

RELATIONSHIP OF CERTAIN RORSCHACH INDICATORS TO  
A VOCATIONAL INTEREST GROUP OF MALE  
KANSAS STATE COLLEGE FRESHMEN

by

DOROTHY WHITMAN

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## INTRODUCTION

An examination of the current literature concerning the Rorschach Test will show an increasing use of this test in areas other than psychiatric evaluation, for which it was originally designed. Recent researchers have investigated its use in industry (46), its relation to intelligence (3, 5, 7, 37), and its use in the analysis of cultural and social groups (4, 12, 14, 23).

There have been a few Rorschach studies pertaining to the personality correlates of vocational interests. Outstanding among these are the studies of Piotrowski and Candee (34) on mechanical workers, Roe (38) and Prados (35) on artists, and Roe (39) on scientists and technicians. The Rorschach approach was found to be quite fruitful in these instances. Also, a recent monograph by Solis Kates (16) shows that five Rorschach indicators are significantly related to the vocational interests of successful clerks.

All these investigators utilized as subjects people who were already engaged in the vocation in question, thus limiting the application of their findings to a particular facet of an occupational group.<sup>1</sup> It would appear that wider applicability of Rorschach findings could be obtained by using Strong's Vocational Interest Blank (30) as the criterion of vocational interest. The findings of such a study would be particularly pertinent for vocational guidance of college students who have not yet selected a specific vocational goal.

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<sup>1</sup>For example, in Kates' study (16), using only clerks as subjects, the findings are not applicable to office workers in general.

The purpose of the present research is to ascertain the efficacy of the Rorschach Test in ferreting out personality characteristics of a group selected for vocational interest by the Strong Vocational Interest Blank (47), and to determine the personality characteristics related to the group studied.

In such an investigation, it must be assumed that there are persisting personality traits, sentiments, or dispositions. McDougall's sentiments (25), Allport's attitudes (1), etc., indicate the existence of persisting facets or parts of the personality which appear fairly consistently under usual circumstances throughout the lifetime of an individual, and which are subject to change only by drastic circumstances or by learning processes.

The Gestaltists emphasize the interrelatedness of factors in the personality and this view is taken as primary among Rorschach workers. However, there are several prominent areas which are profiled by the Rorschach analysis: namely, the approach of the individual to life situations, energy level and direction, experience type (introversion-extroversion), and the degree of control employed by the individual in his perception of events. These will be the areas of personality studied in this research.

A restatement of the problem of this investigation is as follows: 1) Is the Rorschach Test efficacious in ferreting out personality characteristics of a vocational interest group selected by the Strong's Vocational Interest Blank? Also, 2) what are those personality characteristics which might be related to the vocational interests of the group in question?

## THE RORSCHACH TEST

### Development of the Use of Inkblots

The history of the use of inkblots in psychological testing began in 1857 with the observation of Kerner (as reported in Klopfer-Kelley, 17), that the blots impressed "their meaning and significance upon the producer." However, Kerner is said not to have noted individual differences in the response to inkblots of various subjects.

From 1895 to 1917, various studies (2, 8, 25, 44, 49) were published concerning the use of inkblots in investigating imagination, intelligence, vocations, interests, etc., but none of these investigators did more than an analysis of the content of the responses. Hermann Rorschach (40) went beyond these investigators in his use of inkblots not only as projected content, but primarily as projections of a structure of personality, elicited from the gestalt properties and determinant of responses (such as color, shading, projected movement, etc.). In 1921, he published his technique of analysis and interpretation in a manual (40) which is still widely used today.

From Rorschach's use of the inkblot responses as a projection of the personality "mushroomed" a bevy of perceptual tests which have been interpreted somewhat similarly, such as sentence completions, drawings, picture interpretations, and many, many others. These tests, along with the Rorschach, have become known as projective techniques. The advantage of using a projective technique lies in the widespread results which may be obtained by

presenting a subject with amorphous stimuli. This is well stated by L. K. Frank:

A projection . . . involves the presentation of a stimulus situation . . . chosen because it will mean to the subject, not what the experimenter has arbitrarily decided it should mean . . . but rather whatever it must mean to the personality . . . who will then respond to his meaning of the stimulus situation by some form of action and feeling that is expressive of his personality.

The inkblots of the Rorschach Test are particularly well suited for the purpose of projective testing because they are: 1) unfamiliar material; 2) amorphous in nature, i.e., there are no clearly defined forms to interpret; and 3) so constituted (gestalt, color, shading) as to elicit important aspects of the personality.

The evolution of the projective techniques, particularly the Rorschach Test, has been accompanied by the development of an eclectic approach to personality, which has arisen inductively out of empirical findings, and deductively primarily from the thinking of the Gestalt school of psychology. Needless to say, the value of projective techniques increases as any psychological principles which might be involved are determined by experimentation.

#### Empirical Findings

In Rorschach interpretation, Hermann Rorschach developed the concepts of "inner life," emotional rapport with the environment, "experience type" (the ratio of inner life to emotional rapport--an introversive-extraversive dimension), the stability of the personality, stereotypy and originality of personality, and the individual's approach to life situations. As these are basic concepts used in Rorschach interpretation, they will be discussed in some detail.

Subjects who saw human movement responses (M) in excess of the average number seen were found to have a rich "inner life," i.e., to be intellectually more productive, creative, and independent. According to Rorschach (40), further differentiation of the M showed that those who saw extensor movements were "active individuals with strong drive toward self-assertion, though they often show neurotic inhibitions." Those who saw flexion movements were "passive, resigned, neurasthenic individuals."

Rorschach found that those subjects who produced more color-forms possessed "that emotional instability biologically necessary and basic for the ability to achieve emotional rapport and to make emotional approach to the environment."

From these two basic interpretations arose the "experience type"--that is, whether the individual is influenced more by promptings from within (M, or "inner life") or from without (color responsiveness, or emotional rapport).

The stability of the personality Rorschach found to be related to the clarity of the forms produced by the subjects; i.e., Does the form fit the blot area? Does the form fit the concept? Where there was preciseness of form perception to an extreme degree, it was considered to be related to pedantry. Also, the use of pure form (F) without color, movement, etc., as additional determining factors, was found by Rorschach to be predominant in those individuals who were more controlled and even rigid in their attitudes and behavior. Poor or "loose" form percepts were characteristic of those cases whose intellectual and/or emotional control was deficient.

Since the inkblots easily take the shape of animal forms, most Rorschach protocols consist of many animal responses. There are probably two reasons why this phenomenon occurs. There are abundant animal forms in nature which most people have observed, to a greater or lesser extent; and secondly, the differences which exist between species, and even between individuals of the same species, allow for a flexible interpretation of their forms. This latter factor might apply also for the perception of human forms. However, the human form in perception has been found to be so closely allied to the self that many variables enter, often preventing its emergence as a percept (13). Returning to the animal response (A), Rorschach found that as animal responses increased, the stereotypy, i.e., the "commonplaceness," of the personality increased proportionately, whether the stereotypy was a permanent feature (as in the feeble-minded) or relatively temporary, as in neurotic inhibition. A moderate number of this type of response was found to be a measure of conformity.

The opposite of stereotyped thinking was observed in those people who produced many original responses (O), defined as those responses which occur in only one out of a hundred cases. It should be added that the one does not necessarily preclude the other. A number of popular type responses (P) have been designated also by their statistical frequency (17). This is the responses related to the "common touch."

Finally, Rorschach compared the predominant area tendency (wholes-W, details-D, d, Dd, and space-S) of the individual to the way the individual approaches life situations. For example,

a meticulous researcher was apt to emphasize little used and tiny areas of the blot in contrast to a "theoretically inclined" person who emphasized whole areas in his responses. A reversal of the figure (inkblot) and the background--which produces a space response --occurs in individuals who are resistive, obstinate, or stubborn. On the other hand, this type of response is sometimes given by artists and other creative people who wish to make use of all the possibilities of the test. These individuals can be easily differentiated by the richness of their protocols in general.

Although many elaborations and refinements have been made on the above tenets of Rorschach, not too much has actually been added that is original. Some of the more original recently added concepts in Rorschach interpretation will now be discussed.

Gotthard Booth (6), in research on arthritic and hypertensive patients, found that the arthritics responded statistically more frequently to the symmetry of the blot, and the hypertensives projected content which was "divided by the central line or space of the blot." He related the symmetry and non-symmetry responses to the tendency of the individual to seek integration in life situations, or to be disruptive. These characteristics were valid clinically for his two groups; i.e., according to clinical judgment of psychiatrists.

Booth also considered the human movement responses as either goal-seeking (e.g., running, pulling, etc.), or as carrying on conventionalized activity (e.g., dancing, standing, etc.). He found differences in his group corresponding to this scoring which indicated that the "goal-seekers" were the more active and independent of the two groups. Another innovation of his was to

differentiate types of animals, in order to ascertain the nature of the subject's identifications. This analysis was done on the presumption that the individual projects his own personality into the blot in his choice of animal. The projection of the self by choice of human and animal figures, mentioned previously in relation to the M response, is an interpretation which is generally accepted (3, 13, 17, 20, 27, 32, 43).

Klopfer and Kelly (17) developed the concept of "instinctual energy" as projected by animal movement responses (FM). Piotrowski (31) further differentiated FM's as dispositions of the individual as a child and the M's as mature dispositions, closely following Rorschach's concepts of the extensor (active), and flexor (passive) types. Klopfer considers FM as a more immature, natural form of energy expression while the M is an expression of conventionalization of instinctual energy.

Just as the above interpretations have arisen empirically, further clues have been developed by clinicians in their administration and scoring of hundreds of cases. Beck and Klopfer have differentiated one further important category, the shading indicators, which both agree is related to the sensitivity, sensuality, or anxiety of the subject, the exact interpretation depending on a number of related factors.

#### Contributions of the Gestalt School

In 1949, at the first international conference of Rorschach workers in Zurich, Professor Manfred Bleuler (26) said that, in effect, the environment of the subject leaves traces in the Rorschach--in the form and content.

