantly related to measures of behavior, but neither would they be related in directions opposite those predicted. Combinations of variables, representing configurations of personality characteristics, might be more meaningfully related, however. That the comparison of individual test variables with behavioral dimensions yielded many inclusive results while the multivariate comparisons

were more conclusive, tended to confirm this.

Another possible reason for the inconclusive results which were found may be related to the limited sample of counseling behavior used in the study. Perhaps more than one segment of interview behavior should have been obtained from each subject, thereby minimizing whatever extraneous factors may have been introduced by individual clients. Even though client characteristics were controlled as much as possible, it seems quite evident that the stimuli in the counseling situation differed for each subject while the stimuli in the test situation were relatively uniform.

It is also possible that imprecise measurement contributed to the inconclusiveness of the results. This seems to have been the case with two dimensions of the CRS. These faults can be corrected to a great extent, and will be, through subsequent development of the instrument.

It was also found that the distribution of scores on several of the CRS dimensions were skewed. Because correlational statistics assume normal distributions, the inconclusive results may have been partially the result of these skewed distributions. The existence of significant nonlinear relationships between variables is also possible because the techniques used in the study were intended to identify only linear relationships.

In addition to these possible factors, there were uncontrolled variables which tended to confound the results. Intelligence and age of the subjects are two variables which may have

had such effects, and the existence of others is likely.

The study and its results may also be considered with regard to practical application. At the outset the study was considered to be relevant to confirmation of psychometric test validity, selection of counselor candidates, and development of counselor education curricula.

In some respects, confirmation of psychometric test validity was not conclusive, since nine of ten predicted relationships were not supported by the results. On the other hand, one predicted relationship was supported and several relationships were suggested which were consistent with theory.

The results seem particularly meaningful when compared with results of prior studies by Ramer and by Mueller and Abeles.[1,2] Ramer found behavioral correlates of the Rorschach Barrier score which to a considerable extent resemble those found in the present study. Although the subjects and behavioral measures used differed from those of the present study, the results of both studies suggested that facility in interpersonal relationships was positively related to the Barrier score.

Mueller and Abeles employed the Human Movement score, as did the present study, and used as subjects counselors who in many ways resemble the present subjects. In that

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[1]John Ramer, "The Rorschach barrier scores and social behavior," J. Consult. Psychol., XXVII (1963), pp. 525-531.

[2]William J. Mueller and Norman Abeles, "The Components of empathy and their relationship to the projection of human movement," J. Proj. Tech., XXVIII (1964), pp. 322-330.

study the Human Movement score was found to be significantly and positively related to what was considered to be a component of empathy, namely, the accuracy with which one's behavior was perceived by others. Quite clearly, that measure of empathy differed greatly from the one used in the present study, i.e., frequency of reference to the client.

The results of the former study seemed to confirm the theoretical dependence of empathy upon projection of one's own feelings onto others.[1] The present study did not seek to assess such components of empathy but rather sought to measure more objective behaviors. Although reference to the client was not considered to be solely determined by empathy, it seemed unlikely that empathy would be present if there were infrequent reference to the client. The finding that the Human Movement score and the Affective Content score seemed positively related tends to support the relationship of human movement perception to empathy. Consequently, the results of the two studies do not appear comparable although both seem to lend support to the validity of the Human Movement score as an indicator of the capacity for empathy.

It appears, therefore, that the present study tended to support the validity of the Barrier and Human Movement

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[1]E. G. Schachtel, "Projection and its relation to character attitudes and creativity in the kinesthetic responses," Psychiat., XIII (1950), pp. 69-100.

scores of the HIT. Validity of the Rokeach Dogmatism Scale was not greatly enhanced, however.

The RDS score was not found to be significantly related to any of the CRS categories, although relationships in the expected direction were found in three cases. RDS scores were negatively related to Client Reference and Content Follow scores and were positively related to Restrictive scores. These results seem consistent with those obtained by Kemp, who found that high scorers on the RDS avoided personal involvement when participating in group counseling.[1] In another study, Kemp found that counselors scoring high on the RDS tended to make more evaluative and diagnostic responses than low scorers when conducting individual counseling interviews.[2] It seems apparent that the results of the present study tended to support those of Kemp's studies, but lacked statistical significance.

