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A study of the efficacy of the group Rorschach test in predicting scholastic achievement.

Marjorie H. Brownell

University of Massachusetts Amherst

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A STUDY of the EFFICACY of the GROUP RORSCHACH TEST IN PREDICTING SCHOLASTIC ACHIEVEMENT

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A STUDY OF THE EFFICACY OF THE GROUP RORSCHACH
TEST IN PREDICTING SCHOLASTIC ACHIEVEMENT

by

MARJORIE BROWNELL

THESIS SUBMITTED FOR THE DEGREE OF MASTER OF SCIENCE

UNIVERSITY OF MASSACHUSETTS

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INTRODUCTION

Personality may be measured either by pencil-and-paper tests in which the subject merely answers a number of printed questions concerning his likes and dislikes, feelings and attitudes, or by the projective type of test. In this type test the subject is asked to interpret certain standard pictures, or ink-blot, or to complete prepared unfinished sentences. The Group Rorschach Test is a personality test of the projective type in which the subject interprets ink-blot. The type of response depends on the subject's personality characteristics. The subject, in his interpretations, reveals his attitudes, opinions, past experience, and characteristic methods of adjustment. Most projective type tests are given individually. However, recently the original Rorschach Test has been modified so that a large number of subjects can be tested at the same time.

The personality characteristics of an individual are important determining factors in his ability to adjust to his environment. Good adjustment is necessary in every-day living and is especially necessary for efficient learning. It has been thought that perhaps the personality adjustment of the college student would influence his study habits and thus have an effect on his scholastic averages.

This study correlates various Group Rorschach scores with scholastic averages. The Group Rorschach Test was

used and an attempt was made to score it objectively. The Rorschach results were compared statistically with total scholastic averages, scholastic averages for the first semester at college, two intelligence test scores, and an aptitude scale. There have been few statistical interpretations of Group Rorschach results using college students as subjects, and in none of these studies were the Rorschach scores correlated with scholastic averages.

A high correlation between Rorschach scores and scholastic averages was not expected. However, the findings of this study indicate that there is practically no correlation between any of the Group Rorschach scores used and scholastic averages.

The results may indicate either that the quantitatively obtained Group Rorschach scores are not a measure of any of the adjustment characteristics related to scholastic averages, or that the students used in this study are all very well-adjusted individuals. It is possible that other Rorschach scores, or scores obtained using a different method of scoring the test would yield higher correlations with scholastic averages.

The literature reveals that subjectively scored Rorschach test results have been used successfully in predicting scholastic achievement. This type of scoring may include certain characteristics of the responses which would be excluded in an objective system of scoring. If the nature of these factors could be determined, an objective system of scoring which would include these factors could be prepared.

SURVEY OF LITERATURE

I. Historical

The first account of the use of ink-blot materials was published by Justinus Kerner (24) in 1857. He observed, quite accidentally, that he could perceive different forms from ink-blot which seemed to be meaningful.

In 1895 Binet and Henri (5) suggested the use of ink-blot in studying various traits, particularly visual imagery. Several other psychologists followed this lead, and in 1910 Whipple (36) published the first standard series of ink-blot.

Another worker in the field before Rorschach was Pyle who used the ink-blot method of studying individual differences such as age, sex, race, and intelligence. Bartlett was probably the first to introduce color and shading and he, with Parsons, set up a system of ink-blot analysis similar to that later devised by Rorschach.

In 1921 Rorschach (33) published his monograph entitled "Psychodiagnostik: Methodik und Ergebnisse eines Wahrmenungsdiagnostischen Experiments. Deutenlassen von Zufallsformen." This he considered just a preliminary report of his findings concerning the use of ten standard ink-blot. Rorschach's contribution was probably unrelated to any of the earlier studies since he had been

experimenting with ink-blot since 1911.

After Rorschach's death in 1922, work was continued on his test mainly by psychologists in Switzerland and Germany. Oberholzer and Roemer were two of these workers.

Since 1923 many Rorschach investigations have been conducted - particularly in the fields of psychoanalysis, psychotherapy, child and adolescent study, personality types, heredity and environment, differential diagnosis and clinical aid, abnormal psychology, organic and neurological disturbances, education, vocational guidance, juvenile delinquency, and general personality study.

Levy introduced the Rorschach method in this country about 1924 and Beck, one of Levy's students, soon assumed leadership in the field. In 1937 Beck published his Introduction to the Rorschach Method (2), the first comprehensive treatment of the method in English.

In 1936 Klopfer began to work and experiment with the Rorschach test. He formed study groups and established the Rorschach Research Exchange in 1936. He also originated the Rorschach Institute, and through his efforts knowledge of the test was spread to colleges, universities, clinics, hospitals and research centers. His book, The Rorschach Technique (26), has been useful as a guide for scoring and interpreting the results of this test.*

* The information in the preceding section was found in Klopfer & Kelly (26), Beck (4), and Krugman (27).

II. Group Rorschach

Klopfer and Kelly (26) stated that, in 1939, it was thought that the Rorschach test might prove valuable as a means of screening unfit men from the armed services and of determining the men most suited for certain industrial positions. This made it more urgent than ever to revise the Rorschach so that it could be administered easily to a large group and so that the scoring would not be too cumbersome and time-consuming. In 1941 Harrower-Erickson (13) introduced her method of group administration which, Hertz (15) stated, has proved "highly successful".

Hertzman (23) found that there are some differences between the group test and the individual test. There are apt to be fewer responses, essentially the same number of W responses (responses to the whole ink-blot), fewer D's (responses to large details of the ink-blot), more M's (human movement) and F's (form responses) and less evidence of shading shock (inability to respond to the heavily shaded slides) in the group test. However, Hertzman concludes that the "results indicate rather small differences between the two tests when all the factors are considered. The relationship between the two tests with respect to a sign approach would indicate the feasibility of the employment of the group test for screening purposes". (Page 107)

Harrower-Erickson (12) stated that the manner in which the subject marked off the areas on the reproductions

of the ink-blots created another measure of abnormality. This, she indicated, is a definite advantage of the Group Rorschach over the individually given test.

III. Reliability and Validity

Hertz (21) suggested the following possible approaches to the problem of determining the reliability and validity of the Rorschach:

- "1. Direct experimentation.
2. Comparison of the Rorschach categories with other objective criteria by means of correlation technique.
3. Comparison of groups of varying intelligence and personality pictures to detect characteristic differences in Rorschach categories and patterns.
4. Case studies including comparison with clinical data, psychoanalytic material, graphological indices and the like." (Page 513)

Krugman (27) pointed out that the reliability of the test cannot be determined from a purely statistical point of view because it does not yield a numerical score, it does not have an alternate form, and successive administration is not very meaningful since a gross picture is what is wanted. She suggested that the methods below be tried:

1. 'Blind' analysis whereby the record of a subject is scored by several competent interpreters and their interpretations are compared.

2. Administration of the Rorschach under three different types of instructions: (a) normally, (b) by asking the subject to respond so as to make a 'good impression', and (c) by asking the subject to make a 'bad impression'.

Several studies have been made following these suggestions. Fosberg (10) used 66 subjects who took the Rorschach and the Bernreuter Inventory three times. The first time the subjects took both tests in the usual way; the second time they tried to make a 'good impression'; the third time they tried to make a 'bad impression'. The following correlations resulted:

1. For the Bernreuter:

- (a) Standard and 'good impression' .107
- (b) Standard and 'bad impression' -.299

These correlations indicate that the subject can simulate the results of this test.

2. For the Rorschach:

- (a) The correlations stood in the "90's" for standard and 'good impression' and standard and 'bad impression'.
- (b) The correlation between 'good impression' and 'bad impression' was in the "80's".

These correlations indicate that the subject can not simulate the results of this test.

Fosberg (10) gathered data from published studies which reported the results of at least two individually given

Rorschach tests for each subject. He correlated these results for reliability and found the following correlations:

.914 for Location Responses

.807 for Content Responses

.885 for Determinants

.877 for the Total Test.

These results indicate a rather high reliability.

