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RORSCHACH INTERPRETERS: RELATIONSHIP
TO SPATIAL INTELLIGENCE

THESIS

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Fulfillment of the Requirements

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By

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In an attempt to find meaningful predictors of the ability to interpret Rorschach protocols by clinicians, a paradigm change (Kuhn, 1962) was instigated by using as predictors the scores of the perceptual organizational abilities of 30 subjects, and their ratings of favorableness toward the Rorschach in terms of its usefulness as a clinical tool. The subjects were first year, graduate psychology students, and the Haptic Visual Discrimination Test (HVDT) was the instrument used to measure perceptual organization. A multiple linear regression analysis was computed, and the data supported the hypothesis that perceptual organization and favorableness are of significant predictive value ($R = .54$, $F(2, 27) = 5.43$, $p = .01$). The standardized beta for usefulness was $.47$ ($p = .008$) and the HVDT beta was $.33$, ($p = .05$). The results were interpreted as applying to Rorschach validity research methodology and pedagogy.

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RORSCHACH INTERPRETERS: RELATIONSHIP
TO SPATIAL INTELLIGENCE

From the large and diversified supply of projection techniques, the Rorschach is and since 1959 (Potkay, 1971; Sundberg, 1961) has been one of the most frequently used assessment instruments in the clinical setting (Lubin, Larsen, & Matarazzo, 1984; Wade & Baker, 1977). In contrast, there is an impressive accumulation over the past five decades of published studies that have "failed to demonstrate any validity for the Rorschach" (Anastasi, 1982, p. 589). Within this framework of a discrepancy between research and practice, there is a historical picture of the Rorschach as having no consensual theory, no consensus of administration and scoring methods, and ensuing heterogenous approaches to the interpretation (Exner, 1974). These heterogenous approaches and the resultant divergence of the Rorschach orientations into similar but distinctly separate systems have been postulated as being the product of chronological elements and theoretical differences (Exner, 1969). Anastasi (1982) credits Exner (1974, 1978) and Wiener-Levey and Exner (1981) as exerting the most ambitious effort to place the Rorschach on a potentially sound psychometric basis by having developed a comprehensive Rorschach system--a system which integrated elements from diverse scoring systems, and was

designed to replace the "personalized approaches" (Exner, 1974) that evolved privately in the clinical settings from the traditional systems.

An alternative and more strongly clinically oriented approach to the Rorschach, presented by Aronow and Reznikoff (1976, 1983), focuses on idiographic content analysis in arriving at the interpretations concerning the test subjects, with the traditional scoring of the perceptual categories playing a complementary role. This approach regards the Rorschach not basically as a test, but essentially as a semi-standardized clinical interview (Anastasi, 1982)--a position that is more akin to the contemporary trend toward evaluating and regarding projective techniques as clinical tools (Anastasi, 1982). Hence from the contemporary trend viewpoint, the value of the Rorschach can be assessed in conjunction with the skills of the clinician using them. In effect, this trend can be interpreted as a call for a more cognitive conceptualization, in contrast to the classical or traditional approaches, of the clinician's task in the Rorschach setting.

Prior to a brief historical overview of the Rorschach's development, for this investigation, the term Rorschach was circumscribed. Subsequently, from the current trend orientation, this investigation explored a more cognitive role for the Rorschach clinician and suggested a test of this theoretical position. Of paramount importance to the

precipitation of this theoretical position were the two following perennial questions: why does the validity-utilization discrepancy with the Rorschach technique continue unabated, and how does the clinician produce his interpretation of the Rorschach?

Terminology

For the purpose of this investigation, the reformulation of the definition of the Rorschach was to direct the focus of Rorschach effectiveness toward the instrument's clinical user, the Rorschach clinician. Therefore, the Rorschach was defined, not as the whole behavioral process, but as the parameters of the clinician's evaluation of the subject's responses and the interpretation of the protocol.

A Brief History

In 1857, Justinus Kerner published the first recorded discussion of the use of inkblots as psychological material. Kerner's role involved noting chiefly that the production and interpretation of the inkblots according to a preconceived plan seemed impossible, and that there was a strong interaction between the objective features of the inkblot material and the observer's individual projections. He did not seem to realize the extent individuality played in the interaction (Klopfer & Davidson, 1962).