A study by Russo, Kelz, and Hudson failed to find statistical support for a negative relationship between RDS scores and ratings of counseling competence, although results

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[1]C. Gratton Kemp, "Behaviors in group guidance (socio process) and group counseling (psyche process)," J. Couns. Psychol., X (1963), pp. 373-377.

[2]C. Gratton Kemp, "Influence of dogmatism on the training of counselors," J. Couns. Psychol., IX (1962), pp. 155-157.

were in the expected direction.[1] More conclusive results had been obtained in a somewhat similar study by Stefflre, King, and Leafgren.[2] Consequently, it appears that the results of the present study tend to confirm results of earlier studies and to support the validity of the RDS, although the support is not conclusive.

It therefore appears that support for the validity of the HIT and the RDS was obtained to the extent that the results of the study were similar to those of previous studies and were consistent with theoretical predictions.

Considering separately several types of validity, it appears that evidence was obtained for both the construct and the concurrent validity of the personality instruments used. Construct validity is the extent to which test performance can be explained by psychological theory and concurrent validity is the relationship of test performance to other measures of behavior.[3]

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[1]J. R. Russo, J. W. Kelz, and G. R. Hudson, "Are good counselors open minded?" Couns. Educ. and Superv., III (1964), pp. 74-77.

[2]Buford Stefflre, P. King, and F. Leafgren, "Characteristics of counselors judged effective by their peers," J. Couns. Psychol., IX (1962), pp. 335-340.

[3]Lee J. Cronbach, Essentials of Psychological Testing (New York: Harper & Row, 1959), p. 106.

Evidence for concurrent validity of the HIT seems particularly significant because very few previous studies have demonstrated relationships between performance on this instrument and specific behavioral measures among normal persons.

Predictive validity, the relationship of test performance to later behavior, was not investigated in the present study. However, establishment of concurrent validity can be a useful step toward attainment of predictive validity. If the relationships obtained are confirmed by future research, a basis for the prediction of behavior will have been provided.

The relevance of this study to counselor candidate selection is directly related to the question of predictive validity. It was immediately apparent that the obtained relationships between test scores and measures of counseling behavior were not of sufficient magnitude to warrant the use of the HIT and the RDS as screening instruments at the present time. However, the results do suggest that these instruments may have potential value for selective screening purposes if sufficient additional research is carried out.

The predictive potential of the instruments was particularly suggested by the results of the exploratory phase of the study because a number of test variables were

found to be related to certain dimensions of counseling behavior. To be suitable for selection purposes, an instrument should not only be capable of predicting counseling behavior during the period of counselor education, but it should also be capable of predicting behavior after the counselor's formal education is completed and he is employed as a professional counselor. That is, predictive validity should be established. Furthermore, the behaviors predicted should be identifiable as being either "effective" or "ineffective" relative to counseling outcome.

It does not appear that such accurate predictions will soon be accomplished, but the results of the present study suggest that such is not beyond the realm of possibility.

The study was also considered to have relevance for development of counselor education curricula, although only indirectly. If it could be decided which counseling behaviors are most desirable, either on the basis of theory or research, then an instrument such as the CRS might be useful for measuring the effectiveness of various learning activities for developing those behaviors. It might also be possible to ascertain which educational experiences would be most effective for counselor candidates possessing particular personality characteristics. Psychometric tests could then be used to assign those students to the most appropriate

learning experiences.

Because of the nature of the study, the results have no direct application to curriculum development at the present time. The results do suggest, however, that the instruments used may eventually prove useful for such purposes.

In conclusion, it appears that the study shed light upon projective theory. Several factors which may have detracted from the accuracy of the study have been identified and could be controlled in future research. The results did appear to support some major aspects of theory and previous research. To the extent that behavioral prediction was accomplished, the results appeared to have relevance for the development of psychometric screening procedures and improvement of counselor education curricula. In particular, the Counselor Response System appears to have potential value for measuring differences between the counseling behaviors of individual counselors and should prove to be a useful tool in interview analysis.

Implications for Further Research

Throughout this study, implications for further research became more evident.

1. Replication of the study is desirable to discover whether the same results would

be obtained using different subjects and different types of counseling situations.

2. Such factors as intelligence and age, which tend to correlate with key projective variables and may have confounded results, could be controlled.