Hertz (16) obtained satisfactory results using the split-half method of correlation. The correlations ranged from .73 to .89.

Klopfer (25) calculated the average variance of five different scorer's interpretations of the same records. He found the variance to be 12% which he considered comparatively small. Cards numbered 4 and 10 showed least variance - 7% and 9% respectively.

After comparing three "blind" analyses, Hertz & Rubenstein (22) concluded that they showed "extremely high agreement" and suggested that "the interpretations based on a Rorschach record have a high degree of reliability". (Page 312)

In comparing the validity of the group and individual Rorschach tests, Hertz (20) concluded that "total personality pictures developed independently from group and individual records show agreement in the (dominant) traits of personality". (Page 514)

Hertz (17) also indicated that some workers have a physiological and neurological approach and have sought to

validate the Rorschach in light of the "dynamic activity of the brain". She stated that "inhibition, excitation, irradiation, and induction which take place upon the surface of the brain show a high correlation with temperament and constitution". (Page 541)

Brosin and Froman (6) suggested that a Gestalt analysis of Rorschach answers might prove to make the Rorschach more valid and also might open the way for Rorschach investigation of the physiological processes involved in perception.

Beck (3) gave some of the sources of errors in validating the findings of the Rorschach as: the lack of a definition of the Rorschach whole personality, the halo effect of E's observations of S (this can be eliminated by "blind" analysis or group testing), and the lack of definitions of the criteria whereby each response is classified. It is also necessary to determine the significance of each type of response with reference to behavior patterns and psychological activity.

IV. Present Status of the Rorschach

A survey of psychologist's opinions concerning the Rorschach method was made in 1945 by Faterson (9). In tabulating the replies, he and Klopfer found that the attitude of the majority of the group was favorable toward the method, but that frequent criticisms were offered. Only a few psychologists expressed consistently skeptical attitudes. They concluded "that the Rorschach method has

a definite place in the field of general psychology. It is widely, though often very briefly, discussed in the college classroom, and it appears to arouse interest in the students. It is rather widely used in research, but usually by associate or advanced students". (Page 29)

Munroe (29) analysed the qualitative results of this questionnaire and found that a majority of the psychologists felt the need for scientific standards and expressed the belief that the "over-enthusiastic cultism" of the Rorschachers was responsible for the present unscientific nature of the test.

Krugman (27) cited several indications of the acceptance of the Rorschach test in this country and abroad. Clinics are requiring psychologists and psychiatrists to have some knowledge of the test and its scoring, graduate courses are being given to deal with the method, many dissertations are being written on it, and it is a common topic for round table discussions. She concluded that "the Rorschach test has not replaced psychiatric, psychological and neurological examinations, but has supplemented these. It has to some degree replaced a large group of non-valid personality tests." (Page 100)

V. Applications

The main applications of the Rorschach test are in the fields of clinical and abnormal psychology. By analysing the whole pattern of the personality as evidenced by the

Rorschach responses, it is possible to determine fairly accurately the degree and type of abnormality present in a subject. Beck (4) cited four groups in which valid and probably reliable personality patterns have been established - the healthy adult of superior intelligence, the feeble-minded, the schizophrenic, and the brain damaged. The patterns of the brain damaged group have not been so completely established as the others.

In a survey article, Hertz (19) stated that, although Rorschach thought there would be no sex differences, several Rorschach workers have reported them. However, these differences vary at different age levels. Race and locality of subjects seem to effect the Rorschach scores, but the reliability is not certain. Since Rorschach records show greater similarity between siblings than non-siblings, and between like twins and unlike twins, she suggested that the technique may be used as one indicator of the influence of heredity vs. environment on the personality make-up.

The Rorschach is not considered a good measure of intelligence except by trained observers who can tell by inspection of the Rorschach records the approximate intelligence of the individuals. Hertz' (19) statement concerning the Rorschach as a measure of intelligence is significant. She says that "the conclusion must be made - that the Rorschach test factors show a low correlation with objective criteria of intelligence, and that they are not as good as other recognized tests of intelligence". (Page 47)

However, in extreme cases, some variance in Rorschach responses has been found. Gair (11) found that very superior children can be differentiated from the normal of the same age level.

Recently some indication has been found by Piotrowski, Candee, Balinsky, Holzberg, and Von Arnold (32) that it may be possible to use certain Rorschach signs in the selection of outstanding male mechanical workers.

The Rorschach has been used as a method for screening unstable individuals from entrance to college and the military services.

Cowin (8) used the Rorschach in a child guidance bureau for screening those who needed treatment and used the overall types of responses in diagnosing the cases. It was also found to be useful in suggesting methods of therapy, and changes in the Rorschach responses were used in evaluating the results of the treatment. Cowin stated that the Rorschach is valuable in considering problem cases in schools - for teachers as well as students - and as an indicator of prognosis as well as the type of treatment necessary. It is useful in counselling and guidance work also.

VI. Achievement Studies

In a comparison of the best and least adjusted girls in a training school, Hertz and Wolfson (14) found that the better adjusted group showed a greater facility for association as revealed by a larger number of responses. There were more movement responses in the better adjusted group,

and more shading shock was found in the least adjusted group.* These results were obtained from observation of the Rorschach responses rather than statistical procedures. The reliability of these findings is not known.

Steinzar (35), using the Klopfer method of scoring the individual test, tested thirty students in an Arts course at college and came to these conclusions:

1. The achievers gave more responses to the cards.
2. The achievers gave more large detail responses.
3. The achievers gave more small and unusual details.
4. The achievers gave many more Fc (responses using both the form and the shading of the ink-blot) responses.
5. The achievers gave more C (color) responses.
6. The achievers gave more F (responses using the form of the ink-blot only) responses.
7. The achievers showed a wider range of content.
8. The achievers showed a small number of animal responses.

The author stated that the non-achievers gave indications of being less well-adjusted. Again, no quantitative data were

* Movement responses refer to responses in which human movement was seen. Shading shock refers to the fact that some subjects have difficulty in responding to the heavily shaded cards (IV, VI, & VII). Shading shock is expressed as the % of responses occurring on these cards.

given and the conclusions were apparently arrived at by inspection of the records only.

In a study by Abel (1) two groups of fifteen girls each in Letchworth Village, a New York state institution for mental defectives, were matched for chronological age and IQ (Terman) and differentiated on the basis of academic school success or failure. They showed marked differences in their responses. The author stated that "those who give evidence of adequate inner and outer control (M&FC) and who conform to certain standards expected in a more or less balanced record (H&A&P& good form) and who respond quickly to achromatic cards, make progress in school work. In contrast, the girls who manifest impulsiveness and egocentricity (CF&C&infrequent P), less well organized imagination (F&content, not H or A) and have slow reaction times to both colored and achromatic cards, do not advance in school work". (Page 109) Although these results again seem rather positive, no statistical data were cited and it is apparent that the manner in which the test was taken affected the score. These were individually administered Rorschachs.

Munroe (30), (31), at Sarah Lawrence College, developed a checklist whereby the deviations from the normal responses were checked and they constituted the score. Using this checklist and an inspection technique, she rated each student in terms of the four categories below:

1. adequately adjusted
2. slight problem

3. moderate problem

4. severe problem

By combining the ratings and the scores on the A.C.E., she found it possible to predict rather accurately the academic performance of entering students. She found that the A.C.E. scores above the 80th percentile were more successful than the corresponding Rorschach ratings of 'adequately adjusted' in predicting superior academic work. Twenty-nine and one-half percent as against 18.2% of the two groups did superior college work in their first year. The Rorschach rating was much more successful in predicting academic failure than the A.C.E. Of 36 failing students, 34 had been rated as being relatively poor on both tests, 21.6% rated as failing, and only 27.8% were rated as satisfactory. None did superior work. The students rated as adequately adjusted by the Rorschach but scoring below the 60th centile on the A.C.E. were relatively weak students, but only one failed. Of students standing well on both tests, 92.6% did satisfactory work or better, and only one failed. This rating technique seemed to produce good results. To my knowledge, however, no detailed account of the scoring technique has been published and Munroe seems to be the only one using it.