This concept was expressed in a recent article by Gotthard Booth (6):

The Gestalt School has demonstrated two facts which are of particular importance for the understanding of the present material. Perception unconsciously tends to organize imperfect, sensory impressions into meaningful forms. Configurations of biological, social or special personal significance are perceived more readily than those which are meaningless to the individual.

Lewin's contributions to personality theory (22) on differentiation and on "thickness of boundary lines" of the personality are also helpful in the understanding of the Rorschach, particularly with regard to intelligence. He describes differentiation as a progressive process from birth onward in the normal individual, but one which tapers off rather early in the life of the feeble-minded. These concepts, while of great import and interest, do not apply to this particular study as the factor of intelligence is controlled in the selection of the group studied.

In the Rorschach, the well-differentiated, mature, or intelligent individual is seen to give more combinatory type (complex in structure) responses and a more varied content than the less differentiated, young, or feeble-minded subject. Other differentiations may be noted, among them responses perceived in unusual areas (dr). This location type is seldom if ever perceived by children and the feeble-minded. Original responses (0) are noted in the well-differentiated individual and again absent in the less differentiated. These factors are also legitimately a part of the personality description as denoting types of intellectual activity and behavior.

The "thick" boundaries (which exclude outside stimulation)

described by Lewin as being characteristic of the feebleminded and stereotyped mind are seen in the Rorschach in excessively high animal form response percentages and to some extent in high pure form percentages.

The controversies which have raged over the instinct concept may well be rekindled in consideration of the interpretations of the movement responses, where an "inner energy" is postulated as the basis of the percept. Rorschach postulates an actual kinaesthetic experience on the part of the subject who visualizes a human movement response, and describes this as a capacity held only by those with "inner life." Animal movement has been described by various psychologists (17, 32) as instinctual drive, or instinctual prompting, the implication being a more basic type of energy as contrasted with the "acculturated drive" implicit in the human movement response.

Klopfer adds to these concepts a minor movement response (m), scored for terrifying expressions, objects in tension--as hanging, or involuntary movement of animal or human forms. These responses are interpreted as "anxiety" indicators. Piotrowski (32) suggests that the symbol, m, be "reserved for inanimate movements caused by external and impersonal forces." The "m" scored in this manner reveals a "conception of role in life which the individual feels to be very desirable and gratifying but which for him is utterly unattainable because of both external difficulties and inner inhibitions. . . . Most m are produced by subjects with an I. Q. of 110 and higher." Piotrowski explains this last statement by postulating that "m's" are the result of psychological self-

observation, which is supposedly not possible to the low in intelligence.

Klopfer's interpretation of minor movement responses would seem to be more justified as it follows along the line of kinaesthetic or physiological causation. This interpretation is more consistent with the interpretations of other movement responses.

Color as an emotional stimulus has been primarily a contribution of the Rorschach empiricists. The present trend in interpretation seems to be getting away from "color shock." At the 1949 Rorschach international meeting (26), Loosli-Usteri reported on 100 normal subjects in which "color shock" was quite prevalent. She concluded that the form level, or accuracy of the form, in color responses was a better measurement of emotional stability than the "color shock" measure, which is evaluated by lengthened reaction time to colored cards. Here it would appear that the breakdown of clear gestalt patterns is a factor of emotional instability; this is a viewpoint which has long been held by psychiatrists.

Although no formal theory has been constructed from the empirical findings of the Rorschach test, original concepts of personality evaluation have been made by Rorschach and others in the evolution of the test. The Gestalt theory of psychology is helpful in understanding the application of the Rorschach test.

#### STRONG'S VOCATIONAL INTEREST BLANK

E. K. Strong (47) has developed a method of evaluating vocational interest by comparing interests of the subject with the

established interest patterns of people engaged in various professions and occupations. The assumption is made that people who have similar interest patterns on the Strong Vocational Interest Blank (47) will find satisfaction in the same occupations. Of course, possession of some ability for the job must be ascertained in utilizing interest patterns in vocational guidance.

In his experimental groups of people in various occupations, Strong used the criterion of being engaged in the occupation at the time of a follow-up as validation of their vocational interest patterns. This criterion was easily determined on an objective basis, and in addition, it was believed that anyone who stayed on a job must have adjusted in terms of satisfaction and ability.

Factor analysis of the Vocational Interest Blank protocols of various occupational groups revealed interesting vocational interest clusters. The thirty-six occupations which were studied were classified into eleven groups, based on a correlation on each occupation of .60 or higher with other members of its group and lower than this with the members of all other groups. Strong has suggested that experimental investigation is needed for a better understanding of these clusters.

It must be pointed out that all individuals do not fall into patterns in their vocational interests, and that those who do are represented in the various groups as a matter of degree. Therefore, in order to investigate the nature of these groups, or clusters, it is necessary to choose cases which are more or less "pure" as to the particular cluster, or clusters under consideration.

The complexity of the Vocational Interest Blank patterns does

not allow a full exposition of the eleven groups. Those readers who desire more complete detail are referred to Chapter 8 of Strong's Vocational Interests of Men and Women (47). For the present study, an examination of Groups IV and X would be of interest.

Group IV is inclusive of seven of the thirty-six vocations under consideration: aviator, farmer, carpenter, mathematics-physical science teacher, printer, policeman, and forest service. This group correlates positively, but of course under .60, with Group I (artist, psychologist, architect, physician, and dentist), Group II (mathematician, physicist, engineer and chemist), and Group III (production manager). There is also a smaller correlation, but positive, with Group VI (musician). Consistently highest negative correlation of Group IV is with Group X (lawyer, author-journalist, and advertising man). Other high negative correlation exist between Group IV and Groups VII (certified public accountant), IX (salesmen), and XI (president of manufacturing concern).

It would appear that two things could be of great importance in the positive and negative correlations of Group IV. First, Groups I, II, III, IV and VI (which correlate positively) represent occupations in which physiological and mental activity are coordinated to a much higher degree than in those groups which correlate negatively with Group IV. Secondly, those groups which correlate negatively, particularly Group X, with Group IV, are composed of occupations which require a great deal of verbal facility with one exception. The exception is Group VII--certi-

fied public accountant. However, accounting at this higher level does require more verbal manipulation than for example, mathematics, a member of Group II. (Of course, other factors are undoubtedly operative here, which must be left for further experimentation due to the limited scope of this paper.)

Thus, making inference from negative and positive correlations of other groups with IV, we might postulate that those individuals who fall into the cluster of plus-Group IV and minus-Group X (as the most representative of the negative correlating groups) would represent a definite vocational type, differing from other groups. Also, it might be conjectured that this vocational type would be characterized by persons who are well able to coordinate physical and mental activities, thus creating the "liking" for the vocations in the positively correlated group; also, this type might have a "disliking" for verbal activities, and probably a corresponding lack of verbal facility.

Further analysis of Group IV indicates that this is a group in which more or less direct service to other people is an outstanding characteristic. Also, these are all everyday, down-to-earth occupations, with little of the esoteric or unusual in them. One would expect these persons to be "good citizens." "Good citizens" is probably a dimension better measured by attitude tests, although the inference may be made from Rorschach interpretation as well as it is made here in analyzing the cluster as a social group.

DESCRIPTION OF THE POPULATION FROM WHICH THE SAMPLE  
WAS DRAWN AND OF HOW THE SAMPLE WAS SELECTED

In September 1949, 1,215 new freshmen entered Kansas State College and were administered the following tests as a part of the orientation procedure: the American Council on Education Psychological Examination (1945 Edition); Cooperative English Achievement Test (Form PM); Cooperative Reading Test (Form Q); Strong's Vocational Interest Blank (Form M); Minnesota Personality Scale. Other tests are administered special groups but all entering freshmen were given the above tests and inventories.

Sixty-nine per cent of these entering freshmen were men and thirty-one per cent were women. Since only men are used in this study, a further description of this group is given. Enrollment by schools was as follows:

	Per Cent
Agriculture . . . . .	35.4
Arts and Sciences . . . . .	38.7
Engr. and Arch. . . . .	25.5
Home Economics . . . . .	0.4

The age distribution was as follows:

15-16 . . . . .	1.8
17-18 . . . . .	67.5
19-20 . . . . .	11.4
21-22 . . . . .	8.1
23-24 . . . . .	3.1
25 and above . . . . .	3.4
Not ascertained . . . . .	4.7

The sample for this study was selected by the following procedure: A list of all freshmen who entered in September, 1949, together with their test scores was used. Subjects were selected on the basis of Strong's Vocational Interest patterns. In order to be selected, a man must have a B+ or A rating on Group IV of

the Strong's Vocational Interest Blank and a C or B- rating on Group X. These ratings were used because Strong and others who have worked with the inventory state that one should seriously consider occupations for which they have A or B+ ratings and be very cautious about entering occupations for which they have C or B- ratings. Beginning alphabetically, care was used to select men standing at different points on the continuum on the ACE; an equal number was selected in each quartile. Approximately one-half was selected from the first half of the alphabet and the other half beginning with the letter "l."

In order to ascertain if this sample is a representative sample of all freshmen men who have the plus-Group IV and minus-Group X pattern of vocational interest, the following procedure was followed:

1. The total list of 1,215 freshmen was used.
2. The name of each man who has B+ or A patterns on Group IV of the Strong Vocational Interest Blank and C or B- patterns on Group X was written on a separate card. The quarter in which he stood on the ACE (1, 2, 3, 4) was also written on the card.
3. This gave a total of 209 men for whom there were complete data. They were then stratified according to quarters on the ACE, shuffled within quarters, and every tenth card was drawn. This gave a sample of 20 men using a sampling ratio of one out of 10.
4. In order to ascertain if the sample selected for the study was different in any significant way from the randomly selected sample, the following procedure was used:

a. Raw scores for each subject composing the two samples were copied from the records of each of the following variables: total score on the American Council on Education Psychological Examination, total score on the Cooperative English test, and scores on each of the five scales of the Minnesota Personality Scale.

b. Means were computed for each of the two groups for each of the eight variables.

c. Differences in means were computed where by inspection the means appeared to be significantly different. To ascertain if the differences between means were significant, the "t" test was employed. The following formula for "t" was used:

$$t = \frac{X_1 - X_2}{\sqrt{\left( \frac{x_1^2}{n_1 - 1} + \frac{x_2^2}{n_2 - 2} \right) \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

d. The largest "t" for any of the eight variables was 0.192. Using Fisher's table for the distribution of "t" as reproduced in Edwards (10) and Johnson (15) for 36 degrees of freedom, it was found that the difference is significant at only about the .90 level of confidence and it may then be assumed that the sample selected for the study is not statistically different from the randomly selected sample in scholastic aptitude, English-achievement, reading achievement, morale, social adjustment, family adjustment, emotional adjustment, and economic conservatism (Complete data are given in the Appendix.)