Usage of the inkblots in the psychological investigation of visual imagination for the study of personality traits originated with Alfred Binet in 1895. Other psychologists

followed Binet's utilization of the blots as test material, and although some of these early attempts suggested the possibility of differentiating various individual characteristics, the focus of attention remained on the content of the subject's responses to the inkblots. Approximately a year after Binet's approach, G. W. Dearborn described how to make black and white and colored inkblots. Also, he reported having experimentally administered 12 sets of 10 blots each to a group of students and professors (Klopfer, 1946).

The first standardized series of inkblots and the first comprehensive review of the work done by the inkblot experimenters was published by G. M. Whipple in 1910. From this review, it is noted that the blots were used primarily as stimulus material for free association, and that they were considered largely in terms of the information they revealed concerning the imaginative process. Little attention had been directed toward the possible relationship between the subject's personality characteristics and their responses (Klopfer & Davidson, 1962).

In the decade following Whipple's review, F. C. Bartlett used the blots to study perception and imagination, finding that he could ascertain the interests and possibly the occupation of his subjects. In addition, Cicely Parsons (1917), while using some of Whipple's standardized blots to study and measure imagination in children, found a high percentage of animal and human responses and gradations in

the type and quality of the responses that were sex and age dependent (Klopfer & Davidson, 1962).

Herman Rorschach's interest in the blots developed in 1911, and until 1921 he explored and utilized the blots in his work at various psychiatric hospitals. In 1921, a few months prior to his death, he published a preliminary report of his findings in a monograph entitled Psychodiagnostik. From his years of experimentation, Rorschach had selected the well-known standardized series of 10 inkblot pictures that bears his name, and consists of nearly symmetrical designs with unique properties of color, form, shading, white space, etc., to serve as the stimulus material in his diagnostic procedure. Compared to previous inkblot pioneers, Rorschach's procedure involved a complete shift of emphasis from the imaginative content of the subject's response to the method the subject used in handling the stimulus material. With this emphasis, Rorschach provided the basis for what he considered as an objective method of total personality diagnosis, by capitalizing on the interaction between the structural characteristics of the stimulus material and the personality structure of the subject as it is reflected in certain formal characteristic categories of the concept formation. Rorschach was the first to develop a functional method to assess the complex response patterns to the inkblots (Klopfer & Davidson, 1962), and the first to fully utilize the inkblots as a deliberately designed and organized

personality probing technique (Allen, 1978). Klopfer (1946) portrays Rorschach as combining "to a marked degree, the sound empirical realism of a clinician with the speculative acumen of an intuitive thinker" (p. 3).

In 1924, several years after Rorschach's death, the first English translation of Rorschach's method was published. Within a short period of time, David Levy introduced the method into the United States. Influenced by Levy, Samuel Beck studied Rorschach's method and became the first American psychologist to publish on the subject (Klopfer & Davidson, 1962).

During the early developmental period, resistance was strong (particularly in the United States) against the Rorschach pioneers. Academic psychologists and psychometricians doubted the scientific value of what appeared to be a subjective and experimentally uncontrolled method. The scoring and tabulation of the technique was considered cumbersome, and even more troublesome was the fact that "it was almost impossible to discover how a Rorschach interpreter arrived at his findings" (Klopfer & Davidson, 1962, p. 7).

After 1936 the Rorschach method spread rapidly, supported mainly by both the strong general interest in personality and the urgent need to efficiently utilize human resources during the 40's. A corollary to the success of the inkblot technique was the stimulated development of the

entire field of projective techniques (Klopfer & Davidson, 1962).

Basic Premise and Theories

Underlying the Rorschach technique is a basic assumption that there is a relationship between perception and personality. Parenthetically, because the blots are relatively ambiguous or unstructured in that they do not elicit particular or learned responses, the subject in order to relate what he "sees" in the blots, selects and organizes his perceptions "in terms of his 'projected' needs, experiences, and habitual patterns of response as well as by the physical properties of the blots themselves" (Klopfer & Davidson, 1962, p. 14). In these terms, the traditional projective theory depicts the subject's style of perceiving the world as a relatively stable aspect of personality. This style, developed during childhood initially and subject to somewhat slower revision throughout life, is the same perceptual style used by the subject in interpreting the Rorschach inkblots.

In contrast, within the framework of the classical projective theory, the subject's unconscious mind plays a paramount role in the determination of the subject's reported apperceptions to the ambiguous stimuli. From this viewpoint, repressed problematic material (psychoanalytic) or problematic complexes (Jungian), in altered form, are part of the subject's apperceptions along with the less diagnostic, yet still important, unthreatening aspects of personality.