Margulies (28) conducted a study using 71 girls and 91 boys of Junior High School age. Each of these groups was divided into a successful and an unsuccessful section and these sections were equated as to age, socio-economic status, birthplace of parents, birthplace and residence of subjects,

religion, and language in the home. The measure of success was based on scholastic averages and teacher's ratings as to whether the student was working up to his capacity. Since there were only 6 unsuccessful girls in the group, the girls' data were not used except on a comparative basis. It was found that the W/M (total number of responses based on the interpretation of each ink-blot as a whole divided by the number of responses on all of the ink-blots in which human movement was included), did not differentiate between the two groups. Margulies (28) suggested that this ratio may indicate the relationship between abstract thinking and creative capacities. The data suggested that certain patterns indicate differences between the groups. The distribution of the number of signs of color shock, which may indicate emotional disturbance, was significantly different between the successful and the unsuccessful students. The unsuccessful students gave more signs. The distribution of the number of signs of shading shock, which may indicate a disturbance in the ability to establish personal relations with other people, was significantly different between successful and unsuccessful students. The unsuccessful students showed more signs. In comparing the successful girls with the successful boys, certain sex differences were observed. The Rorschach test was given individually and the scoring was according to the Klopfer technique.

In summary, the literature reveals the Rorschach to be a widely used index of personality and adjustment. Many

efforts have been made to standardize the administration and scoring technique of this test, but much still remains to be done. The Rorschach is used in determining personality deviations, especially in psychopathic patients, and an attempt has been made to determine the usefulness of the Rorschach in vocational and educational guidance. The development of the group Rorschach made it possible for greater numbers of subjects to be tested and a greater variety of problems to be investigated. The evidence points to the high reliability of both the individual and the group Rorschach, when used by trained interpreters. The test seems to have value.

Studies concerning the prediction of scholastic success by means of the individual Rorschach indicate that, when subjectively scored, the Rorschach shows some correlation with scholastic achievement. However, unless a subjective scoring system can be explained so that it can be used easily and reliably by any person accustomed to administering and scoring tests, that scoring system is of little, if any, scientific value. For example, many responses on the Stanford-Binet Intelligence Tests must be interpreted subjectively, but adequate explanations have been formulated so that the scorer knows what to look for in the responses. Perhaps in the future more adequate explanations of the factors in the Rorschach responses will be formulated. It is very possible that the present methods of scoring this test are inadequate and that other scoring techniques should be adopted using some of the factors suggested by Munroe in her subjective method of scoring.

PROBLEM

The main objective of this study is to determine whether the Group Rorschach Test, given to groups and scored on a quantitative basis, indicates college achievement. Various studies cited above have indicated that the individual Rorschach has some significance in predicting achievement. Other studies have shown that the test has value as a measure of personality adjustment. If the Rorschach is a valid measure of adjustment, its use as a prognosticator of academic achievement will depend on the extent to which better adjustment to college is conducive to greater scholastic achievement.

It is generally accepted by Rorschach workers that the Rorschach Test is not a good measure of intelligence. Therefore, this study might give some evidence concerning the degree to which scholastic achievement is dependent on adjustment. This, of course, assumes that the Rorschach is a good measure of adjustment. No study has been conducted previously relating objectively scored Group Rorschach results to scholastic achievement. If the Rorschach proves to be valuable as an indicator of scholastic achievement, it might have greater use in screening entering college students and in vocational and educational guidance.

SUBJECTS AND APPARATUS AND MATERIALS

I. Subjects

Ninety-one Sophomore girls at Massachusetts State College were used as subjects. These girls were regularly enrolled students and all were taking Sophomore Psychology at the time they were tested. The average age of the group was 19 years, with a range of 18-23. Only girls were used in this study because many of the men in the present Sophomore class are veterans. These men took the intelligence or scholastic aptitude tests used in this study five or six years ago and the actual scores are not available now. Also by using only those students whose college careers had not been interrupted for any reason, a more homogeneous group of subjects was obtained. There were only eighteen men whose complete records were available. The data for these men were not used since no statistically reliable results could be obtained using so small a group of subjects.

The subjects had no technical knowledge of the test before taking it, but they seemed interested and were very cooperative.

The original plan was to use two groups of subjects, one composed of Sophomores and the other of Juniors, but it was impossible to get a large enough number of Juniors to take the test.

II. Apparatus and Materials

A standard projector was used to project the pictures

on the Rorschach slides onto a screen at the front of the room. The slides used are commercial Rorschach slides obtained from the Psychological Corporation. Reproductions of the original Rorschach ink-blot are on the ten slides. Five of these ink-blot are black and white, two are black, white and red, and the other two are multicolored. The size of the projected ink-blot on the screen was approximately 4' square. The size of the original Rorschach cards is about 10" x 8". This size difference constitutes a variance in the stimuli of the group and the individual Rorschach tests.

The blanks used were the original Harrower-Erickson Group Rorschach Blanks or mimeographed copies of them. A sample Harrower-Erickson blank is included in the Appendix. A stopwatch was used to time the exposure of the slides as they were presented.

PROCEDUREI. Method of Administration

The Rorschach was given as a group test and the ink-blots were shown the students by means of slides projected on a screen before them. The same instructions were given at each testing session. Before the ink-blots were projected on the screen, the Group Rorschach Blanks were passed out and the students recorded their names, ages and the date. The examiner, following Harrower-Erickson's (13) suggested instructions, explained that the pictures to be shown to the subjects were actually reproductions of inkblots. The subjects were then instructed to write in their record blanks what the pictures, or any parts of the pictures resembled or looked like to them. Any questions asked by the subjects were answered. It was explained that the light would be dim and that quality of handwriting was not important.

The slides were shown, upright and in the usual order for three minutes each while the students wrote their interpretations of the ink-blots in the blanks. The slides were shown a second time, upright and in the usual order for one and one-half minutes each. This time the students were asked to mark off, on little reproductions of the ink-blots in their record blanks, the areas that resembled whatever they had seen. The subjects could also add any additional information at this time. The exposure times of three minutes for the

first exposure and one and one-half minutes for the second exposure were those suggested by Harrower-Erickson (13). The complete administration of the test took from 45 minutes to 1 hour.

II. Testing Sessions

There were seven testing sessions in all. The first two were voluntary but since only a small number of students appeared it was necessary to find some other method of getting the students together. The other five testing sessions were in the regular class periods of the Sophomore Psychology classes. All students in these classes were tested and the records of all regularly enrolled Sophomore women students were selected for use in this study. Records of other students were discarded.

The scores on the American Council on Education Psychological Examination, 1945 Edition, the Bregman Revision of the Army Alpha, Form A, and the Massachusetts State College Psychological Examination, 1944 Edition were taken directly from the test booklets used by these students when they took these tests in 1945. Hereafter in this paper these tests will be referred to as the A. C. E., Army Alpha, and M. S. C. tests respectively. The total scholastic averages for each student's first three semesters in college were calculated. These calculations were based on each student's semester averages for her first three semesters. The semester averages were taken directly from records in the Dean's office.

III. Scoring Technique

The scoring of projective tests, such as the Rorschach, is usually subjective in nature, thus limiting the use of these tests to trained interpreters. It is always preferable to have an objective scoring technique for a test so that it can be more accurately used. Every effort was made by the experimenter to enhance the objectivity of the Rorschach scoring technique.

Rorschach workers have adopted a system of symbols representing certain characteristics of the responses to the ink-blot. In this study Klopfer's list of symbols, given by Klopfer and Kelly (26), were used and their scoring directions were followed. The following is a list of Klopfer's symbols and a statement explaining what each symbol stands for.