3. The inter-relationship of predictor and criterion variables could be more intensively studied, since the multiple regression analyses of the present study were only an initial step in this direction. One possible approach would be selection of variables for multiple regression analysis which were highly correlated with the criterion but relatively uncorrelated with each other. For example, Penetration, Integration, and Barrier scores seemed to be somewhat related to Client Reference scores and yet were virtually unrelated to each other. An intercorrelation matrix of the personality variables, shown in Appendix D, suggests that similarly related variables might be found for several of the CRS dimensions.

4. The existence of nonlinear relationships between variables should be investigated. This could be attempted through application of a nonlinear transformation on each of the CRS dimensions.

5. The long-range predictive value of the personality instruments could be investigated. Results of the instruments obtained at the beginning of counselor education could be compared with measurements of counseling behavior obtained during and after the period of formal counselor education.
6. Performance on the HIT of persons scoring high and low on the RDS could be compared. The persons studied would not necessarily have to be counselors.

Further research concerning the CRS is also implied.

1. Overlapping dimensions of the CRS might be combined, if feasible, since some overlapping was evidenced.
2. Additional relevant dimensions could be sought. One such dimension already being considered is the affective level, per se., of counselor responses.
3. Some of the present dimensions could be refined to yield more meaningful measurements. For example, separate categories could be used for past, present, and future reference. The Affective-Cognitive Follow-Shift dimension could be subdivided to indicate the affective level of following

responses and the direction of affect level changes.

4. Dimensions for client statements could be developed. This would permit study of counselor-client interaction.
5. The characteristics of counselor statements and responses in different kinds and levels of counseling could be compared through use of the CRS.
6. The utility of the CRS for assessing typescripts of interviews and "live" interviews could be studied.
7. The CRS could be used to assess changes occurring in counseling behavior as a result of specific educational experiences, e.g., kinds of practicum supervision or involvement in group counseling.

Thus the results of the study, although limited in statistical significance, suggest directions for future research. Investigations derived in part from questions raised by the present study are currently being planned. Continued exploration of relationships between projective personality measures and behavior should constitute an important aspect of the developing science of psychology. Increased knowledge of the counseling process is essential to the continued development of the counseling art.

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APPENDIX A

The Counselor Response System With Rating Sheets and Examples

COUNSELOR RESPONSE SYSTEM

of the

BEHAVIOR INTERACTION DESCRIPTION SYSTEM

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The Counselor Response System (CRS) is a method for analyzing the 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 and 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 2^6 different descriptive profiles. One person can adequately judge two dimensions at one time. Judges need only to be familiar with counseling practice and theory.

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* See attached rating sheets.

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 guidlines for judging "good" or "bad" responses. This method is presented only as a means 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 (BIDS), is a method for analyzing both counselor and client responses, as well as their inter-relationships.

DEFINITION AND DESCRIPTIONS OF THE DIMENSIONS

I. The Affective - Cognitive Content Dimension

This dimension indicates whether or not expression of affect or 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 directly 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 very 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?"

B. 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 expressions 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?"
3. "You did quite well on the test!"
4. "So you feel you should look more seriously at teaching as a possible career."

II. <u>The Affective - Cognitive Change Dimension</u>

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 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.

Examples:

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 changing response is one in which the counselor responds at 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:

1. Cl: "Every time he says that, I could just sit down and bawl!" (Affective statement)

   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)

III. 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: "How 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 getting 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?"

   Cl: "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. <u>The Control Dimension (Restrictive - Expansive)</u>

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 client's freedom, the specific question should be asked: "Within the area focused upon the counselor's response, does the response restrict or expand the client's freedom to express 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 often implied by such responses; little opportunity is given for 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.

Examples:

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 yourself that you really could."

3. "And then how did you feel?"

V. <u>The Temporal Dimension (Present vs. Past or Future)</u>

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 combining 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.

Examples:

1. "How 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 present plans?" (Note that although the counselor begins 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. <u>The Client - Other Referent Dimension</u>

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. "How do you feel when your parents argue with each other?"
3. "It seems to bother you when your friends don't listen 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 determines the category. References to non-humans (e.g. places, things, animals), are included in the other-referent category if such reference is primary.

Examples:

1. "How 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?"

CRS Rating Sheet

Judge:_____
Subject:_____
Date:_____

	Affective-Cognitive Change Dimension	
	Follow	Change
1.		
2.		
3.		
4.		
5.		
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19.		
20.		

	Client-Other Referent Dimension	
	Client	Other
1.		
2.		
3.		
4.		
5.		
6.		
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17.		
18.		
19.		
20.		