## PROCEDURE USED IN COLLECTING DATA AND PROCESS OF ANALYSIS OF THE DATA

### Collection of the Data

Appointments were made by telephone with the subjects for an individual administration of the Rorschach Test. The tests were administered in a private office with no interruptions. Four of the tests were given by a psychologist in the Counseling Bureau of Kansas State College and the remaining sixteen were given by the writer. Identical techniques were used by the examiners and no difference was noted between the protocols of the respective examiners. It has been reported that there are examiners who elicit more responses of certain types than other examiners do. If standard testing procedure is followed, the results of testing should be objective.

### Description of the Rorschach Material

The Rorschach Test is composed of ten inkblots printed on smooth white paper mounted on heavy cardboard. Six of these inkblots are achromatic, varying in shade from light grey to black and in texture from fluffiness to a heavy quality. Two blots are composed of both red and black ink, and the remaining three are composed of rainbow colors.

Rorschach chose these ten blots out of thousands as being the most useful in eliciting information about the person taking the test. He arranged them in a sequence that would give further clues for interpretation and they are always given in this order. Essentially, the order is so arranged so that: 1) the subject is

presented at intervals with "easy" cards, and 2) to make use of the emotional effect of the color. The color cards are Cards II, III, VIII, IX and X.

Timing of the initial response to each card and total response time to each card requires the use of a stop watch. The response time is particularly important in diagnosing clinical cases where there is a great deal of inhibition of response. However, for the purposes of this research, it was not considered essential and this part of the administration was omitted.

#### Administration of the Rorschach

The standard testing procedure followed in this research was as follows:

1. Subjects were greeted pleasantly and then told that they were to be given an inkblot test in something similar to this statement: "I am going to show you some inkblots and I want you to tell me what you see in them, what they remind you of, etc." No clues as to type of response that might be given, timing, or success or failure of the subject were given at this time, or at any time throughout testing. He was instructed to turn the card over and put it on the desk when he had finished with it.

2. The subject was handed each card in the standard order from Card I to Card X. Only when he spontaneously relinquished one card was he given the following one. The examiner wrote all responses word-for-word in two columns, the first column being the performance proper (the spontaneous responses) and the second column representing the inquiry and testing the limits.

3. After the administration of the ten cards, an inquiry was conducted to ascertain the location, determinant, and content of responses which were not clearly described in the "free" first administration of the cards. Locations were drawn in on a location map. (See Appendix.)

4. "Testing-the-limits," the third phase of administration was gone into where necessary. Since these were largely not clinical subjects, this phase was seldom necessary. It consists of further, more direct questioning regarding the responses and sometimes pushing the subject to give more responses.

5. At the end of testing, the subject was thanked for participating in the research and, if necessary, reassured that he would not be identified in any way in the analysis of test results.

#### Process of Analysis of the Data

Scoring. The writer scored all protocols according to the Klopfer-Kelley method (17) with two exceptions and several additions to this method as described below.

In Rorschach scoring, there are three "scores" obtained for each response given to the blots. The first refers to the location of the response, that is, whether it is a whole, detail or space response. Secondly, the primary and secondary determinants of the response are scored--form, color, movement, shading, etc. Finally, the content of the response is tabulated. For more detailed description of these categories see "Explanation of Scoring Symbols" in the Appendix. This explanatory page is copied from the Klopfer-Davidson scoring blank (18).

In addition to the scores mentioned above, total number of responses, and popular and original responses were tabulated.

For the purposes of this research, two indicators for neurotic disturbances were omitted. These were: 1) the "k" score, which is purportedly an indication of anxiety and, 2) the response time.

Additional scoring was as follows:

1. Responses which corresponded symmetrically to the blot symmetry and those which were disruptive of the blot symmetry (e.g., "explosion in the middle") were tabulated. These scores originated with Gotthard Booth (6).
2. All human and animal movement responses were broken down into extensor and flexor categories, according to Rorschach's (40) and Piotrowski's (32) standards.
3. Human movement responses were also broken down into those activities which were goal-directed and those which were conventional in nature, after Booth (6).
4. Combinatory responses were tabulated according to the following criteria:
  - a. Two or more objects or people connected in some way in the concept.
  - b. One object or person but with very elaborate and intertwined parts.
5. Rejections of cards were tabulated.

Scoring Summary. The scoring is summarized in three ways so as to clarify its meaning. This is done by totaling categories in the three main divisions--location, determinants, and content,

and all other categories, such as originals and populars. Secondly, obtaining percentages of certain categories is a method of equating scores for comparison. Third, certain ratios are computed. The scoring summaries of the twenty subjects tested were entered on a table. (See Appendix.) For further detail of the rationale behind scoring summary categories, any textbook on the Rorschach method may be consulted. The Klopfer method (17) is used here.

It cannot be overemphasized in Rorschach research that the interdependence of "scores," or the various factors contributing to the analysis, is the primary characteristic of the interpretation. Therefore, in most instances, it is quite useless to attempt statistical comparison of isolated scores. It appears, for the present at least, that the most accurate and complete analysis can be done only on a semi-quantitative basis. The scoring summary is the first step towards analyzing the interdependence of scores.

The inter-relating of various factors is a method which in itself is validating. For example, if a record containing a large number of "popular" responses (P) includes no human responses (H), one has to consider a different shade of meaning of the "P" interpretation from a record containing a large number of both categories. The meaning of the second example (large number of P and H) would be simply that the subject sees a lot of people and a lot of things that other people see, and therefore he relates easily and well with others. In the first instance (large number of P, no H), evaluated as an isolated pair of categories, the conclusion might be drawn that for some reason the individual is avoiding seeing people, probably because of conflicts within himself.

or with others, but he is able to adjust to life's commonplaces because of his ability to see things that other people see. The first example gives a neat, surer interpretation than the second; for complete interpretation of the second, we have to look to other related categories. It should, of course, be remembered that the Rorschach will not give all the answers, and oftentimes its primary use is in giving clues rather than more complete personality interpretations. A good example of this would be in the case of a suspicious, uncooperative subject, who might give only two or three responses to the entire series of ten cards.

Thus, the scoring summary is useful for refining the data, putting it in a form which will lend itself not only to comparison, but also to interrelating scores.

Method of Interpretation. As has been elaborated above, analysis of individual scores is hardly useful, except in a few instances (e.g., total "M"), in the Rorschach technique because of the interrelatedness of scores. Still, some norms have to be established before interrelating the scores is possible, in order to evaluate the meaning of the parts of the constellation, or group of interrelated scores.

In order to obtain a rough picture of the group, as a whole, all individual scores were first added in each category and means and medians and the range (see Appendix) were established. Since the means and medians were not sufficiently deviating from the rough norms which are used by Klopfer in the various categories and the ranges were quite extensive, it was decided to break down the scores in another way for analysis. Using Klopfer's rough

norms, most scores, percentages and ratios, were broken down into three divisions: 1) below average, 2) average, and 3) above average. In the case of the "experience type" ratios ( $M:Sum C$  and  $FM+m:Fc+c+C'$ ), the divisions were as follows: 1) introversive, 2) ambiversive, and 3) extroversive.

Some scores could not be evaluated in this way, as their presence seems to indicate "additional" attributes of the personality rather than more basic qualities which we expect to find in every individual. These were the shading scores and the symmetry-disruptive score, which indicate respectively types of sensitivity to the environment and disintegrative forces. If significantly large numbers of these scores had been given, special characteristics of the group would have been exemplified thereby. The meaning of the absence of these two types of scores in the group as a whole will be given due weight in the interpretation.

After classifying twenty-three scores and summarized scores into the three groups (below, average and above) and the experience type ratios into the three categories, eleven meaningful tendencies emerged. Eight of these consisted of interrelated scores and three were individual scores. Further interrelating of these eleven tendencies determined important interpretations for the group as a whole.

Next, all twenty of the subjects were evaluated on the basis of the agreement between their individual tendency and the eleven differentiating tendencies established for the group. Most of the results were clear-cut, and individuals were rated either plus or minus in each of the eleven categories. In some instances, there

was only partial agreement between an individual's record and one of the eleven tendencies. In this case, the individual was given only a partial positive rating on that particular category.

The two records which agreed most and least with the group categories were selected for individual analysis.

These protocols were analyzed on the basis of the eleven tendencies; e.g., their fit or lack of fit with the group.

Summarizing the method of interpretation of the Rorschach protocols of this group of twenty, the following steps were taken:

1. Sums, means, medians, and ranges were established for all individual scores and percentages.
2. Means and medians were compared with Klopfer's rough norms for the various scores.
3. The range of the various scores was examined.
4. Since no clear information was forthcoming from the procedures taken in (2) and (3), the scores were evaluated in another way: Using Klopfer's averages, three columns were determined for each score: a) below average, b) average, and c) above average. In the case of the "experience type" ratios, these columns became introversive, ambiversive and extroversive. There were twenty-three scores and percentages which could be classified according to whether they were average or not, and two ratios which were classified in the "experience type" group.
5. Out of these twenty-six classified scores, percentages and ratios, eleven tendencies were observed, most of them as a result of interrelating different classified scores, percentages, or ratios.

6. The twenty individual records were rated plus or minus on each of the eleven tendencies, and in some instances, given partial credit when the fit was not "pure."

7. The two records which agreed most and least with the group were chosen and analyzed.

### RESULTS OF THE EXPERIMENT

Table 1 is a compilation of the number of subjects below, above and just average found in the categories listed in the first column; i.e., the Rorschach indicators.