Location

- W - ink-blot interpreted as a whole
- D - large detail in the ink-blot interpreted (Sender & Klopfer (34) and Hertz (18) have prepared lists of the usual details of each ink-blot and the usual interpretations of these details. These lists were used throughout the scoring.)
- d - small detail of the ink-blot interpreted
- Dd - unusual detail of the ink-blot interpreted
- S - the space around or within the ink-blot interpreted

Determinants

- M - human movement seen

- F - form of the ink-blot was used
- FM - animal movement seen
- m - abstract movement seen
- FC - both form and color were used; form more than color
- CF - both form and color were used; color more than form
- C - color alone interpreted
- C' - black and white used as a color
- K - diffusion in ink-blot interpreted
- k - toned-down diffusion used
- c - texture indicated in the ink-blot was used
- Fc - both form and texture used

Content

- H - human figures seen
- A - animals seen
- Hd - human details seen
- Ad - animal details seen
- Aobj - animal object seen
- Obj - man-made object seen
- At - anatomy seen
- Pl - plant life seen
- Other - any content response that does not fit any of the above descriptions

The following are some of the explanations and interpretations of the Rorschach symbols and their combinations generally accepted by present-day Rorschach workers. Interpretations such as these are usually evolved by comparing the test results of normal and abnormal subjects. Efforts are made to determine characteristics of the responses which

could be used to distinguish a record of a normal individual from one of an abnormal person. When a certain type of response is found consistently in the records of abnormal persons and not in those of normal persons, or vice versa, the next step is to determine the factor in the individuals' personalities causing this response. This is a long and arduous task usually involving many trials before the most exact interpretations and definitions can be formulated. The Rorschach is a comparatively new test and there is still much work to be done, in the writer's opinion, in determining the personality traits represented by the Rorschach symbols now in common use. The interpretations below were given by Margulies (28) who used information from Beck (2) and Harrower-Erickson & Steiner (13).

- W - a large number of W responses may indicate an emphasis on the abstract form of mental activities and strong intellectual ambitions.
- D - a large number may indicate the individual's regard of the obvious facts of everyday living or his common sense.
- d - may indicate the ability to criticise, especially when accompanied by a large number of D's.
- Dd - may indicate originality and the ability to observe details.
- S - may indicate originality.
- M - index of creative and imaginative capacities.
- F - indicator of conscious control of one's actions,

but when an excess is found it may indicate lack of spontaneity.

FM - indicator of aspects of inner expression less mature than those indicated by M.

m - may indicate the existence of some tendencies which are not well integrated in the personality.

FC - may indicate the ability to respond to emotional stimuli in an adapted way.

CF - indicator of instability in emotional responses.

C - large number of C responses may indicate some form of neurotic tendency.

C' - indicator of neurotic tendencies - rarely used.

c and Fc - may indicate social awareness and ability to introspect.

A - indicator of stereotyped thinking.

Shading Shock - term describing the difficulty which some people have in responding to the highly shaded pictures (slides IV, VI, VII). It may indicate a disturbance in the ability to establish personal relations with other people.

Color Shock - % of answers occurring on the colored cards - II, III, VIII, IX, and X. A high %C may indicate emotional insecurity.

Sum of Color - the different forms of color responses are weighed: $\frac{1}{2}$ for FC, 1 for CF, and $1\frac{1}{2}$ for C. A high sum of color may indicate instability in emotional response.

%F - percent of answers determined by form alone. It has been used to indicate conscious control of one's reactions.

W/M - index of productivity in relation to creative ability.

R - total number of responses.

A scoring sheet for each subject containing this list of Rorschach symbols and places for scoring the ten ink-blot was prepared. Reproductions of the scoring sheets for subjects #62 and #70 may be found in the Appendix, Table I and Table II, pages 44 and 45 .

The method used in scoring each subject's separate responses to each of the ten ink-blot was as follows:

A single interpretation was read and the part of the ink-blot which suggested that interpretation to the subject was determined by referring to the marked-off area on the reproduction of the ink-blot in the record blank. It was then possible to judge which of the Location scores best described the response. For example, if the whole ink-blot was used in the interpretation, a check was placed in the square included in both the W row and the column representing the number of the ink-blot being scored. If a large detail of the ink-blot was used in the interpretation, a check was placed in the D row. The same interpretation was then examined to decide which of the Determinants was outstanding. For example, if human movement was seen by the subject, a check was placed in the square included in both

the M row and the column representing the number of the ink-blot being scored. The content of the interpretation was then investigated and the Content symbol that would best describe the interpretation decided upon. For example, if human figures were seen, a check was placed in the square included in both the H row and the column representing the number of the ink-blot being scored.

Thus, the separate interpretations for each ink-blot and for each subject were recorded three times - once according to Location, once according to Determinant and once according to Content.

After all the responses were recorded in this manner, it was possible to calculate the Rorschach scores used in the correlations. For example, the R (the subject's total number of responses to the ten ink-blot) was obtained by adding the number of responses to each of the individual ink-blot together, and $F\%$ was calculated by dividing the total number of F responses by the total number of responses to the ink-blot. The other scores were calculated similarly according to definition.

Although every effort was made to score these tests objectively and to obtain entirely quantitative data, a subjective interpretation of some of the responses was unavoidable. Subjectivity of scoring was necessary in judging which of the scoring symbols under the three general headings of Location, Determinant, and Content best described an interpretation.

The average time necessary for scoring one of these tests was 45 minutes - accuracy rather than speed being the objective.

The following is a detailed account of the scoring of the Rorschach Blanks of subjects #62 and #70. Tables I and II in the Appendix, pages 44 and 45, are reproductions of the scoring sheets for these subjects and show the manner in which the responses were scored for each of the 91 subjects. A sample Record Blank is also included in the Appendix, page 54.

Subject #62

<u>Responses Given</u>	<u>Location</u>	<u>Determinant</u>	<u>Content</u>
<u>Slide I</u>			
1. two people waving in the middle.	D	M	H
2. a large bird.	W	F	A
3. a butterfly at the bottom.	S	F	A
<u>Slide II</u>			
1. two people dancing with red hats	W d	M FC	H Obj
2. two elephants and something hanging	D	F	A
<u>Slide III</u>			
1. two waiters lifting something.	D d	M F	H Obj
2. a red butterfly in the middle	D	FC	A

Slide IV

- | | | | |
|-----------------------------------|---|---|----|
| 1. a backbone in the middle. | D | F | At |
| 2. two feet and two arms. | D | F | Hd |
| 3. an insects head at the bottom. | D | F | Ad |

Slide V

- | | | | |
|-----------|---|---|---|
| 1. a bat. | W | F | A |
|-----------|---|---|---|

Slide VI

- | | | | |
|---|---|---|-----|
| 1. the leg of a table down the middle. | D | F | Obj |
| 2. the doors of a large room or church. | D | F | Obj |

Slide VII

- | | | | |
|------------------------|---|---|-----|
| 1. two little Indians. | D | F | H |
| 2. two pairs of pants. | D | F | Obj |

Slide VIII

- | | | | |
|----------------------------|---|----|----|
| 1. two animals climbing. | D | FM | A |
| 2. internal organs. | W | Fc | At |
| 3. two bears sitting down. | D | F | A |
| 4. top of a pine tree. | D | Fc | Pl |

Slide IX

- | | | | |
|-------------------------------------|---|----|-----|
| 1. an airplane motor and propellor. | D | F | Obj |
| 2. two pink fish. | D | FC | A |
| 3. two pink apples. | D | FC | Pl |

Slide X

1. a kaleidoscope.	W	F	Obj
2. two octopuses.	D	F	A
3. two humming-birds.	d	FM	A
4. two green worms.	d	FC	A
5. clouds.	D	Fc	Other

Subject #70Slide I

1. the two ends look like wings.	D	F	Ad
2. the middle looks like two women back to back holding their hands up to the sky.	D	F	H
3. the end also looks like two men - like Santa Claus.	D	Fc	H
4. The two 'caps' on the ends look like winter pointed caps.	d	F	Obj

Slide II

1. this looks like two men playing 'clap hands' and knees.	W	M	H
2. they have red caps.	d	FC	Obj
3. they are kneeling on a blotch of red.	d	F	Obj
4. they have gloves on.	d	F	Obj

Slide III

1. these look like two thin men bent backward.	D	M	H
2. each has a chicken by the neck.	d	F	A
3. the red in center a hair bow.	d	FC	Obj