CRS Rating Sheet

Judge:_____
Subject:_____
Date:_____

	Affective - Cognitive Dimension	
	Affective	Cognitive
1.		
2.		
3.		
4.		
5.		
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16.		
17.		
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19.		
20.		

	Present vs. Past or Future Dimension	
	Present	Other
1.		
2.		
3.		
4.		
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6.		
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17.		
18.		
19.		
20.		

CRS Rating Sheet

Judge:_____
Subject:_____
Date:_____

	Restrictive - Expansive Dimension	
	Restrictive	Expansive
1.		
2.		
3.		
4.		
5.		
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7.		
8.		
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11.		
12.		
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16.		
17.		
18.		
19.		
20.		

	Content Follow-Shift Dimension	
	Follow	Shift
1.		
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3.		
4.		
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COUNSELING INTERVIEW CONTENT: EXAMPLE 1

Cl There are some nurses in my neighborhood and they work long hours, and, you know, they're very tired, and they don't make that much money.

Co_1 So if we're going to be really honest we can say it's not worth it.

Cl Uh huh (laughs)

Co_2 But - uh - social workers - uh?

Cl Well, uh, my older sister, she would like to be a social worker, and you know, she takes psychology and everything, and - uh - (pause). I think that - you know - the pay is worth it.... Although, you know, I've never experienced talking to a social worker or anything, but I think the pay would be worth it.

Co_3 Uh huh. Y'say your sister is - uh - going into this?

Cl Uh huh

Co_4 She's older, I take it?

Cl Uh huh.

Co_5 Where's she at now at this stage?

Cl She's - uh, I've got one sister, she's at college. She's my half sister.

Co_6 Okay. Then she's the one that's working toward being a social worker?

Cl Yes, I think that's why I'd like to do that.

Co_7 You like your sister?

Cl Yes. (laughs)

Co_8 You might not be choosing this because - uh - you like your sister real well?

Cl No.

Co_9 So you're saying - uh - that, uh - the toil and the effort, four years, are going to be worth it, both in helping people and as, you can do this in nursing too, and it's going to pay..uh...

Cl Well, I hope so. It's just that I hope so.

Co_{10} Do you know how much a social worker gets paid?

Cl Well no.

SCORING OF EXAMPLE 1

Response Number	Affective-Cognitive Content		Affective-Cognitive Follow-Change		Content Follow-Shift		Present vs. Past & Future		Restrictive-Expansive		Client-Other Reference	
	Aff.	Cog.	Foll.	Chng.	Foll.	Shft.	Pres.	Past-Fut.	Rest.	Exp.	Cl.	Oth.
1.		X	X		X		X		X			X
2.		X	X		X		X			X		X
3.		X	X			X		X	X			X
4.		X	X		X		X		X			X
5.		X	X		X			X	X			X
6.		X	X		X		X		X			X
7.	X		X		X		X		X		X	
8.		X		X	X		X		X		X	
9.		X	X			X		X		X		X
10.		X		X		X	X		X			X

COUNSELING INTERVIEW CONTENT: EXAMPLE 2

Cl We used to go on vacation there every year. My grand parents live in Massachusetts, and we usually spend some time on the seashore at a cottage or something.

Co_1 You think you like that better than, uh, than L_____.(Name of Cl's home town).

Cl Yuh, definitely!

Co_2 Uh...on what basis don't you like it?

Cl I don't know... L_____ seems so old and, I don't know. (Pause) I don't know, it's just kinda dull and drab. I think if you're used to a lot of history or, uh, it's far more interesting to you.

Co_3 Uh, you say L_____ is old.

Cl It's not really so old... Well, you know, it's just kinda drab and, uh, I don't know - there's some nice parts of L_____ but - I don't know - I like the East a lot better.

Co_4 D'you mean the country side in the East now, or the cities?

Cl Well uh, I like the mountains.

Co_5 And there aren't too many mountains around here. I wonder, do you make, uh, do you make a fair comparison, uh, when you compare a place that you vacation to a place that you live all the time?

Cl Oh, I don't know. This is all I can compare, 'cause I haven't lived there. And my father grew up there, in Massachusetts, and he liked it.

Co_6 Your mother grow up around here?

Cl Yes

Co_7 How'd they meet?

Cl Well my Dad came out here to go to school at M_____ (name of university).

Co_8 And he met a M_____(name of state) girl, and, uh....

Cl Yes.