Comparatively, using the context of a cognitive theory, the subject's response involves visual perceptual tasks and verbal functions. The subject organizes the visual pattern of the inkblot into a percept triggered from visual memory. When a dominant visual perception is chosen, the subject verbalizes this choice with a response. This is a complex treatment of the subject's response formation that has been knowingly simplified. Within this simplified process, there is the possibility of perceptions that are not generally perceived by others. For example, the percepts may involve bizarre visual organization or imagination, bizarre verbalization of a percept, threatening emotional percepts, and/or distortions in understanding the world.

Since the Rorschach attempts to describe rather than measure the individual in terms of a dynamic pattern of multiply interrelated variables with results that cannot be a summative procedure, the Rorschach clinician when evaluating the different variables "is concerned not with the sum of the components but with a configuration or Gestalt" (Klopfer & Davidson, 1962, p. 24). For instance, in its interrelated position, a single factor in the Rorschach record has a general meaning by itself, a more specific meaning in relation to another factor, and another meaning in light of the entire record. In addition to working in the context of a total configuration or pattern, analytic procedures are performed by the clinician on the qualitative and

quantitative information obtained from the Rorschach. For example, a sequence analysis of the scores in terms of their variability of succession within each card and from card to card is conducted (Klopfer & Davidson, 1962). Hence from the viewpoint of the traditional theory of Rorschach interpretation, the clinician's task is to use the data to form inferences about the subject's personality and psychopathology by performing analytical procedures and forming Gestalts.

Comparatively, within the context of the cognitive theory of Rorschach interpretation, the clinician uses his/her own perceptual-organization, imagination, visual/verbal memory, and verbal abilities (including defense mechanisms) to examine the subject's process from perception to verbalization for pathological signs and style of understanding the world. In more detail, the clinician evaluates the quality of the subject's ability to construe the world and the presence of any pathonomic signs in this construction by the ease with which he/she can organize the blot into a percept similar to the subjects, and by his/her experience of pleasure or strangeness in the construction of the blot via the subject's description. Also, as in the traditional theory of interpretation, a sequence analysis is done on the percepts and attributes of the blots that have been considered by the subject, or are in absentia in the construction of their responses.

Returning to the two perennial questions previously mentioned--from the historical overview of the development of the inkblots as a projective instrument, we find the subject's task as consisting of perceptual organization and verbal functions. Likewise, in tandem, the clinician's task can be viewed as consisting of perceptual organization and verbal functions. While there are many hypotheses concerning how a Rorschach clinician arrives at his interpretation of the protocol, a review of the literature revealed no published investigations of the perceptual organizational skills of the Rorschach clinician.

If the Rorschach clinician's task requires well developed perceptual organization skills, would not the validity-utility discrepancy status of the Rorschach technique have been affected, because this aspect of the nature of the task had not been subjected to and/or was not susceptible to empirical resolutions? An idea of how this task position can expand the stylistic differences of the clinical approaches can be viewed from the content of the protocol. Several studies (Potkay, 1971; Aronow & Reznikoff, 1983) have demonstrated that Rorschach clinicians rely heavily on content in interpreting the Rorschach protocol. There are two primary approaches to the Rorschach interpretation that are consistent with Allport's two major types of personality description, nomothetic and idiographic. The nomothetic approach to personality description focuses on those traits

characteristics which are conceptualized as common denominators of everyone's behavior, while the idiographic approach focuses on the unique aspect of the individual. These two primary modes of content interpretation involve different interpretive procedures and produce different types of information about the subject. The idiographic approach would focus on the qualitative aspects of the subject's response and his/her highly individualized manner of verbalizing. Therefore, Aronow and Reznikoff (1983) point out that "it could be argued that because the Rorschach test requires the subject alone to provide the structure of the response, a greater heterogeneity of content results which allows for the expression of stylistic differences" (p. 73). With the clinician's use of his/her perceptual organization skills in tandem, we have a vehicle for greater heterogeneity of stylistic differences among clinicians. In addition, this type of functioning that the clinician performs may be what Gardner (1983) refers to as "open-ended creativity that is crucial at the highest levels of human intellectual achievement" (p. 24). At this level, problems have an indefinite range of solutions in addition to their generation of new problems.