Slide IV

- | | | | |
|--|---|----|------|
| 1. it might be a bear skin. | W | Fc | Aobj |
| 2. it also looks like two heavy boots with toes pointed outward. | D | F | Obj |
| 3. the two appendages at top look like arms but out of proportion to any body. | d | F | Hd |
| 4. the center looks like the brain stem of a lower animal. | D | F | At |

Slide V

- | | | | |
|---|---|----|------|
| 1. the center looks like a bug. | D | F | A |
| 2. the two sides look like a big blotch of fur. | D | Fc | Aobj |
| 3. The very ends look like aligator's heads. | D | F | Ad |

Slide VI

- | | | | |
|--|---|----|------|
| 1. the center looks like a carved mahogany pillar that would be part of the furniture of the room. | D | F | Obj |
| 2. it also looks like some physical instrument. | D | F | Obj |
| 3. it looks as though the instrument (lower part) is covered with furplece. | D | Fc | Aobj |
| 4. upper part feathers. | d | Fc | Aobj |
| 5. north pole pointer. | d | F | Obj |

Slide VII

- | | | | |
|--|---|---|-----|
| 1. this looks like two cherubs with arms outstretched as if waving them up and down to the side. | W | M | H |
| 2. the very lowest middle looks like a door hinge. | d | F | Obj |

Slide VIII

- | | | | |
|--|---|----|----|
| 1. the middle looks like spinal column with horizontal ribs of an animal. | D | F | Ad |
| 2. the pink side blots look like pink frogs trying to climb like humans. | D | FM | A |
| 3. the lowest part looks like two babies or two embryos back to back with feet outwardly extended. | D | FC | H |

Slide IX

- | | | | |
|--|--------|---------|------------|
| 1. the middle looks like two girls dancing. | D | M | H |
| 2. there is a maypole upside down with pink balls on the bottom. | D
D | F
FC | Obj
Obj |
| 3. the very top looks like two Godlike spirit hands. | d | F | Other |

Slide X

- | | | | |
|--|--------|----------|----------|
| 1. the two green blotches on the side look like spiders. | D | FC | A |
| 2. the center green blotch looks like a chandelier. | d | FC | Obj |
| 3. or it might be the head of a Jester. | d | FC | Obj |
| 4. the pink blotches look like two bears drinking from two green urns connected in the middle. | D
d | FC
FC | A
Obj |

The scores calculated from data recorded on the scoring sheets were: R, Dd-S, W/M, F%, Color %, Shading %, Fc and A. These were chosen by the investigator because, from the interpretations given above, it seemed that they were the ones

most related to college adjustment and achievement. Margulies (28) used W/M, Shading % and Color % in her study correlating individually given Rorschach scores with scholastic achievement.

IV. Correlations Calculated

Correlations were calculated using the Rorschach scores derived from the data recorded on the scoring sheets. The total scores on the A.C.E. were used as well as the Q scores (mathematical ability scores) and the L scores (language ability scores) on this test. Scores made on the Army Alpha and the M.S.C. test were used also. The other two scores used in the calculations were the scholastic averages for the students' first three semesters of college and the scholastic averages for the first semester alone. The first semester's grades were used because it was thought that they would better reflect the degree of the student's adjustment to college life.

Product-moment coefficients of correlation (Pearson's r) and the probable errors were calculated. To be considered significant, r should be at least 0.30 and have a P.E. of less than $\frac{1}{4}$ the r .

Three coefficients of multiple correlation $R_1(23)$ were calculated to see if there were any indications of the presence of three-factor relationships.

Tables III and IV in the Appendix (pages 46 to 53) contain the data used in the calculations.

Product-moment coefficients of correlation were calculated between:

Total Scholastic Average and R (number of responses on the Rorschach)

Total Scholastic Averages and F% (% of form answers on the Rorschach)

Total Scholastic Averages and Shading % (% of total number of answers occurring on Slides IV, VI, and VII)

Total Scholastic Averages and Color % (% of total number of answers occurring on Slides II, III, VIII, IX, and X)

Total Scholastic Averages and Sum C ($\frac{1}{2}FC + CF + 1\frac{1}{2}C$)

Total Scholastic Averages and Dd + S (number of unusual details interpreted plus space interpretations)

Total Scholastic Averages and A (number of animal responses)

Total Scholastic Averages and Fc (form plus shading responses)

Total Scholastic Averages and W/M (ratio of whole responses to those containing movement)

Total Scholastic Averages and Total A.C.E. scores

Total Scholastic Averages and M.S.C. scores

Total Scholastic Averages and Army Alpha scores

Total A.C.E. scores and R

Total A.C.E. scores and F%

Total A.C.E. scores and Color %

Total A.C.E. scores and A

A.C.E. Q scores and R

A.C.E. Q scores and A

A.C.E. L scores and R

A.C.E. L scores and A

First Semester Scholastic Averages and R

First Semester Scholastic Averages and A

Coefficients of multiple correlation were calculated between:

Total Scholastic Averages, F% and C%

Total Scholastic Averages, A and Sum C

Total Scholastic Averages, A, and Total A.C.E. scores

V. Additional Comparisons

Two comparisons were made between Rorschach scores for the four students with the highest scholastic averages and the four with the lowest scholastic averages to see if any differences could be found.

The first was a comparison of the number of P (popular) responses. A list of P responses was prepared using only those items appearing on at least two of the three lists prepared separately by Beck (2), Klopfer and Kelly (26) and Buckle and Cook (7). This list was:

Slide I - Winged animal

Slide II - Human beings: animals or head and shoulders of animals

Slide III - Human figures

Slide IV - Animal Object

Slide V - Winged animal

Slide VI - Animals: humans

Slide VIII - Animals (non-winged)

Slide X - Animals - blue multilegged, green eels

The second comparison was of the number of unusual or abstract responses - considering the quality of the responses as a determining factor as well as the quantity.

RESULTS AND DISCUSSION

I. Results

In recording the results several symbols will be used. These are: TSA for Total Scholastic Averages, ISA for First Semester Scholastic Averages, ACET for Total Scores on the American Council on Education Psychological Examination, ACEQ and ACEL for the Q and L scores on the American Council on Education Psychological Examination, AA for Army Alpha scores, and MSC for the scores on the Massachusetts State College Psychological Examination. The usual Rorschach symbols will be used.

The Pearson's product-moment correlations are as follows:

	r & P.E.
TSA & R	-.017 \pm .061
TSA & F%	-.160 \pm .068
TSA & Shading %	.045 \pm .070
TSA & Color %	-.132 \pm .060
TSA & Sum C	.142 \pm .060
TSA & Dd+S	-.070 \pm .070
TSA & A	-.125 \pm .059
TSA & Fc	-.064 \pm .071
TSA & W/M	.042 \pm .068
TSA & ACET	.292 \pm .064
TSA & MSC	.410 \pm .058
TSA & AA	.259 \pm .066
ACET & R	.267 \pm .065
ACET & F%	.032 \pm .070

ACET & Color %	-.030 ± .070
ACET & A	.144 ± .065
ACEQ & R	.278 ± .065
ACEQ & A	.195 ± .063
ACEL & R	.106 ± .060
ACEL & A	.084 ± .070
LSA & R	-.161 ± .060
LSA & A	-.173 ± .057

The multiple correlations are:

TSA, F%, & C%	.20
TSA, A, & Sum C	.19
TSA, A, & ACET	.34

In comparing the subjective ratings of the High and the Low Groups, it was found that the High Group gave an average of 8.1 popular responses, the individual responses numbering 7,8,9, and 9. The average for the Low Group was 9.2 with individual scores of 8,9,10, and 10.

In comparing the unusual responses, the High Group gave an average number of 9.2 responses with individual scores of 5, 10, 10, and 12. The Low Group gave an average of 8.75 responses with individual scores of 5, 5, 6, and 19.

II. Discussion

None of the correlations obtained in this study between the various Group Rorschach scores and the scholastic averages are statistically significant. None of them are as high as 0.30 and none of the probable errors are less than $\frac{1}{4}$ the r.