Co_9 That's pretty, uh, pretty common. Uh, how many brothers and sisters do you have?

Cl Two brothers.

Co_{10} Older than you?

Cl Younger than me.

SCORING OF EXAMPLE 2

Response Number	Affective-Cognitive Content		Affective-Cognitive Follow-Change		Content Follow-Shift		Present vs. Past & Future Reference		Restrictive-Expansive		Client-Other Reference	
	Aff.	Cog.	Foll.	Chng.	Foll.	Shft.	Pres.	Past-Fut.	Rest.	Exp.	Cl.	Oth.
1.	X		X		X		X			X	X	
2.		X	X		X		X			X	X	
3.		X		X	X		X		X		X	
4.		X	X		X		X		X			X
5.		X	X			X	X			X	X	
6.		X		X		X		X	X			X
7.		X	X			X		X		X		X
8.		X	X		X		X			X		X
9.		X		X		X	X		X			X
10.		X	X		X		X		X			X

APPENDIX B

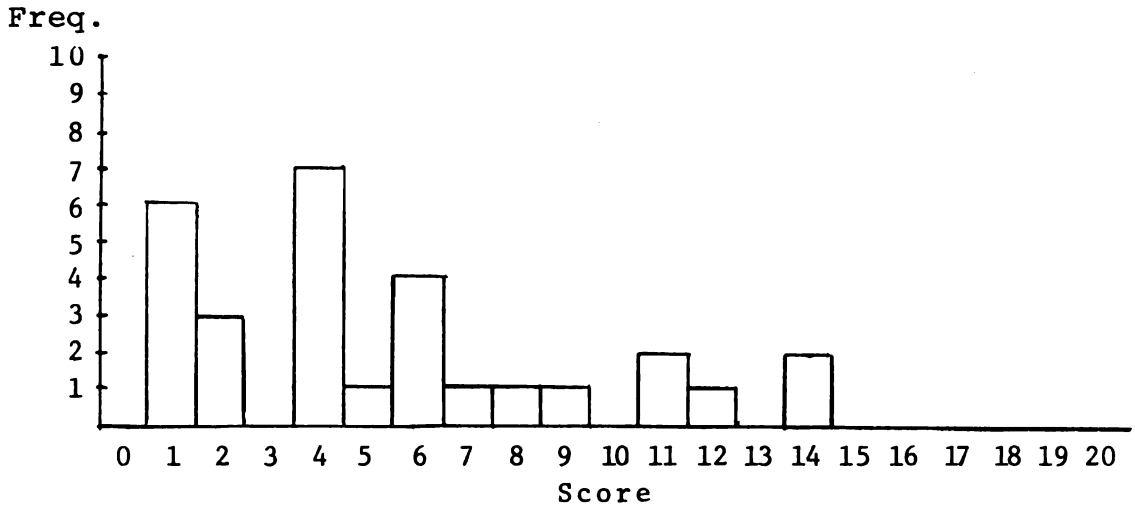
Means and Standard Deviations Obtained For All Variables

Variable	Mean	S. D.
Holtzman Inkblot Technique Scores		
Rejection	0.90	0.94
Location	41.14	11.72
Space	0.72	1.00
Form Definiteness	73.00	13.94
Form Appropriateness	46.31	1.44
Color	16.83	7.88
Shading	4.93	4.09
Movement	25.48	13.44
Pathognomic Verbalization	1.83	3.48
Integration	3.55	3.08
Human	25.00	9.83
Animal	20.90	5.93
Anatomy	3.21	2.13
Sex	0.97	1.68
Abstract	0.10	0.41
Anxiety	7.72	4.90
Hostility	6.72	4.73
Barrier	4.90	2.30
Penetration	1.38	1.24
Balance	0.10	0.31
Popular	9.76	2.48
Human Movement	7.00	3.94
Rokeach Dogmatism Scale	134.59	27.03
Counselor Response System Scores		
Affective Content	5.35	3.98
Affective-Cognitive Follow	16.21	3.60
Content Follow	16.10	4.14
Present	16.21	3.96
Restrictive	7.52	4.58
Client Reference	13.21	3.63