1. Response number. Starting with the first item of Table 1, it is noted that eleven subjects were below average in number of responses given (for norms used, see Appendix). Adding to this the four who were only average in response number, there is a total of fifteen or seventy-five per cent who give no more than an average number of responses. This is a little unusual in a college group, the number of responses depending to some extent on the intelligence of the individual. Other factors which enter into the production of responses are energy level and quantitative striving. Psychic disturbances also often lower response number.

Low intelligence can be ruled out as a causal factor here because of other contraindications in the records, which are: high form level; large number of whole responses, original responses, and combinatory responses; and an adequate number of human movement responses. Psychic disturbances may also be ruled out because of the over-all absence of indications of severe psychic disturbances in the records.

Table 1. Analysis of Rorschach scores of the group as to number of subjects scoring in each of the three categories

Rorschach indicators	Number Below average	Number Average	Number Above average
R	11	4	5
Location:			
W%	6	3	11
D%	9	8	3
d%	12	5	3
Dd,S%	0	9	11
Determinants:			
M	11	8	1
FM	3	14	3
m	NA*	NA*	1
F%	6	9	5
C'	NA*	NA*	1
FC	15	1	4
CF	10	4	6
C	NA*	19	1
Percentages, Ratios, etc.:			
VII, IX, X%	4	10	6
W : M	0	3	17
Symmetry	5	12	3
A%	12	1	7
H%	1	19	0
(H+A) : (Hd+Ad)	1	19	NA*
Content different	12	6	2
P	4	7	9
O	5	9	6
Combinatory R	5	5	10
Rejections	NA*	NA*	1

\*Not applicable.

Low energy level can be ruled out on the basis of many animal movement responses (FM) as a measure of vitality, over-production of whole responses and many combinatory responses. The last two factors indicate an active integrative process in the utilization of energy.

Thus, we are left with the interpretation of a lack or absence of quantitative striving, for which there is no contradiction in the rest of the Rorschach.

This tells us something new about the group which we do not get from the analysis of the Strong data. This, however, also fits in with the occupational groups under consideration. Quantitative striving implies a great degree of competitiveness which is not ascribed to people in occupations such as those in Group IV: aviator, farmer, carpenter, math-physical science teacher, policeman, printer, forest service. Over-striving is a characteristic which might better describe a business, or executive group, for example. On the other hand, the sample is not as a whole understriving, and there are five individuals who are overstriving. Therefore, it may be said that this characteristic describes most of the group only, allowing for some individual variation.

2. Locations. Examining the location category as a whole, we see that there is a trend towards many wholes (W), average to below average number of large usual details (D), few small usual details (d), and average to above average number of unusual details (Dd,S).

According to Rorschach (40) and other experts in Rorschach

analysis, the person who perceives a lot of whole responses is inclined to look on situations as global entities, organized and integrated meaningfully. On the other hand, he may have a tendency to be non-analytic, looking at only the broad outlines of situations. The fact that our group has also a high number of unusual details negates the latter possibility.

Average to below average large usual details follows the interpretation above, and that is, that this group as a whole is not overly concerned with the parts of a situation, but tends to integrate. The paucity of the small usual detail in the group as a whole may be a part of this same trend, and that is, that these individuals are not overly concerned with the logical breakdown of situations, or parts, as opposed to their interest in integration. The large number of unusual details, when occurring with few large and few small usual details and a large number of wholes, would indicate an interest in the unusual, the obscure, rather than meticulousness. To use an old word, these are "curiosos," people who delve into every little nook and cranny to discover what is going on.

Thus, from the location analysis, we have people who in their approach to situations who are globally oriented and yet who are "curiosos" too. Actually, there are only three people whose scores are excessively high on the unusual detail category, the rest being average and somewhat above average. It would appear then that most of the group, because of better-than-average intelligence, or perhaps college atmosphere, is at times selective in their perception to the point of choosing the unusual against a

more important background of a global orientation.

3. Movement responses--M and W:M. The human movement response has been designated by Rorschach (40) as an indication of "inner life," imagination, etc. It is considered the best single indicator of intelligence in the Rorschach. Klopfer (17) says that three M's are expected from college people. The average number of this group of 20 college students is 2.5 and the median of the group is two, with a range of zero to nine. There are eleven subjects whose number of M responses is below average, eight whose number is average and one only who produces more than average. With a group selectively scaled for intelligence (with a division of subjects into an equal number in each quartile), more even distribution of the M might be expected. The only conclusion that can be drawn is that the qualities expressed by the M; i.e., inner living, imagination, etc., are not characteristic of this group.

Glancing over the occupations included in the Strong Group IV, this interpretation seems valid, especially since it fits so aptly the character of Group X, with which the experimental group has a negative correlation (according to Strong and Thurstone's work [47]), that is, the lawyer, the writer and advertising man.

Since the whole responses are an attempt to grasp whole situations, there is an element of wanting to control, to master. Thus, those people who give a lot of W's are also ambitious. According to the W:M ratio, the ambitiousness of the group as a whole exceeds their basic capacity for achievement, taking the M as a rough measure of intelligence. This type of ambition is

different from the quantitative striving, or competitiveness mentioned in connection with number of responses. Competition implies a pressure to produce. Ambition of the type suggested by the large number of whole responses implies just a desire to be known, to be a person of importance. In connection with this, the breakdown of the movement responses into extensor/flexor and conventional/goal-directed fits in with this interpretation. There are more extensor, or dominant type responses than flexor, or passive type. The number of conventional responses exceeds those which are goal-directed. Goal-directedness implies the competitive element again, rather than the loftier type of ambition which is apparently a characteristic of this group.

4. Movement responses--M:FM. As a measure of maturity, the "inner resources" quality of the M is compared to the "vitality" of "spontaneous animal energy" quality of the FM. The usual measure expected of the mature person is a ratio of two to one.

The ratio obtained on the group is approximately 2:3. Thus, there is some measure of immaturity in the group as a whole. Another way of saying this is that the basic drives of the group have not been acculturated to a great, or even average extent. It should be remembered that this is a college group, just past adolescence. On the other hand, the world is full of people who behave spontaneously--who have little felt the effects of a society which ties strings around their impulses. When they are hungry, for example, they say they are hungry, instead of asking the time (in order to determine how long it is until the next meal) or busying themselves with sublimative activity. Again, these are the people who eat between meals. The immaturity

implied here, therefore, is not necessarily the type of immaturity which brings maladjustment in its wake; e.g., dependency, but rather the spontaneous, unhampered response of the individual to basic impulses.

Whether this interpretation is a characteristic of the Strong Group alone, or one of the midwestern culture also cannot be determined from the present data. It could be easily rationalized as a characteristic of both. As far as the occupational group is concerned, printer is the only category which does not fit, although from reading any local newspaper, one might wonder just what impulsion drives the printer to setting occasional letters upside down.

5. Color. In the color scheme, responses in which the color is the predominant determinant (CF) exceed those in which form is predominant, that is, in evaluating them from the standpoint of number of people below average, average and above average. Since form is neglected more in people who behave spontaneously, this tendency fits in very well with the one given above; i.e., concerning the ratio of human to animal movement.

The number of color responses taken altogether is rather low. This is probably a function at least partially of the group's being male, as males do not respond as openly to color or emotion as females.

The importance of the FC:CF ratio in relating it to the Strong Group IV would probably be that these are people who are somewhat more open to emotional warmth than average and who do not emphasize emotional control. Again, although there are not too many of this

type of response, the quality of the response is that of open, spontaneous responsiveness.

They are average in the percentage of responses to the last three cards--the multicolored cards. Since they do not produce many color responses, however, it is likely that the response to strong emotionality is covert rather than overt in most instances. This interpretation is made commonly by experts in the field.

6. Flexibility--F Per Cent and A Per Cent. The percentage of pure form responses (F per cent) of the group follows a rather normal distribution and thus implies that the group shows stability or objectivity in their perception of percepts, with some individuals being more controlled and some less. This does not add particularly to the interpretation, except in a negative sense of ruling out constrictedness or looseness of emotionality.

The animal response percentage (A per cent) follows somewhat a different pattern, but is related to the interpretation of the F per cent. Not only is the group flexible but stable in the determinants of their percepts, but also in the content. There is, however, a U-shaped distribution here, with twelve below average and seven above average in A per cent. This implies that there is some stereotypy of response in a good portion of the group, some sameness, or conformity, but the majority are free from this stereotypy. One point showing the lack of stereotypy is that most of the group produces average to above average number of original responses. It may be that those who have above average A per cent are less verbally fluent and cannot readily name different objects. It has been noted already that the occupational choices they make are largely those which are non-verbal.

7. Human Contact--H Per Cent and P. The relationship between the percentage or number of human responses and the number of popular responses has been discussed in Chapter V, under "Scoring Summary." To repeat, these are variables which reveal the contact an individual makes with others. Nineteen of the subjects were average in their perception of human forms and there were seven average and nine above average in number of popular responses. Evidently, these are people who make good contact with others, a trait which fits in very neatly with the occupational interest group they represent.

8. Combinatory responses. Fifteen of these subjects were average to above average in the number of combinatory responses perceived. A large number, ten, was above average. This would indicate that these people are people who are well able to integrate their activities, who are able to combine units into meaningful wholes, and whose sense of organization is superior.

Here is a suggestion that would fit in with the interpretation that, by their choice of occupations, these are people who integrate, in this instance, physical and mental activities.

9. Content differentiation. Response to different kinds of percepts (human, object, scenery, etc.) is probably related to verbal facility to some extent. Since over half of this group is below average in their content differentiation and only two are above average, the implication is that this is a rather non-verbal group.

10. Experience type--M:SumC. Over half of the group falls into the introversive category. According to Rorschach (40), these people would be more influenced by their inward feelings than

outward stimuli. However, both the number of human movement responses and color responses are below average in general. The trend towards introversion is more a function here of the lack of quantity in response to color than the quantity of movement responses. The implication is that this is not a highly charged group in either direction, though they tend not to respond overtly to emotional stimuli.