This investigation attempted to determine whether there is a basis to the proposal that the perceptual organization factor of intelligence is related to the clinician's ability to utilize the Rorschach. Perceptual organization skills

of the clinician were measured by the Haptic Visual Discrimination Test, an instrument that has demonstrated reliability and validity. These measures, along with the subject's rating of the clinical usefulness of the Rorschach, were compared independently to the following criteria: the class grades that the clinicians (first year graduate psychology students) earned as they learned the projective technique skills; the instructor's or teaching assistant's forced pair ratings of the subject's ability to interpret the Rorschach; and the instructor's or teaching assistant's forced pair ratings of the subject's overall ability to be a provider of psychological services. Measures of verbal comprehension were collected in the form of verbal scores from the Graduate Record Examination (GRE), and a questionnaire allowing the quantitative assessment of handedness was utilized.

Hypothesis

The hypothesis addressed was that independent from the level of the verbal comprehension factor of intelligence, the perceptual organization factor of intelligence would predict the rate and/or quality of learning Rorschach interpretations by first year graduate psychology students.

Method

Subjects

Subjects were 30 either male or female graduate psychology students drawn from the appropriate subject pool

at North Texas State University. Participation in the experiment was voluntary.

Apparatus

Subjects completed a questionnaire that, in addition to gathering demographic data, included an assessment of handedness via the Edinburg Inventory, 1970 (see Appendix A). The Edinburg Inventory was used as a simple means for screening and assessing handedness. It provided one quantitative measure of handedness that was backed by a known distribution of values in a reasonable sized normal population (1,100 individuals). An additional questionnaire that requested the subjects to rank order a representative grouping of personality tests (Anastasi, 1982) in terms of their personal consideration of each test's clinical usefulness was administered (see Appendix B).

Perceptual organization performance was measured via the Haptic Visual Discrimination Test (HVDT) (McCarron & Dial, 1979). These test materials were specifically designed to require skills in tactile sensitivity, spatial synthesis, and the ability to integrate the elements of an object into a unified whole. A broad range of materials was used and included such dimensions as shape, size, texture, and spatial configurations. The subject's hand was placed through a visual screen composed of a wooden frame and a cloth screen, to obscure the objects entirely from the subject's field of vision. The subjects felt and moved objects around in their

hand and pointed to the picture on the photographic identification chart that was like the object in their hand. Each item on the HVDT was administered in approximately 10 to 20 seconds, and it was possible to complete the test for one hand in 15 minutes. When the haptic skills in both hands were determined, a 15 to 30 minute period of intervening activity or time lapse was necessary to reduce the effects of short-term memory and learning from the administration of the first test. Procedurally, both right and left handed persons initially used their right hand for manipulating the objects (McCarron & Dial, 1979).

The reliability of the HVDT was determined by pre- and post-testing and split-half reliability. High retest reliability coefficients were $r = .91$ for children and $r = .93$ for the neuropsychologically disabled adults. Using the Spearman-Brown prophecy formula, the estimated reliability for the total test was .91 for normal elementary school age children and .90 for neuropsychologically disabled adults (McCarron & Dial, 1979).

From a series of investigations, the validity of the HVDT was interpreted. Content validity was interpreted by the items being arranged according to their level of discrimination difficulty; 88% of the test items for the adult neuropsychologically disabled group had moderate or high validity. Factor analysis of the behavioral data revealed shape and configuration as tending to be highly

correlated ($r = .54$); similarly size and texture have a correlation of $r = .58$. Concurrent validity involving the HVDT and the criterion measure of a similar cutaneous-kinesthetic process indicated a correlation coefficient of .84 (McCarron & Dial, 1979).

Instructors and teaching assistants were asked to rate each of their student subjects in terms of each student's ability to interpret the Rorschach, and in terms of each student's overall ability to be a provider of psychological services. The forced choice technique of pairing the subjects was used to enable the raters to provide a rank ordering of each student subject (see Appendix C and Appendix D).

Procedure

Subjects were given the HVDT and questionnaire individually. First, the HVDT, using the subject's right hand, was administered according to the instructions outlined in the manual (McCarron & Dial, 1979). Subjects then completed the questionnaire that addressed demographics and assessed handedness, and completed the questionnaire that provided the rating of the clinical usefulness of the personality tests listed. After an appropriate 15 to 30 minute lapse in time, the HVDT was administered using the subject's left hand. GRE verbal scores were obtained from the graduate student's records, and the relevant course grades that addressed the acquisition of Rorschach skills were obtained from the

appropriate instructors. Instructors and teaching assistants ranked the student subjects on their ability to interpret the Rorschach and their overall ability to provide psychological care.

Results

The data were rendered readable by automatic data processing equipment. The SPSS-X System (Norusis, 1983) was used to compute all results. Tables 1 and 2 in Appendix E contain the descriptive statistics and the intercorrelations among study variables.