APPENDIX C

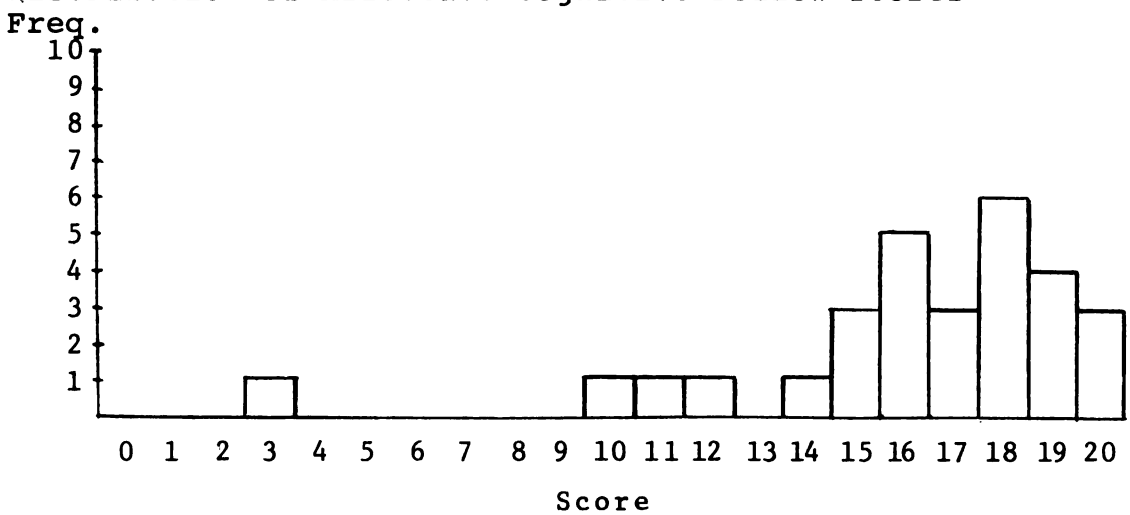
FREQUENCY DISTRIBUTIONS OF COUNSELOR RESPONSE SYSTEM SCORES

Distribution of Affective Content Scores



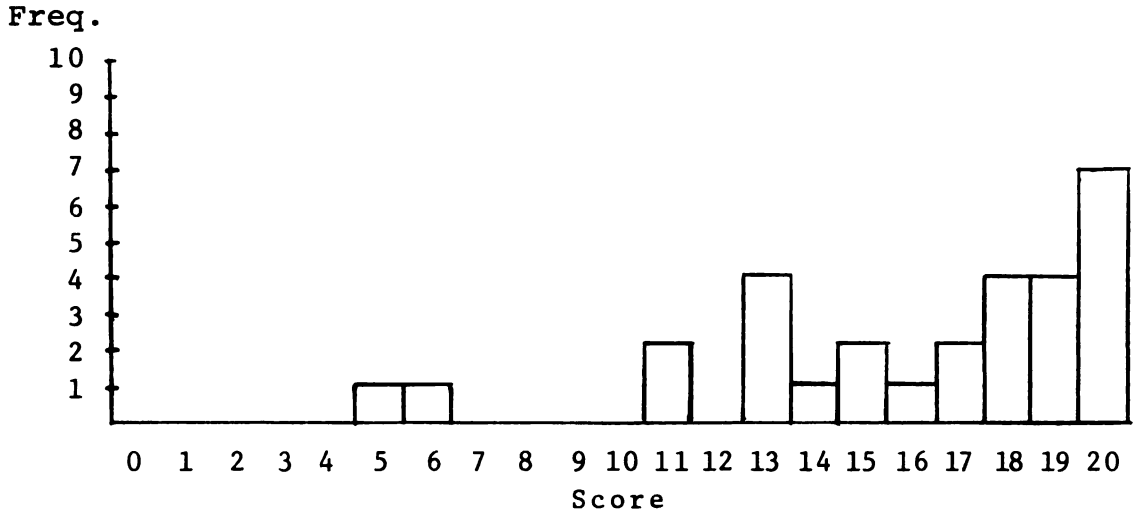
N = 29
$\overline{X}$ = 5.35
S.D.= 3.98