At first glance, the results seem to disagree with some other studies along this line. In the study by Margulies (28) cited above, a low significant correlation was obtained between scholastic achievement and color shock and scholastic achievement and shading shock, and no significant correlation was found between W/M ratio and scholastic achievement. However, Margulies used the individual Rorschach and her subjects were Junior High School boys. A few differences have been found between the Group Rorschach and the Individual Rorschach, such as a larger number of M and F responses and a fewer number of shading responses on the group test. These differences are thought by the investigator to be at least a partial explanation of the conflicting results. Also, age and sex differences are known to exist and both different age groups and different sexes were used in these studies.

The studies of Munroe (30), (31) at Sarah Lawrence College are not directly comparable to this study since her scoring was subjective and since she used her own rating system. Comparisons of subjectively and objectively scored test results are not reliable. Objective scoring produces a quantitative score whereas subjective scoring is in terms of ratings which are affected by the scorer's personal attitudes and interpretations.

No definite conclusions could be drawn from the comparison of the two Rorschach scores using only the records of the high and low ranking students. There was too much

overlap in the individual scores and the average number of responses was not significantly different between the high and the low groups.

Higher correlations might have been obtained if the Rorschach had been given during the first few weeks after the students entered college since adjustment problems would be more pronounced at that time. If the Group Rorschach is a measure of adjustment, the results may indicate that the students are all very well-adjusted individuals. However, the results may also indicate that adjustment has too small an effect on scholastic averages to be measured. Another possible explanation is that the Group Rorschach, when scored in the manner described above, is not a good measure of adjustment. It is possible, also, that other Rorschach scores or combinations of scores might have resulted in higher correlations with scholastic achievement.

Although the students seemed interested in the test, the degree of motivation may not have been so high as is desirable. No rewards, monetary or in any other form, could be offered and the completeness and accuracy of response depended on the degree to which the students cooperated.

SUMMARY AND CONCLUSIONS

The purpose of this study was to investigate the efficacy of the Group Rorschach Test as an indicator of the scholastic achievement of a group of Sophomore college girls.

The test was scored according to the Klopfer technique, and the following Rorschach scores were investigated: R, F%, Shading %, Color %, Sum C, Dd+S, A, Fc, and W/M. Comparisons were made between these scores and scholastic averages for the first three semesters and for the first semester. Scores on the Bregman Revision of the Army Alpha, Form A, the American Council on Education Psychological Examination, 1945 Edition, and the Massachusetts State College Psychological Examination, 1944 Edition, were also used as bases for comparison.

An attempt was made to differentiate between the Rorschach records of the four students with the highest scholastic averages and the four students with the lowest scholastic averages using the number of popular responses and the number of abstract or rare responses. No significant differences were found.

It may be concluded from these results that:

1. When Klopfer's method of scoring the Group Rorschach Test is used, its scores do not indicate scholastic achievement.
2. The factors indicating personality disorders may have been excluded by objective scoring methods.

It is suggested that further investigation be undertaken to determine the nature of the factors, as indicated in the Rorschach responses, which differentiate between satisfactory and unsatisfactory adjustment of an individual. If these factors can be recognized and adequately described, a more successful and more objective method of scoring may be prepared.

APPENDIX

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SCORING SHEET FOR SUBJECT #62

Subject # 62 A.C.E. Total 134 Schol. Ave. Total 67
 Age 18 Q Score 57 1st Semester 69
 M.S.C. 87 L Score 77 2nd Semester 66
 Army Alpha 170 3rd Semester 65

Card #	1	2	3	4	5	6	7	8	9	10	Total
Location											
W											5
D											19
d											4
S											1
Dd											
Determinants											
M											3
F											16
FM											2
m											
FC											5
CF											
C											
C'											
K											
k											
c											
Fc											3
Content											
H											4
A											11
Hd											1
Ad											1
Aobj											
Obj											7
At											2
Pl											2
Other											1
Shading Shock											
Color Shock											
F%											
W/M											
R	3	3	3	3	1	2	2	4	3	5	29
Dd+S											1

$7/29 = 24\%$
 $18/29 = 59\%$ $\Sigma = 2.5$
 $16/29 = 51\%$
 $5/3 = 1.7$

SCORING SHEET FOR SUBJECT #70

Subject # 70

A.C.E. Total 124

Schol. Ave. Total 87

Age 19

Q Score 53

1st Semester 88

M.S.C. 81

L Score 71

2nd Semester 86

Army Alpha 172

3rd Semester 86

Card #	1	2	3	4	5	6	7	8	9	10	Total
Location											
W											3
D											20
d											14
S											
Dd											
Determinants											
M											4
F											18
FM											1
m											
FC											8
CF											
C											
C'											
K											
k											
c											
Fc											5
Content											
H											8
A											5
Hd											1
Ad											3
Aobj											4
Obj											14
At											1
Pl											
Other											1
Shading Shock											
Color Shock											
F%											
W/M											
R	4	4	5	4	3	5	2	3	4	5	37
Dd+S											0

$11/37 = 29\%$

$19/37 = 51\%$ $\Sigma = 4$

$18/37 = 48\%$

$3/4 = .8$

Table III

INTELLIGENCE TEST SCORES AND SCHOLASTIC AVERAGES
USED IN CALCULATING CORRELATIONS

S# - Subject Number
 TSA - Total Scholastic Averages
 LSA - First Semester Scholastic Averages
 ACET - American Council on Education Examination Scores
 ACEQ - American Council on Education Examination Q Scores
 ACEL - American Council on Education Examination L Scores
 AA - Army Alpha Scores
 MSC - Mass. State College Examination Scores

S#	TSA	LSA	ACET	ACEQ	ACEL	AA	MSC
1	79	82	117	54	63	168	93
2	76	77	128	42	86	169	90
3	82	83	114	43	71	167	66
4	74	75	113	43	70	165	74
5	82	82	131	50	81	177	77
6	86	86	107	46	61	151	70
7	74	74	102	43	59	159	93
8	74	77	119	43	76	169	58
9	83	83	109	43	66	166	65
10	68	65	131	61	70	173	81
11	69	70	141	55	86	168	79
12	80	78	126	48	78	176	85
13	74	74	96	46	50	133	72
14	80	79	137	47	90	170	104
15	76	75	107	47	60	160	69
16	69	69	100	38	62	149	49
17	72	69	134	43	91	182	73
18	74	69	108	42	66	130	63

S#	TSA	LSA	ACET	ACEQ	ACEL	AA	MSC
19	71	72	107	36	71	149	73
20	76	74	99	44	55	149	82
21	81	83	89	44	45	143	88
22	81	83	136	54	82	172	69
23	81	78	132	46	86	168	84
24	82	82	120	35	85	159	80
25	69	60	123	59	64	150	63
26	73	74	122	56	66	179	85
27	79	78	149	55	94	177	88
28	86	90	146	47	99	175	109
29	69	64	104	32	72	168	68
30	77	76	113	51	62	155	72
31	73	69	98	32	66	134	61
32	75	74	130	47	83	167	67
33	65	67	129	48	91	158	86
34	80	80	104	35	69	188	81
35	89	90	137	53	84	180	81
36	67	71	129	51	78	164	82
37	75	76	95	45	52	135	61
38	86	84	137	49	88	173	92
39	84	84	143	56	87	175	78
40	73	65	156	60	96	186	88
41	78	78	143	62	81	143	83
42	68	62	107	47	60	146	71
43	83	83	145	48	97	183	92
44	72	76	145	59	86	173	88
45	71	64	102	37	65	147	65