The criterion of the student clinician's ability to interpret the Rorschach protocol, as judged by instructors and teaching assistants using a forced-comparison format, was selected as the most representative criterion. This rating was chosen because of the expected lack of variance among the subjects' course grades. The interrater correlation for one class was $r = .67$, ($p = .03$).

A multiple linear regression analysis was performed. The direct effects of all independent variables on each dependent variable were calculated using direct multiple regression equations with the simultaneous entry of independent variables. This regression used the verbal scores of the GRE as a covariate to statistically control for differences in verbal ability. In the same manner, handedness was used to control for laterality as reflected in the HVDT scale scores.

A statistically significant multiple regression onto the student ratings by the Rorschach favorableness (the clinical usefulness of the Rorschach as judged by the subject) and the HVDT-RSS (the scaled scores of the right hand on the Haptic Visual Discrimination Test) as predictors was found. The multiple R for the predictors and the criterion variable was $R = .54$, ($F = 5.43$, $p = .01$). The standardized beta for usefulness was $.47$, ($p = .008$) and the HVDT-RSS beta was $.33$, ($p = .05$).

Discussion

These results support the hypothesis that, independent from the level of verbal comprehension, perceptual organizational abilities and favorableness toward the usefulness of the Rorschach are related to the quality of interpretational skills attained on Rorschach protocols by first year, graduate psychology students. It was expected that a favorable attitude towards the Rorschach would play a positive role in this attainment.

The present research evolved from an exploratory attempt to find meaningful predictors of the ability to interpret Rorschach protocols by clinicians. The direction of this attempt was greatly governed by the lack of empirically demonstrated validity for the Rorschach (Anastasi, 1982), and by the difficulty in discovering how a Rorschach clinician arrived at his findings (Klopfer & Davidson, 1962). As a result, this investigation measured abilities not

traditionally in the research paradigms (Kuhn, 1962) of previous researchers in this area. Hence, there is no reason or evidence to expect the subjects, instructor raters, and teaching assistant raters to be biased in a way that would have specifically affected these data.

The results may have been affected by sex bias, for the descriptive statistics in Table 1 reveal that 73.3% of the subjects were female and 26.7% were male. Kolb and Whishaw (1980) write that:

Both males and females vary substantially in performance of both verbal and spatial tasks. For example, although females are generally poorer than males at spatial skills, 20 to 25 percent of females exceed the average performance of males. In addition, and intriguingly, the variability of female performance on both verbal and spatial tests exceeds that of males. (p. 169)

The possibility of sex bias is not likely given its failure to contribute significantly to the regression. However, the fact that only 8 male observations were available may have masked the association.

Kolb and Whishaw (1980) wrote that perception is the result of sensory information being transformed, in the various sensory regions of the neocortex beyond the primary sensory cortex, "into a percept by such factors as experience and context" (p. 189). These are the areas referred to as gnostic regions where understanding or comprehending the

meaning of the incoming sensory information occurs. At this point of confluence of all inputs, cross-modal associations are formed allowing the individual to link sensual inputs in such a manner "that he is able to apply words" (p. 29) and describe perceptions (Strub & Black, 1982). Two distinct modes of cognitive processing seem to occur, e.g., diffuse sensory information being organized and integrated by spatial analysis in terms of Gestalts, and language functions being integrated into individual units (Kolb & Whishaw, 1980). Perhaps people, otherwise similar in verbal ability but with stronger HVDT-non-verbal spatial/perceptual abilities, prefer the Rorschach because of their enhanced ability to think configurally and to form Gestalts of the many pieces of information from a Rorschach protocol.

Since only students were studied, possibly the benefit of better spatial, configural reasoning applies only to the learning of the Rorschach techniques. One possibility is that "configural thinkers" could have reduced the large number of bits of information into tabular condensations. Mastering these consolidated structures may have been more effective than mastering a linear verbal narrative over the same information.

Approaches to teaching are similar when viewed from Gardner's (1983) framework for analyzing educational processes. He begins . . .

By listing the various components that should be taken into account in the analysis of any educational encounter. Given the complexity of any given situation in which one or more individuals are charged with the transmission of knowledge to another set of individuals, it is essential to consider a large set of components.

(p. 334)

When the subject matter to be taught is also complex, such as the techniques of Rorschach interpretation, the many component problem becomes compounded. Given this study's finding of better performance from students with stronger configural abilities, perhaps the Rorschach techniques should be organized for presentation to students in a multitask, configural process rather than a single narrative track paradigm.