Distribution of Affective-Cognitive Follow Scores



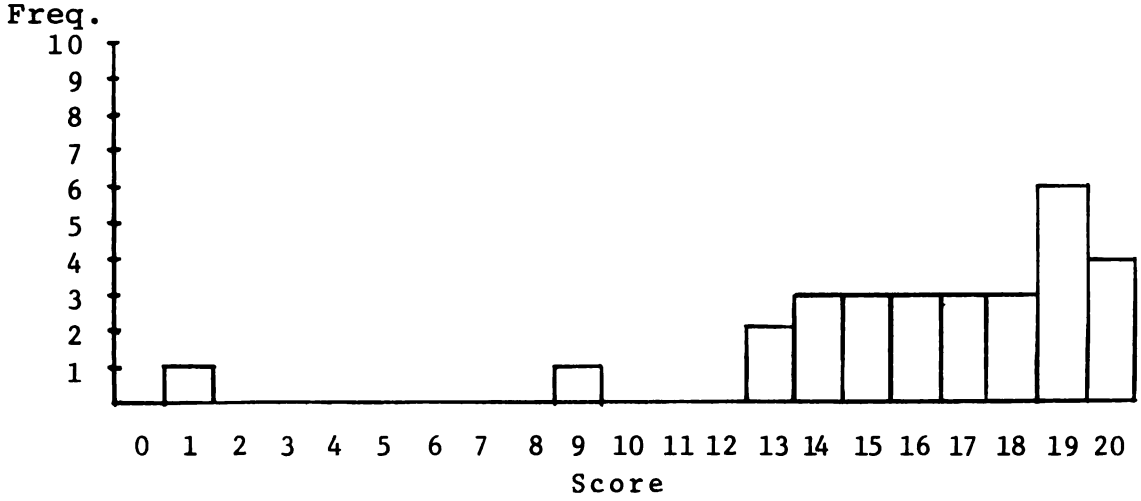
N = 29
$\overline{X}$ = 16.21
S.D.= 3.60

Distribution of Content Follow Scores



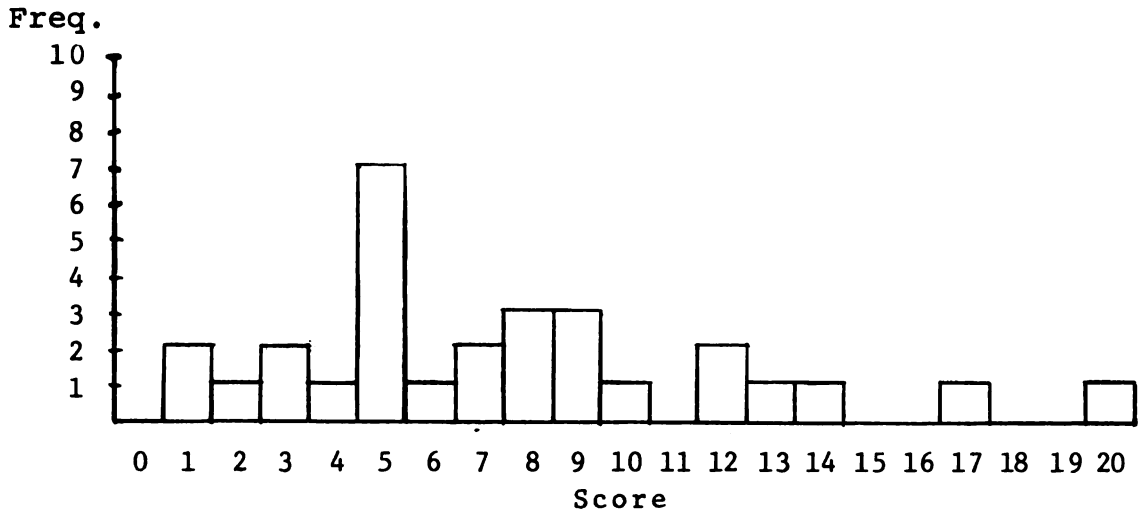
N = 29
$\overline{X}$ = 16.10
S.D.= 4.14