S#	TSA	LSA	ACET	ACRQ	ACEL	AA	MSC
46	85	86	104	37	67	155	73
47	83	88	123	38	90	176	89
48	79	80	138	54	79	173	83
49	76	78	124	48	76	166	78
50	71	69	107	41	66	158	69
51	69	65	113	53	60	168	82
52	68	67	92	35	57	154	69
53	70	71	62	25	37	127	47
54	71	70	122	45	77	160	74
55	72	70	121	51	70	170	77
56	74	79	95	43	52	140	58
57	79	80	145	52	93	163	90
58	80	82	74	21	53	126	68
59	75	78	121	48	73	176	82
60	76	81	142	55	87	181	69
61	77	73	117	47	70	174	74
62	67	69	134	69	66	170	87
63	78	80	130	52	78	181	76
64	75	75	126	51	75	165	84
65	88	88	131	37	94	169	84
66	67	70	98	35	63	131	68
67	75	77	92	29	63	130	60
68	67	66	122	48	74	167	81
69	62	62	94	38	56	127	54
70	87	88	124	53	71	172	81
71	69	75	92	36	56	151	76

S#	TSA	LSA	ACET	ACEQ	ACEL	AA	MSC
72	76	80	100	35	65	164	64
73	67	73	104	36	68	133	67
74	89	89	115	41	74	144	95
75	80	79	157	56	91	184	98
76	71	69	97	44	53	171	59
77	74	78	139	55	84	183	93
78	74	75	113	56	57	171	73
79	70	74	122	61	61	163	63
80	74	72	107	38	69	140	60
81	64	62	109	43	66	154	65
82	86	86	122	43	79	145	92
83	75	76	84	30	54	158	65
84	71	74	97	33	64	145	62
85	74	74	125	43	82	184	96
86	78	80	107	45	62	154	67
87	63	60	119	45	74	160	64
88	68	62	112	40	72	154	68
89	77	80	124	43	81	164	72
90	73	64	113	36	77	173	74
91	68	65	103	40	63	148	74

Table IV

RORSCHACH SCORES USED IN CORRELATIONS

S# - Subject Number	C - Sum C Responses of Rorschach
R - Number of Rorschach Responses	DS - Number of Dd+S Responses on the Rorschach
F% - % Form Rorschach Responses	A - Number of Animal Responses on the Rorschach
S% - % Shading Responses on the Rorschach	Fc - Number of Form-Shading Responses on the Rorschach
C% - % Color Responses on the Rorschach	W/M - Amount of Whole/Movement Ratio of the Rorschach Scores

S#	R	F%	S%	C%	C	DS	A	Fc	W/M
1	31	42	29	55	5.5	3	12	4	3.5
2	27	74	18	59	0	1	8	1	1
3	18	33	28	55	3.5	0	5	0	1.8
4	23	22	22	65	6.5	1	11	1	1.5
5	43	63	26	56	2.5	13	11	6	3.5
6	26	50	34	42	.5	4	6	1	1.4
7	20	40	25	65	1.5	1	10	1	3.5
8	31	38	32	52	2	5	8	0	1.5
9	17	53	24	53	0	3	9	2	5.0
10	31	61	29	55	1	4	11	3	.8
11	44	61	23	54	.5	10	23	5	1.4
12	32	37	31	53	1.5	5	12	7	1.8
13	28	25	29	50	5.5	0	12	3	2.0
14	25	24	24	24	3.5	2	9	3	1.6
15	55	49	26	47	1.5	6	14	11	.9
16	25	44	20	60	3.5	5	10	5	4.0
17	75	47	16	59	10.0	9	15	9	1.5
18	23	42	18	52	6.5	2	12	4	2.3
19	35	40	20	60	2.0	1	19	5	1.3

S#	R	F%	S%	C%	C	DS	A	Fc	W/M
20	38	53	26	55	1.5	12	7	7	5.0
21	34	73	30	48	1.5	1	14	2	14.0
22	38	47	21	58	2.0	2	11	2	0.5
23	26	39	27	58	2.0	0	7	3	1.8
24	26	73	35	38	0.5	2	13	2	4.0
25	50	66	22	58	3.0	9	18	6	2.0
26	42	48	29	52	3.0	7	10	1	0.5
27	33	30	18	70	6.5	1	17	0	0.8
28	40	49	30	52	4.0	4	13	5	1.8
29	27	63	29	41	1.5	3	7	3	4.7
30	34	56	18	59	3.0	1	11	3	1.7
31	50	70	21	51	4.0	5	10	6	7.0
32	28	57	25	57	3.0	0	9	3	1.0
33	24	58	37	42	0.0	0	8	2	1.0
34	29	34	24	55	6.0	1	11	3	2.3
35	31	45	19	61	4.5	0	9	0	0.6
36	49	57	25	55	2.0	1	14	6	0.7
37	32	40	31	52	6.5	0	9	6	3.0
38	68	55	28	54	6.5	3	12	11	1.5
39	27	59	37	48	5.0	2	11	2	4.0
40	40	67	30	55	4.5	3	9	2	3.3
41	36	67	31	45	0.5	1	10	3	0.7
42	29	76	31	52	1.0	0	10	0	3.0
43	27	59	26	59	5.0	1	4	2	1.0
44	35	71	26	54	1.0	3	12	0	1.0
45	25	56	32	56	0.5	2	8	1	0.2

S#	R	F%	S%	C%	C	DS	A	Fc	W/M
46	30	54	32	50	2.5	1	9	1	1.0
47	22	53	32	59	8.5	0	6	1	1.5
48	26	39	27	54	0.5	1	7	1	0.9
49	30	60	23	56	4.5	0	7	1	10.0
50	43	33	28	54	1.0	4	11	7	0.6
51	35	60	20	60	4.0	2	16	1	6.0
52	39	78	23	56	6.0	2	8	1	1.0
53	30	37	30	50	4.0	2	7	9	1.3
54	28	48	29	61	2.0	1	9	2	0.5
55	22	64	23	59	1.5	1	6	1	1.0
56	25	44	24	60	2.0	0	11	1	1.0
57	48	56	29	52	4.0	1	16	7	6.5
58	32	63	22	56	2.5	1	13	0	0.5
59	23	91	23	44	0.5	0	7	0	3.0
60	18	55	33	56	2.5	0	11	0	5.0
61	29	58	28	55	2.5	1	10	0	1.3
62	29	51	24	62	2.5	1	11	3	1.7
63	48	79	23	60	3.0	3	15	3	4.0
64	34	53	18	59	5.5	0	17	3	2.0
65	17	41	29	53	5.0	0	2	1	4.0
66	31	49	23	61	4.0	2	16	2	4.0
67	19	63	11	68	0.0	1	8	2	1.0
68	40	55	28	60	3.0	1	11	3	1.0
69	24	58	33	50	2.0	2	8	3	3.0
70	37	48	30	51	5.0	0	4	5	0.8
71	18	50	22	55	0.5	0	7	3	1.5
72	29	48	28	55	4.0	0	5	0	1.0

S#	R	F%	S%	C%	C	DS	A	Fc	W/M
73	21	57	29	53	0.0	2	6	2	1.3
74	37	35	24	54	3.0	0	13	5	1.4
75	31	49	26	65	0.5	1	10	1	0.4
76	23	83	39	48	0.0	0	8	0	0.5
77	33	63	27	52	5.0	2	9	2	0.7
78	46	62	26	67	9.5	1	14	5	7.0
79	27	70	30	59	2.5	3	7	3	1.5
80	28	57	25	55	0.0	3	13	0	0.6
81	27	60	22	56	0.0	0	14	7	4.0
82	17	59	35	46	1.0	1	7	0	1.0
83	22	39	26	57	2.0	0	8	4	2.0
84	38	79	26	56	0.5	1	11	3	7.0
85	26	50	31	31	1.5	2	7	2	0.1
86	30	43	17	63	3.0	0	10	3	2.7
87	47	49	34	48	6.5	7	6	5	0.3
88	29	64	31	55	2.5	2	16	0	2.0
89	30	46	20	60	5.5	1	7	5	1.2
90	19	56	21	68	2.5	2	5	2	2.0
91	20	50	25	55	2.0	0	6	1	1.0

HARROWER-ERICKSON GROUP RORSCHACH BLANK

GROUP RORSCHACH BLANK

GROUP RORSCHACH BLANK

Name.....

Age.....

Date.....

Occupation.....

INSTRUCTIONS

You will see on the screen ten inkblot pictures.

Your task is to write down what these inkblots, or any parts of them, resemble or look like to you.

You will see each inkblot for three minutes.