11. Experience type--FM+m:Fc+c+C!. Here the variable of shading responses comes into play. We find that although these people are able to achieve good human contact, they are shy emotionally, though occasionally spontaneous, and they lack the delicate sensitivity that goes along with tact and keenness in the understanding of human relationships. This last characteristic, according to the experts (3, 17, 40) is found in people who have large number of shading responses, or in other words, sensitivity to tactile stimuli. Their vitality is high. Thus, they may be more sensitive to their own feelings than those of others, or more responsive to their own feelings.

As regards the choice of Group IV of the Strong test, this interpretation, especially the lack of keenness in perception of the feelings of others, appears very apt. Of course, this is considering the group as a whole. There are individuals in this group who do have shading responses, although the number is small even for these few. Usually, many shading responses are found in the records of psychologists, psychiatrists, social workers, and the like.

### Summary of the Group Analysis

This group as a whole approaches life situations globally; that is, they direct their attention mainly to the importance of the whole rather than parts. They seek importance and this ambition drives them to integrate their environment in order to feel secure.

Controlled and objective, these are not constricted but are stable individuals. There is some stereotypy of thinking, but the majority are free from this type of perception, and thus, thinking. A factor of importance here is that most of the group produces an average or above average number of original responses. However, there is no strong tendency towards "inner life" or imaginative thinking. These are average people in this quality of their thinking.

There is high vitality, but they apparently do not use this vitality in competitive striving. They do integrate well and much energy goes in this direction.

On the whole, they are dominant, but conventional people. Neither introversive nor extroversive to a great extent, these are rather objective individuals. However, there is excellent contact with other people in the sense that they easily make and maintain extensive relationships (as opposed to intensive). Although normally responsive to emotional stimuli, they are shy of overt emotional response. Pent-up feeling may occasionally flare out into the open, however.

These are realistic, down-to-earth people who are not overly sensitive to the feelings of others. They get along well super-

ficially with others but may have difficulty adjusting to more intensive relationships.

The implications for vocational guidance fit in well with the picture seen on the Strong Vocational Interest Blank. The seven occupations of their highest choice (aviator, farmer, carpenter, math-physical science teacher, printer, policeman, and forest service) might well be served by people who are similar in personality to the group above.

#### Analysis of Individual Cases

Subject M. Subject M is chosen for individual analysis because of the greatest similarity between his record and that of the group as a whole.

Like the group, this subject approaches life situations globally. He is somewhat overstriving in his ambition to be important, and integrates parts of the environment in his drive for prestige in a very skillful and effective way.

He is also original in his thinking in addition to the integrative capacity. A good example of this type of thinking; i.e., originality, is a response to Card V, in which he gave as response to the whole, which is usually given as a flying animal (which was also his first response to the card): "House, gable, chimney. Leave out bottom of the house, the main part of the house."

The ability to perceive rationally without being overwhelmed by feelings from within or excessive promptings from outer emotional stimuli, in other words, to exert intellectual control, is at an optimum level. Although he is capable of originality of thought, he does not get carried away by fantasy. There is more imagination

in this record than in the group as a whole, however.

Vitality is high, again with the energy going in the direction of integrative thinking and planning rather than anxious competitive striving.

This is a very dominant individual, but one who follows convention and custom. He is at the top of the group in getting along with others in extensive relationships. Close emotional rapport is also possible in this case to a greater extent than the group taken as a whole (shown by the quality of his human movement responses). He does experience some "shock" upon the sudden appearance of situations which are emotionally "charged."

Already, we see individual variation in this record which is indeed most similar to the group. He is more emotionally reactive and more imaginative and more able to relate closely to others.

Nevertheless, like the group again, he is a realist, a down-to-earth person, who is neither a strong introvert nor extrovert. Unlike the group, he does not tend to be emotionally shy. Like the group, he is not extremely sensitive to the feelings of others, but is, rather, more responsive to his own buoyant feelings.

There are implications for vocational guidance which are important here. If the occupations of Group IV are to be considered, one should be chosen which will allow some originality and initiative. His imagination, within its limits, should be used and his facility for getting along with people allowed a chance for development in choice of occupation. For the second reason, aviator, farmer and printer might be ruled out. Policeman as an occupation may not allow enough room for imaginative activity. Thus, we are left with forest service and math-physical science teacher. The

vocation of teaching would supply his need for importance and dominance and the interest in farming might be drawn in by adding "agriculture teacher" to the list of possibilities. Forestry is work which requires imagination ( planning forest preserves, preventing fires, etc.) and also requires a knack for getting along with people, as the cooperation of everyone in the area must be acquired. Again, teaching in this field is a possibility for consideration.

Thus, vocational choice may be expanded by a knowledge of some of the personality characteristics of the individual. Also, factors which would clarify the inadvisability of following certain vocational choices may be brought out.

#### Herschach Protocol of Subject M

##### Performance proper

##### Inquiry

##### Card I.

1. Might be a bat--some kind of fly- 1. Flying--has wings spread  
ing animal--flying squirrel, some-  
thing like that--that'd be first  
impression. That's about all.

W FM A P

##### Card II.

Well, I don't know what I'd make of that one. That would probably take a lot of imagination.

1. Could make a face out of it.  
I'm afraid he would be a little  
deep around the jaw.

1. (no further comment)

W F → F- Hd

##### Card III

1. This could be a face.  
2. If you use a lot of imagination,  
you could make a car of it, coming  
from here down.  
3. Could be two people holding a  
basket--I don't know what you'd use  
the red spots for.

1. W F Hd  
2. Strictly imagination--  
windows, tires, grille.  
W F Obj. O  
3. Women--bust up here in  
front--possibly piled hair  
on head

W M H P

## Rorschach Protocol of Subject M (cont.)

Performance Proper

4. Might be an insect--be rather odd.

## Card IV.

1. Bearskin--be a rather odd-looking bear.

## Card V.

1. Bat, could be another bat, insect butterfly--something like that.  
2. House, gable, chimney--leave out bottom of the house--main part of the house.

## Card VI.

1. Another insect--some kind.

2. Could be a tree--upside down.

## Card VII.

1. Well--gentleman laughing--uh--person laughing.

2. Upside down--could be two dancers with long hair.

## Card VIII.

1. Flower--could be a lobster.

2. Or some kind of animal if you turn it upside down if you left out the lobster's body.

3. Let's say this is--reflection in lake--some kind of animal--don't know what you'd call it.

Inquiry

4. Weird creature.  
W F A

1. Spread out--head up at the top. Kind of way it lays out--stripe down middle--front feet--rear feet. Design down the back--small head.

W F A obj.

1. In flight--shape of wings.

W FM A P

2. (no further comment)

W F Obj. O

1. Thin neck in here--could call these the legs. Too thick through body for a little animal--just first impression.

W F A

2. W F Pl

1. Some kind of person laughing.

D M Hd

2. (no further comment)

W M H

1. Color--bloom.

D CF Pl

2. Claws.

D F A

3. Walking across the rocks--reflection here.

W FM A P

## Rorschach Protocol of Subject M (cont.)

Performance ProperInquiry

## Card IX.

1. Two insects fighting.
2. Flower.
3. Still got the idea--could be another reflection of trees in the lake
4. Back in background could be top view of the head of a frog--of course the picture wouldn't match with him though.

1. Could be feelers and claws there.  
D FM A
2. Two leaves and the bloom.  
W FC Pl
3. Trees, hillside--reflection in the water--somewhat the color.  
W CF, FK W
4. Brother--that was a lulu--I went a long ways for that one. Head--eyes--mouth--streak down back  
S F Ad

## Card X.

1. Reminds me of a bunch of insects--all different species.
2. Could be a flower--spiders crawling up the side.
3. Couple of sea horses up here. Turned upside down.

1. Shapes--spread of them.  
W F A
2. Pink flower.  
dr FC, FM Pl, A P
3. Just shape of them.  
D F A

Subject N. This subject was chosen as being most dissimilar to the group as a whole.

The only areas in which this individual corresponds to the group as a whole are in his lack of imaginative thinking, in high vitality, in his paucity of different types of concepts, implying non-verbalness.

He approaches situations very practically, examining them for the job or exigency of the moment and is not generally impressed with the global aspect. He responds to the commonplace, to the figure only, leaving background out of the picture.

In his relationships with other people, he is sensitive to feelings (shown by tactile sensitivity, or response to shading

of the cards). However, he rejects contact with others on a highly emotional basis (lack of color responsiveness). There is some sort of inhibition in interpersonal relationships which prevents his getting close to other people. He does not give one "human" response (H). He does not seem to be interested in others particularly, except to follow conventional patterns, as shown by his stereotyped animal responses (A). He probably makes social gestures, but it is an effort to him.

Just as he responds to the commonplace in situations, his characteristic type of thinking is stereotyped, to the point of rigidity. He is unable to make an integrated analysis of events, or to do effective planning, as shown by his lack of ability to integrate details of perceptual material.

Vitality is high, but does not appear to be going in any very productive direction (again the lack of integrativeness and also production of response--his total number being only eighteen responses).

The dissimilarity with the group seems to rest largely on a neurotic inability to make any kind of satisfactory adjustment to other people.

As he is now, it would perhaps be best that he choose those occupations which would least involve direct service to others, which would require a minimum of integrative capacity and in which practical considerations are foremost. The most important thing to emphasize in this case, however, is the need for some type of counseling. Out of the seven occupations, farmer, and printer would probably put less strain on his present psychological status.

This case particularly illustrates the importance of understanding what personality traits are characteristic of the vocational interest pattern and what the personality traits of the particular individual are.

Rorschach Protocol of Subject N

Performance Proper

Inquiry

Card I.

1. Looks like an eagle--form of an eagle.

1. As in a picture.

W F A P

Card II.

1. Couple of animals--bears, I guess. I seen first.

1. Noses are together. Standing--I suppose they'd be standing on their hind feet

W FM A P

2. Those things remind me of two socks--like at Christmas--that's what they remind me of.

2. Xmas time stocking--like little kids would have-- (Xmas?) Red, I guess.

D FC Xmas sock

Card III.

1. I see a bowtie, one thing.

1. Right in middle--bowtie. Just the shape of it.

D F Obj. P

2. See a limb of a tree.

2. Two of them.

D F Pl

3. Couple of heads of chickens.

3. (no comment)

d F Ad

4. Two birds--about all I see.

4. Birds with some kind of long tail, big combs.

D F A

Card IV.