Distribution of Present Reference Scores



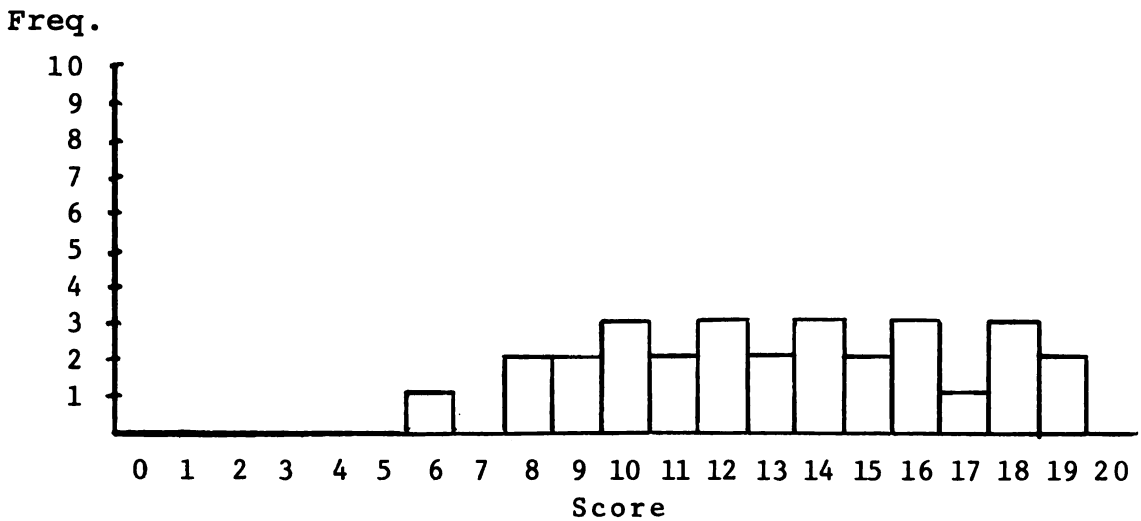
N = 29
$\overline{X}$ = 16.21
S.D.= 3.96

Distribution of Restrictive Scores



N = 29
$\overline{X}$ = 7.52
S.D.= 4.58

Distribution of Client Reference Scores



N = 29
$\overline{X}$ = 13.21
S.D.= 3.63

APPENDIX D

INTERCORRELATION MATRIX OF HOLTZMAN INKBLOT TECHNIQUE VARIABLES AND ROKEACH DOGMATISM SCALE SCORES[1]

	L	S	FD	FA	C	Sh	M	PV	I	H	A	At	Sx	Ab	Ax	Hs	Br	Pn	B	P	HM	RDS
R	-10	-03	-24	13	11	07	-31	-14	-25	-37	-05	03	-12	40	04	-10	-27	10	-21	-20	-38	23
L	. .	23	37	49*	-48*	-36	-13	-11	-23	25	12	-24	-17	-18	-35	-42	10	-27	-39	37	-04	-02
S	. . . .	.	20	41	01	-21	27	25	06	07	01	-24	-09	-02	09	04	22	12	10	17	26	-23
FD	. . . . .	.	.	21	-64*	-74*	46*	54*	42	71*	55*	-32	44*	-23	15	21	25	-16	-31	65*	55*	-02
FA	. . . . .	.	.	.	-17	-14	13	04	06	10	15	05	-22	-30	-06	-02	-03	-03	-15	32	21	-07
C	. . . . .	.	.	.	.	71*	-16	-15	-17	-57*	-38	28	-05	18	22	12	04	37	16	-51*	-33	06
Sh	. . . . .	.	.	.	.	.	-28	-36	-31	-43*	-51*	23	-14	22	03	-04	-11	28	15	48*	-32	-09
M	. . . . .	.	.	.	.	.	.	54*	82*	55*	26	-29	34	06	63*	69*	14	18	14	38	86*	05
PV	. . . . .	.	.	.	.	.	.	.	35	35	42	-12	61*	21	50*	55*	00	16	-12	27	32	08
I	. . . . .	.	.	.	.	.	.	.	.	53*	31	-25	29	-08	40	48*	21	09	13	42	82*	06
H	. . . . .	.	.	.	.	.	.	.	.	.	15	-51*	52*	-20	18	30	30	06	01	62*	72*	-30
A	. . . . .	.	.	.	.	.	.	.	.	.	.	-09	35	-19	25	26	23	-22	-11	20	15	06
At	. . . . .	.	.	.	.	.	.	.	.	.	.	.	-28	-03	-04	03	-52*	-03	02	-19	-37	19
Sx	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	27	59*	57*	44*	33	01	16	23	-14
Ab	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	34	18	-22	42	-09	-26	-20	39
Ax	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	87*	18	45*	16	09	28	-04
Hs	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	09	42	29	00	44*	03
Br	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	08	-04	-01	22	-30
Pn	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	08	-20	03	-20
B	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-15	12	-14
P	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	60*	-09
HM	. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-07

*Significant at .05 level, two-tailed test (p .05 = .43).

[1]Decimal points are eliminated.

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