Always write your answers on the right hand side of the open double page, and do not concern yourself with the left hand side until instructed to do so.

Turn the page each time the slide is changed.

Do not be disturbed if the light is not very bright while you are looking at the inkblots and writing your answers, handwriting is not important.

When the first slide is on the screen, open this blank and record your answers where it says:

“Write your answers to inkblot I here”

Number your answers for each inkblot.

INKBLOT I

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

Shape

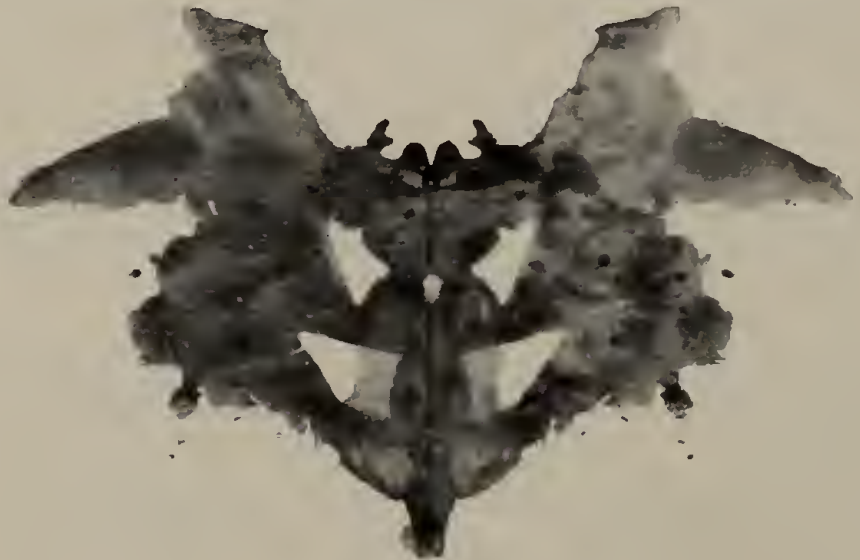
Color

Movement

Texture

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot I Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT II

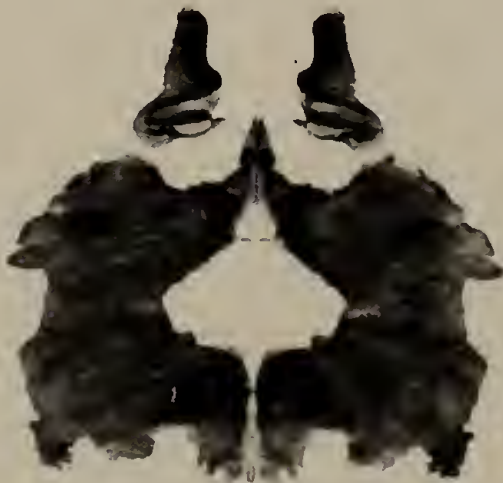
INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

<i>Shape</i>	<i>Color</i>	<i>Movement</i>	<i>Texture</i>

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot II Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT III

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

Shape

Color

Movement

Texture

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot III Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT IV

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

<i>Shape</i>	<i>Color</i>	<i>Movement</i>	<i>Texture</i>

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot IV Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT V

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

<i>Shape</i>	<i>Color</i>	<i>Movement</i>	<i>Texture</i>

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot V Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT VI

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

Shape

Color

Movement

Texture

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot VI Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT VII

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

<i>Shape</i>	<i>Color</i>	<i>Movement</i>	<i>Texture</i>

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot VII Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT VIII

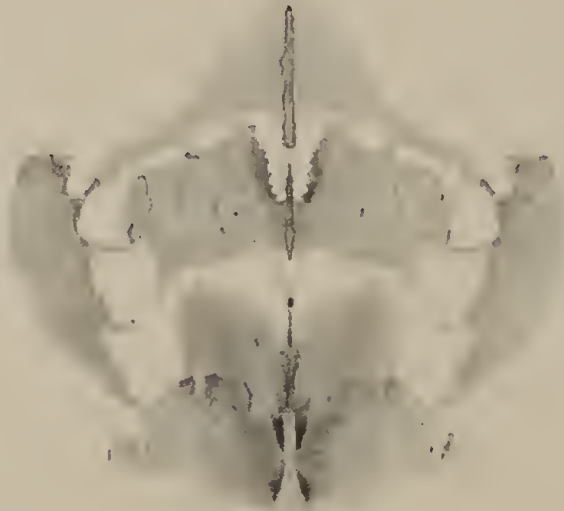
INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

<i>Shape</i>	<i>Color</i>	<i>Movement</i>	<i>Texture</i>

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot VIII Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT IX

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

Shape

Color

Movement

Texture

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot IX Here

Before you turn to the next page, draw a line under your last answers.

INKBLOT X

INSTRUCTIONS FOR INQUIRY

Put the number of your answer under any of these words if by so doing you feel you can amplify it in the way the examiner has just explained.

Shape

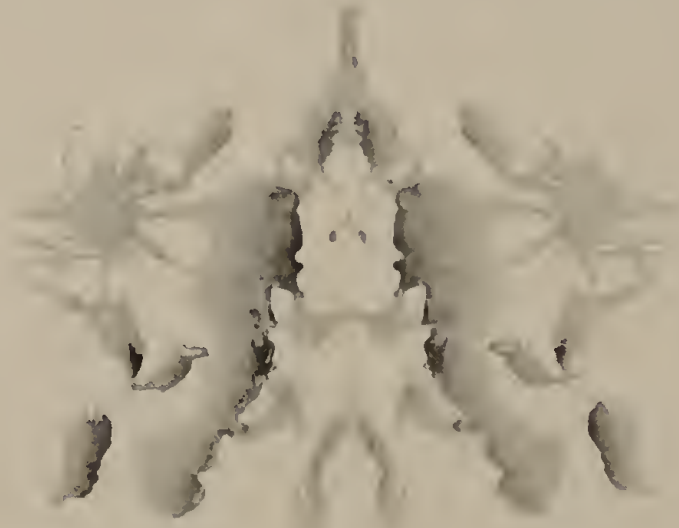
Color

Movement

Texture

ALTERNATE INSTRUCTIONS FOR INQUIRY

Write anything else about your answers which you think will describe them to the examiner more fully.



Where did you see your answers? Mark off the areas on this little diagram as nearly as you can.

Write Your Answer or Answers to Inkblot X Here

Before you turn to the next page, draw a line under your last answers.

This is the end, you need not turn the page again.

FOR EXAMINER'S USE
FOR SCORING AND PSYCHOGRAM



Scoring after Klopfer.

FOR EXAMINER'S USE

MUNROE'S CHECK LIST. (Ror.Res.Ex. 1944.8.46-70)

Number of R _____		
T/R) 60" <30" (+, -) _____		
Refusal (v) _____		
LOCATION	W (+, -, V, B) _____	
	Dd (+) _____	
	S (+) _____	
	Suc (r, 1) _____	
CONTENT	P, Com (-) _____	
	O (+, B) _____	
	At, Sex (+) _____	
	Range (+, -) _____	
FORM	F% (+, -) _____	
	F (V, B, E) _____	
SHADING	Shading Shock (<u>±</u>) (v) _____	
	FK, Fc (+, -) _____	
	c (+) _____	
	C' (+) _____	
	K, k (+) _____	
MOVEMENT	M (+, -, B, r, d) _____	
	FM, FM:M (+, -) _____	
	m (+) _____	
	Total Movement (+, -) _____	
COLOR	Color Shock (<u>±</u>) (v) _____	
	FC (-, B) _____	
	CF, CF:FC (+, -) _____	
	C) 1, Cn (+) _____	
	Total Color (+, -) _____	
Color: Movement (+, -) _____		
Total Number of Checks		

FOR EXAMINER'S USE

arranged by and obtainable from
M. R. Harrower-Erickson
652 East Gorham St.
Madison 3, Wisconsin

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Approved by

Claude C. Fleet

T. C. Caldwell

Gilbert L. Woodside

Graduate Committee

Date May 29, 1947