1. I'll say a skeleton--some kind of a fossil looks like.

1. Skeleton of some kind of sea animal--shell-fish or clam. Looks like got a hard shell--way it's laid there.

W Fc A obj.

## Rorschach Protocol of Subject N (cont.)

Performance ProperInquiry

## Card V.

1. I'll say that's a butterfly.
2. Head of a rabbit.

1. Lacks color but got perfect shape. Wings are spread like it's flying. Antenna.  
W FM A P
2. Ears especially.  
d F Ad

## Card VI.

1. Skin off some kind of fur-bearing animal--coon or something.

1. Pattern on there. Shape of four feet--way colors in here--kinda looks soft--like its fur.  
W Fc A obj. P

## Card VII.

1. Looks like two hind feet of rabbit.
2. Skeleton of a cow--cow's head, skull.
3. See a camel's head.

1. Looks kinda furry and kinda shape in here.  
dr Fc Ad
2. Top of head--shape of horns there--hole in middle where nose should be. White too.  
dr FC' A obj.
3. Pretty good shape for camel's head.  
dr F Ad

## Card VIII.

1. See an animal of some kind--some kind of a rodent.

1. Two of those--some kind of animal. Standing on its feet, looking down.  
D FM A P

## Card IX.

1. Deer's head there.

1. Moose. Antlers.  
D F Ad

## Card X.

1. Rabbit's head.
2. See a dog.

1. Reminds me of jack-rabbit--white around nose and mouth.  
D FC' Ad P
2. Sitting down.  
D FM A

## DISCUSSION OF RESULTS

The original purposes of this paper were: 1) to ascertain the efficacy of the Rorschach Test in ferreting out personality characteristics of a group of twenty males selected for vocational interest by the Strong Vocational Interest Blank, and 2) to determine the personality characteristics related to the group studied.

### Method

After some experimenting with method, it was found that an analysis of the group could best be made by classifying each response category into: 1) number of individuals who were below average in the category, 2) number of individuals who were average, and 3) number who were above average. After this classification was made, a number of important differences in these personalities from the norms emerged.

This appeared to be the best method of handling the data for the size of the sample. The size of the sample was necessarily kept low as it was a highly selective one, and also because of the time-consuming nature of the task. However, it is felt that a highly selective sample like this one is far more accurate than a large, indiscriminately-selected group. For example, the factor of intelligence was ruled out by scaling the intellectual level of the sample in the selection thereof. The group happens to be all males. Control of this element (sex differences) can be handled only by cautiousness in interpretation of factors related to sex differences. For example, if dominance is found, one has to consider that this is a male and not attribute it solely to some

other interrelated factor, such as, for example, compensation for fear of being dependent on others.

After analysis of the group as a whole, the most similar and most dissimilar individuals in relation to the whole group were chosen for analysis.

These individual analyses were made with reference to the group characteristics as it appears that these characteristics might contribute to success on the job. Recommendations for vocational choice were then derived for the individual record. This method of arriving at recommendations seems more secure than "guessing" at the primary characteristics of the people who choose this vocational group. Of course, this study is highly limited and much caution must be observed in the use of its results. In fact, it would be safer to await further research in this direction before using the findings in counseling situations.

#### Analysis of Data

Several over-all generalizations come to light as a result of this study. These are as follows:

1. Of theoretical importance and interest is the fact that some preliminary hunches made on an over-all analysis of the positive and negative correlations of the Strong Vocational Interest Blank in the case of the pattern of these twenty men (plus-Group IV and minus-Group X) "came true" on the Rorschach analysis. There has been speculation as to the real worth of the Strong Vocational Interest Blank in occupational planning. Some feel that it is a superficial test, easily manipulated by the subject into what he

wants to be, not necessarily what he is suited for in terms of personality traits.

The observation that there was a coordination of mental and physical activities in the chosen occupations was indirectly supported by the Rorschach. There was a lot of vitality in the group, though a rather average level of imaginative thinking. But there was excellent integrative capacity in these people. This is an over-all concept of integrativeness and superordinate to any detailed parts. Therefore, the application of this trait to coordination of physical and mental activities seems reasonable.

Occupations which were chosen and those which, according to Strong's studies, correlate positively with this group were largely non-verbal in nature; those which correlated negatively were largely verbal. Content differentiation was low in the Rorschachs and this might well be related to verbalness.

The Group IV occupations consisted of work which in five out of the seven jobs listed involved more or less direct service to other people. The Rorschach shows that the experimental group as a whole has the ability to make and maintain good extensive interpersonal relationships. The occupations chosen were not those in which an intimate understanding of or feeling for people are necessary, and it is a characteristic of the experimental group that they do not readily enter into such relationships.

2. It is important to remember that allowances have to be made for individual differences, as shown in the analysis of individual cases. For this reason, a Rorschach should be administered along with the Strong Vocational Interest Blank in each Vocational guidance case. Even if it were proven definitely (if such were

possible) that certain personality traits belonged to each of Strong's Groups, we cannot account for other traits which may not show up in the over-all picture as given by a group analysis and which may be detrimental to the success of the individual in some or indeed all of the occupations of his chosen group. Too, some of the characteristic personality traits might be intensified in one individual. For example, the emotional shyness which was noted to be characteristic of Group IV may reach the point at which the individual would be unable to perform, for example, the duties of a policeman.

3. The personality data are useful in delimiting and also in expanding vocational choice. Certain areas which are highlighted by the combining of vocational choice and personality traits may be interrelated and expanded. For example, someone who is artistically inclined and who has special integrative capacity might consider entering the field of interior decorating or doing the artistic part of city planning, etc. The integrative inclination of course may well show up in the personality analysis only.

4. In the absence of time, money, etc., which might be required in the administration of individual Rorschachs, group testing could be done. If this is impractical, such tests and other information that are available or obtainable might be examined in the light of the personality traits suggested by the choice of vocation. It would seem that being able to understand some of the traits that go into the choice of a particular vocation or group of vocations is a refinement which would help in evaluation,

particularly of the more or less deviant cases within the group.

#### Limitations of This Research and Suggestions for Further Research

Because of the enormity of the task, only one small group could be processed in this analysis. It would be of great value not only to be able to include more cases in a well-selected sample, but also to study the relationships between other vocational patterns and personality, and the differences between the personalities of the various groups.

Not being able to validate the data statistically is another drawback to this type of analysis of personality. However, it is felt that the internal consistency achieved by interrelating of factors lends considerable validation to the Rorschach. Also, it is true that qualitative analysis must precede quantitative and up to now, no one has gotten far beyond the qualitative stage in the use of the projective techniques.

Finally, this study, as a function of the above limitations, is limited in its direct applicability, which must be the ultimate aim of all research. It is hoped that the contributions to method and theory may be of compensatory value.

Suggestions for further research would be along the line discussed above; i.e., the study of more cases and more groups. A warning should be made that this is a study for experienced persons, both in vocational guidance and in the Rorschach technique. There are many distracting paths into which one may turn and many blind alleys.

## CONCLUSIONS

1. The Rorschach Test can be used to evaluate a group of persons who are homogeneous as to vocational choice.
2. In the analysis of individual records, the Rorschach interpretation may both widen and narrow the field of vocational choice. Certain attributes of personality may negate certain areas and, on the other hand, expand others.
3. The application of the findings can be made only with caution, as deviants are found in all the personality traits studied.
4. The application of findings should also be limited to the age and sex of the group studied, as these factors were not ruled out in selection of subjects.
5. The inference that the Strong Vocational Interest Blank is more than a superficial test which may be manipulated by the subject is made on the basis that there are corresponding, consistent tendencies in the personalities of the experimental group.
6. That there are consistent personality tendencies which actually correspond quite well to the vocational choice of the group bespeaks validation for the method of analysis and for the Rorschach technique in general.
7. Further research is needed, not only on larger groups, but also on other patterns of the Strong Vocational Interest Blank.
8. The intricacies of research of this type requires experience and skill both in vocational guidance and in the Rorschach technique.

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**A P P E N D I X**

## APPENDIX

## Explanation of Scoring Symbols

LOCATION

W	WHOLE BLOT
W	intended use of whole blot but part or parts omitted or cut off
W,S	whole blot and white space used (tabulate as main W and additional S)
DW	a detail interpreted, with its meaning assigned to the whole blot without justification (confabulation)
D	LARGE USUAL DETAIL
D → W	detail interpreted and remainder of blot used as background or W tendency otherwise expressed (tabulate as main D and additional W)
D,S	white space used in addition to D (tabulate as main D and additional S)
d	SMALL USUAL DETAIL
Dd	UNUSUAL DETAIL
dd	tiny detail
de	edge detail
di	inside detail
dr	large or small detail combined with rare adjacent areas, or parts of usual areas, or unusual combinations of usual areas
S	WHITE SPACE
SD	a detail used in addition to S (tabulate as main S and additional D)

CONTENT

H*	Human Figures
Hd*	Parts of Human Figures, not Anatomical
A*	Animal Figures
Ad*	Parts of Living Animals
Aobj	Fur Skins, Skulls, and the like
At	Human Anatomy (dissected parts, x-rays, anatomical charts)
Obj	All Kinds of Man-Made Objects
N	Nature (landscapes, mountains, sunsets, rivers, and other scenery)
Geo	Topographical and Outline Maps and Geographical Concepts like Islands, Gulfs, Channels, not seen in vista

\*Caricatures and mythological figures indicated by parentheses as (H) or (A)

Note. Other symbols like Arch (architecture) or Pl (plant) are self-explanatory.

POPULARITY -- ORIGINALITY

P Popular Responses  
 O Original Responses Found Not More Than Once in 100 Records

DETERMINANTS

M FIGURES IN HUMAN-LIKE ACTION  
 (human, mthological, or animal)

FM ANIMALS IN ANIMAL-LIKE ACTION

m ABSTRACT OR INANIMATE MOVEMENT

m form excluded from consideration  
 mF form indefinite  
 Fm definite form in inanimate motion

k SHADING AS THREE DIMENSIONAL EXPANSE PROJECTED ON A  
 TWO DIMENSIONAL PLANE (x-ray, topographical map)

k form excluded from consideration  
 kF form indefinite  
 Fk definite form with k

K SHADING AS DIFFUSION (smoke, clouds)

K form excluded from consideration  
 KF form indefinite

FK SHADING AS THREE DIMENSIONAL EXPANSE IN VISTA OR PERSPECTIVE

F FORM ONLY, NOT ENLIVENED

F+ form more accurate than popular  
 F form on level of popular response  
 F- form less accurate than popular

Fc SHADING AS SURFACE APPEARANCE OR TEXTURE, DIFFERENTIATED

c SHADING AS TEXTURE (undifferentiated)

c form excluded from consideration  
 cF form indefinite

C' ACHROMATIC SURFACE COLOR

FC' definite form with C'  
 C'F form indefinite  
 C' form excluded from consideration

FC DEFINITE FORM WITH BRIGHT COLOR

F/C combination of F and C where the form is definite  
 and the color used merely to distinguish areas

- CF      BRIGHT COLOR WITH INDEFINITE FORM  
 C/F      combination of C and F where the color is used  
           merely to distinguish areas and the form indefi-  
           nite (indefinite anatomical chart, political map)
- C      COLOR ONLY
- C      concrete association to bright color; form and con-  
           text disregarded (blue: sky or water, red: fire  
           or blood)
- Cn      color naming
- Cdes    color description
- Csym    color symbolism -- abstract association to bright  
           color (Spring, Fall, Gayety)

\* Copied from Klopfer-Kelley Scoring Sheet (40).<sup>17</sup>

Table 2. Rorschach data.\*

Subject	Locations										Determinants														Analysis of Movement Responses						Symmetry					Content												
	W	W%	D	D%	d	d%	DdS	DdS%	S	Total R	M	FM	m	K	FK	F	F%	Fc	c	FK+F+Fc%	C'	FC	CF	C	M : Sum C	FM+m : Fc+c+C'	VIII, IX, X%	W : M	Extensor M	Flexor M	Goal M	Conventional M	Extensor FM	Flexor FM	S%	N/S%	A	Ad	A%	H	Hd	H%	(H+A) : (Hd+Ad)	Content Differentiation	P	O	Combinatory	Cards Rejected
A	8	27	15	50	...	...	7	23	4	30	4	7	...	...	...	16	55	...	...	55	1	...	...	...	4 : 0	7 : 3	40	8 : 4	2	2	1	3	4	3	16	3	16	3	63	3	2	16	19 : 5	8	3	4	10	...
B	5	36	6	43	...	...	3	21	...	14	2	1	...	...	...	4	29	...	1	29	3	...	2	...	4 : 2	2 : 4	29	5 : 2	...	...	2	...	14	...	1	1	14	1	...	7	2 : 1	9	1	...	2	...		
C	7	50	6	43	...	...	1	7	...	14	3	3	...	...	...	6	43	...	...	43	...	1	...	...	3 : 1	4 : 0	36	7 : 3	...	3	...	36	...	6	...	43	...	2	36	9 : 2	3	...	...	2	...			
D	4	9	20	42	9	19	14	30	1	47	4	4	...	...	...	35	74	1	...	78	1	...	...	4 : 0.5	4 : 2	21	4 : 4	4	...	...	4	...	36	...	7	13	40	4	12	34	11 : 25	10	4	8	...			
E	4	18	14	50	3	11	6	21	1	28	1	2	4	1	2	13	47	2	...	60	2	1	...	1 : 0.5	6 : 4	32	5 : 1	1	...	1	...	25	4	4	1	18	1	...	4	5 : 1	14	4	2	1	...			
F	9	17	29	55	6	9	10	19	1	54	5	2	...	...	6	24	46	...	1	55	5	6	2	2	5 : 8	2 : 6	44	9 : 5	2	3	...	5	1	16	...	11	1	23	2	4	11	13 : 5	14	4	5	8	...	
G	8	22	26	70	...	...	3	8	2	37	1	4	...	...	1	28	76	...	...	78	...	2	1	...	1 : 1.5	4 : 0	48	8 : 1	...	1	...	34	...	16	5	57	4	2	16	20 : 7	11	6	5	6	...			
H	7	19	10	27	7	19	13	35	3	37	2	3	...	1	23	62	...	2	64	...	2	...	...	2 : 1	5 : 3	29	7 : 2	1	1	...	1	...	29	...	8	6	38	2	2	11	10 : 8	18	6	11	5	...		
I	8	67	3	25	...	...	1	8	...	12	1	4	...	...	...	5	42	...	1	42	...	...	1	...	1 : 1	4 : 1	42	8 : 1	1	...	1	...	33	8	8	...	66	1	...	8	9 : 0	4	6	1	...			
J	10	48	10	48	...	...	1	4	...	21	3	3	...	...	...	11	52	2	...	62	...	2	...	3 : 1	3 : 2	38	10 : 3	3	...	...	3	2	66	...	11	2	62	3	...	14	14 : 2	5	9	2	2	...		
K	2	14	11	74	2	8	1	4	...	16	1	3	...	...	...	11	74	...	1	74	...	...	...	1 : 0	3 : 1	33	2 : 1	...	1	1	...	1	2	38	...	5	...	33	1	...	6	6 : 0	10	3	3	...	1	
L	7	50	7	50	...	...	...	...	...	14	...	1	...	...	...	7	50	2	1	64	...	1	2	...	0 : 2.5	1 : 3	50	7 : 0	...	...	1	...	50	7	71	...	...	...	...	...	...	...	...	...	...	...		
M	16	65	5	22	...	...	2	13	1	23	3	4	...	...	...	12	54	...	...	54	...	2	2	...	3 : 3	4 : 0	43	15 : 3	3	...	...	3	56	...	12	9	1	43	...	3	22	12 : 4	4	6	2	...		
N	5	28	8	45	2	11	3	16	...	18	...	4	...	...	8	45	3	...	...	61	2	1	...	0 : 0.5	4 : 5	22	5 : 0	...	...	...	...	33	...	6	6	67	...	...	...	...	...	...	...	...	...	...		
O	10	91	1	45	...	...	...	...	...	11	3	4	...	...	1	1	45	...	...	18	1	...	1	...	3 : 0.5	4 : 1	18	10 : 3	3	...	2	...	18	...	5	...	45	2	...	18	7 : 0	6	2	2	...	6	1	...
P	10	100	...	...	...	...	...	...	...	10	...	...	1	1	1	3	30	1	...	50	2	1	...	0 : 0.5	0 : 3	30	10 : 0	...	...	...	...	60	10	3	...	30	...	...	...	...	...	3 : 0	7	2	1	5	...	
Q	6	40	9	60	...	...	...	...	...	15	2	5	...	...	...	7	47	...	...	47	...	...	...	2 : 1	5 : 0	20	6 : 2	2	...	...	2	...	47	...	8	2	66	2	...	13	10 : 2	5	8	...	2			
R	5	8	24	40	12	19	19	33	2	61	1	7	...	...	2	39	64	...	1	77	1	...	...	1 : 0.5	7 : 8	30	5 : 1	1	...	...	3	11	...	14	3	27	...	1	...	5	...	...	...	...	...			
S	10	38	9	34	1	5	23	2	2	26	5	2	...	...	1	14	53	2	...	65	...	1	...	5 : 1.5	2 : 2	30	10 : 5	4	1	1	...	4	...	42	...	5	3	30	...	19	9 : 3	11	6	...	...			
T	8	31	14	54	...	...	4	15	1	26	9	2	...	...	1	10	38	3	...	54	...	1	...	9 : 0.5	2 : 3	42	8 : 9	7	2	3	...	2	...	38	...	9	9	34	...	34	18 : 0	6	8	3	...	...		
Total	150	778	227	841	42	101	94	280	18	51.4	50	65	11	3	16	277	990	23	8	1130	18	22	14	2	.....	.....	677	.....	36	14	15	35	43	22	708	32	160	49	870	47	28	274	.....	188	95	79	80	5
Median	7.5	37.0	9.5	44.0	...	...	3.0	11.0	...	22.0	2.0	3.0	...	...	11.0	48.5	0.5	...	58.0	...	1.0	0.5	...	.....	.....	32.5	.....	1.5	...	1.0	1.0	2.0	1.0	35.0	...	8.0	1.5	42.0	2.0	...	12.5	.....	7.5	5.0	2.0	2.5	...	
Mean	7.5	38.9	11.35	42.05	2.1	5.05	4.7	14.0	.90	25.7	2.5	3.25	.55	.15	.8	13.85	49.5	1.15	.40	56.5	.9	1.1	.70	.1	.....	.....	33.95	.....	1.80	.70	.75	1.75	2.15	1.10	35.40	1.60	8.0	2.45	23.50	2.35	1.40	13.70	.....	9.40	4.75	3.95	4.00	.25
Range	2-16	8-100	0-29	0-74	0-9	0-19	0-19	0-33	0-4	10-61	0-9	0-7	0-4	0-1	0-6	1-39	9-76	0-6	0-2	18-78	0-5	0-6	0-2	0-2	.....	.....	18-50	.....	0-7	0-3	0-3	0-6	0-4	0-4	11-66	0-10	1-16	0-13	14-71	0-9	0-12	0-36	.....	4-30	1-9	0-27	0-10	0-2
Norm	....	20-30	....	45-55	...	5-15	....	<10	...	25-35	3-5	2-4	<3	...	...	...	<50	...	...	<75	...	...	<1	2:1 → 1:2	.....	.....	.....	2 : 1	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

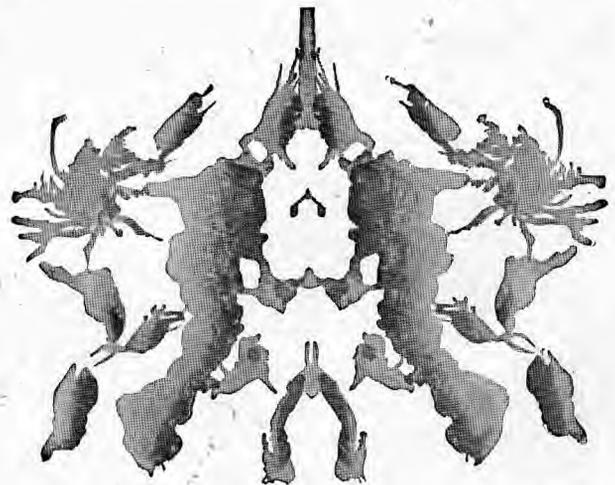
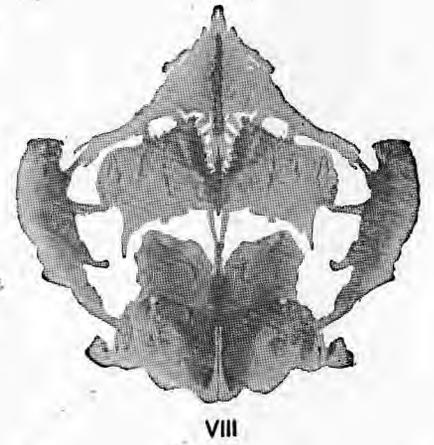
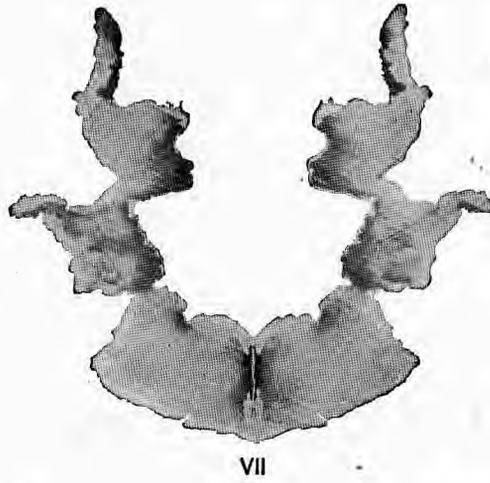
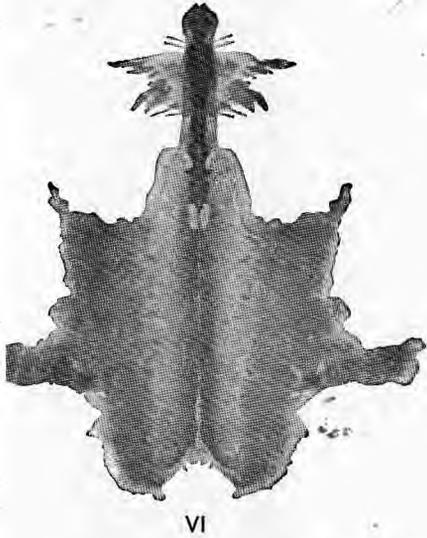
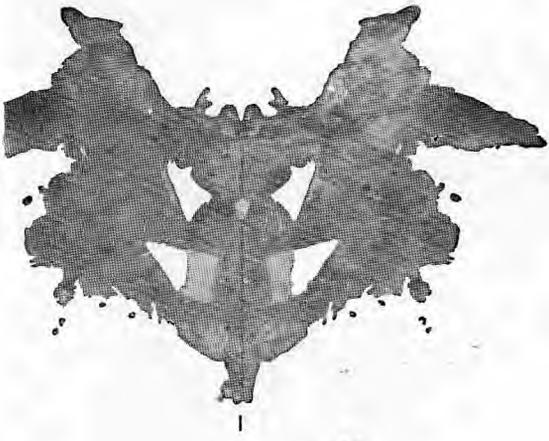
\*This chart includes all scoring data of the Rorschach tests of the twenty subjects, based on the Klopfer-Kelley (40) system of scoring.

Table 3. Sample used in the study.

Subject	ACE Total	Coop. English	Minnesota Personality					Coop. Reading
			Morale	Social	Family	Emotion	Econ.	
A	35	58	191	254	141	169	108	- 5
B	53	65	142	181	94	127	97	10
C	68	96	156	166	128	144	114	12
D	72	84	191	208	130	150	100	4
E	73	114	106	225	143	168	104	9
F	92	104	172	189	119	156	101	14
G	98	148	157	198	116	153	107	24
H	98	102	173	212	138	163	101	11
I	96	129	189	218	135	164	104	22
J	99	164	192	243	160	164	118	21
K	101	140	193	251	133	177	121	19
L	104	132	153	137	93	117	112	24
M	107	177	164	200	144	142	106	25
N	111	184	176	200	131	132	106	10
O	118	140	181	257	135	177	117	26
P	119	190	173	251	140	171	116	26
Q	128	135	176	221	158	161	108	17
R	133	224	157	237	111	136	133	24
S	158	248	170	230	133	156	108	37
T	124	227	179	250	157	178	121	26
TOTAL	1988	2861	3471	4328	2639	3105	2202	356
MEAN	99.4	143.05	173.6	216.4	131.95	155.25	110.1	17.8
Difference of Means: $\bar{X}_1 - \bar{X}_2 =$	0.3	6.15	7.45	8.45	2.6	9.45	6.3	0.4
t =	insig.	0.128	0.128	0.123	0.061	9.192	0.180	insig.
Level of Confidence: P =	.90	.90	about .90	.90	.90	about .90	about .90	.90

Table 4. Random sample.

Subject	ACE Total	Coop. English	Minnesota Personality					Coop. Reading
			Morale	Social	Family	Emotion	Econ.	
A <sup>1</sup>	97	149	169	224	121	130	120	16
B <sup>1</sup>	114	167	150	253	110	109	120	27
C <sup>1</sup>	103	148	179	200	155	158	125	19
D <sup>1</sup>	96	135	149	196	139	167	65	16
E <sup>1</sup>	82	85	175	157	110	110	107	11
F <sup>1</sup>	142	166	175	199	121	151	100	26
G <sup>1</sup>	107	148	168	213	151	168	117	19
H <sup>1</sup>	73	114	186	225	143	168	104	9
I <sup>1</sup>	74	112	172	208	125	154	107	9
J <sup>1</sup>	118	240	166	232	128	166	111	34
K <sup>1</sup>	79	86	174	230	157	138	105	7
L <sup>1</sup>	113	128	168	249	138	173	107	15
M <sup>1</sup>	92	104	172	189	119	156	101	14
N <sup>1</sup>	108	166	157	224	144	134	71	26
O <sup>1</sup>	53	65	142	181	94	127	97	10
P <sup>1</sup>	103	134	154	210	154	156	104	27
Q <sup>1</sup>	80	62	175	204	140	159	110	8
R <sup>1</sup>	148	206	160	145	95	104	113	29
S <sup>1</sup>	101	179	169	180	101	129	99	18
T <sup>1</sup>	99	144	174	230	157	138	105	24
TOTAL	1982	2738	3323	4159	2587	2916	2076	364
MEAN	99.1	136.9	166.15	207.95	129.35	145.8	103.8	18.2



RELATIONSHIP OF CERTAIN RORSCHACH INDICATORS  
A VOCATIONAL INTEREST GROUP OF MALE  
KANSAS STATE COLLEGE FRESHMEN

by

Dorothy Whitman

A. B., Duke University, 1949

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ABSTRACT OF

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## PURPOSE

The purpose of this study was to ascertain the efficacy of the Rorschach Test in ferreting out personality characteristics of a group selected for vocational interest by the Strong Vocational Interest Blank, and to determine the personality characteristics of the group studied.

## METHOD

A qualitative investigation of personality similarities and differences was made of twenty male college freshmen who were selected according to the following criteria: (1) Their Strong Vocational Interest Blank showed a rating of B<sup>+</sup> or A on Group IV (aviator, farmer, carpenter, mathematics-physical science teacher, printer, policeman, and forest service); and a C or B- rating on Group X (lawyer, author-journalist, and advertising man). (2) The twenty subjects were selectively stratified into four equal quartiles as to scholastic aptitude as measured by the American Council on Education Psychological Examination (1945 Edition). (3) Approximately one-half was selected from the first half of the alphabet and the other half beginning with the letter "l." The sample studied was found not to differ on several variables from a randomly selected sample of all male freshmen meeting the first criterion and stratified according to scores on the American Council on Education Psychological Examination.

Subjects were given the standard administration of the Rorschach Test. Then the author scored all protocols according to the Klopfer-Kelley method, using all the usual scoring indicators except for one shading indicator and the timing of responses.

Klopfer's norms were used in evaluating the scoring data and an analysis of the group was made on the basis of widely accepted interpretations. The case most similar to, and the case most dissimilar to, the group in Rorschach findings were analyzed separately as illustrations of how personality characteristics ascertained by the Rorschach method might be used in vocational guidance, in conjunction with the Strong Vocational Interest Blank.

### RESULTS

1. It was found that the Rorschach Test could be used in evaluating a group of persons who were homogeneous as to vocational interest. In the analysis of individual records, the Rorschach interpretation was found to both widen and narrow the field of vocational choice; i.e., certain attributes of personality negated certain occupations and, on the other hand, expanded other areas.

2. The application of findings was determined to be limited as deviants were found in all the personality traits which were characteristic of the group as a whole. Application should also be limited to the age and sex of the group studied.

3. The inference that the Strong Vocational Interest Blank is more than a superficial test which may be manipulated by the subject was made on the basis that there were corresponding, consistent tendencies in the personalities of the group investigated. That there were consistent personality tendencies which actually corresponded quite well to what is known about the vocational interest group studied indicated that both the method of analysis and the

Rorschach technique in general might be valid means of personality analysis.

4. Specific personality traits found to be characteristic of the group studied were: (1) They approach life situations globally; that is, they direct their attention mainly to the importance of the whole rather than parts of the environment. (2) Controlled and objective, these are not constricted but are stable individuals. There is no strong tendency towards imaginative thinking, or fantasy life. (3) There is high vitality, much of which is utilized in integrative activity. (4) These are realistic, down-to-earth people who are not overly sensitive to the feelings of others, but who adjust well to other people in extensive relationships.

5. This type of investigation was found to be extremely intricate because of the difficulties of Rorschach analysis and the complexity of vocational guidance, and it should only be undertaken by persons who have acquired skills in both areas.