Although it would produce complications in empirical design, in the same manner, research approaches utilizing holistic or multivariate strategies need to be used in Rorschach validity research. These strategies would allow for the reflection of the configural use of Rorschach information. Some of the problem with the bulk of Rorschach validity research may be that in translating the clinical observations of expert Rorschach researchers into hypotheses, observations obtained by them in configural logical structures would lose any configural aspects by being cast into univariate or few variable hypotheses.

In some ways, these problems are similar to those of psychotherapy outcome research. Often there is noticeable non-specific positive outcome from psychotherapy in a number of areas not specifically related to the presenting problem. Amelioration of the specific complaint often appears quite modest while the patient's general adjustment to life is valuable.

There has been "blind analysis" research studying the possibility of incremental validity of the Rorschach in psychological assessment, e.g., Rapaport-Schafer System. However, blind analysis must be presented as verbal/symbolic narrative. Before the subject clinicians could apply configurally structured knowledge, they would have needed to reconstruct a configural understanding of the stimulus Rorschach protocol. This latter effort would be both a separate skill and unpracticed by most clinicians. The experimental manipulation of a Rorschach versus two hours of additional interview being imposed on a standard screening psychological battery could address Rorschach validity without the possible confounding reduction of configurally structured information into a linear narrative.

With respect to favorableness of opinion towards the Rorschach and the HVDT findings, these may be reflecting two aspects of the same phenomena. Those students having better spatial/configural reasoning abilities may not have as much difficulty as their fellow students when introduced to the

Rorschach. This could translate into a more favorable opinion towards the Rorschach. On the other hand, the Rorschach may be sufficiently configural in structure that only students with higher configural abilities are positively attracted to it. Obviously, favorableness could be unrelated to the HVDT and be reflecting only the greater motivation to study, resulting in a positive attitude.

In summary, perceptual organizational abilities and favorableness towards the Rorschach technique appear to be significant predictors of the ability to become a Rorschach clinician. Research and teaching approaches and these data support the theoretical understanding of the Rorschach as an assessment method requiring interpretation from the analysis of a holistic Gestalt.

Appendix A

Questionnaire

Sex: M _____ F _____

Age: _____

Please indicate your preference in the use of hands in the following activities by putting + in the appropriate column. Where the preference is so strong that you would never try to use the other hand unless absolutely forced to, put ++. If in any case you are indifferent, put + in both columns.

Some of the activities require both hands. In these cases, the part of the task or object for which hand preference is wanted is indicated in brackets.

Please try to answer all the questions, and only leave a blank if you have no experience at all of the object or task.

	LEFT	RIGHT
1. Writing	_____	_____
2. Drawing	_____	_____
3. Throwing	_____	_____
4. Scissors	_____	_____
5. Toothbrush	_____	_____
6. Knife (without fork)	_____	_____
7. Spoon	_____	_____
8. Broom (upper hand)	_____	_____
9. Striking match (match)	_____	_____
10. Opening box (lid)	_____	_____
11. Which foot do you prefer to kick with?	_____	_____

12. Which eye do you use when
using only one?

LEFT RIGHT

Total +'s

(Leave these spaces blank) L. Q.

Decile

Appendix B

From the following list of psychological assessment techniques, cross out those that you would not feel comfortable interpreting because of minimal experience. Comfortable is defined as follows: The instructor expects the student to be "comfortable" in the usage of a technique if the student has completed or is currently attending a graduate course in which the administrative and interpretational skills of that technique were/are being taught.

Please rank the various remaining techniques in terms of clinical usefulness to you. Begin to rank by putting a "1" to the right of the technique which you find most useful. Then, put a "13" next to the least useful. Continue with a "2", then a "12", etc., until all of the techniques are either ranked or crossed out because of your unfamiliarity with them. If some of the techniques are crossed out, not all of the 13 rankings will be used, e.g., 6 or 7.

<u>Technique</u>	<u>Rank</u>
Adjective Check List (ACL)	_____
California Q Sort Deck	_____
Draw-a-Person Test (DAP)	_____
Edwards Personal Preference Schedule	_____
Make a Picture Story (MAPS)	_____
Mental Status Examination (MSE)	_____
Minnesota Multiphasic Personality Inventory (MMPI)	_____

<u>Technique</u>	<u>Rank</u>
Myers-Briggs Type Indicator	_____
Rorschach Ink-blot Test	_____
Rotter Incomplete Sentences Blank, etc.	_____
Sixteen Personality Factor (16 PF) and/or CAQ	_____
Social History Interview	_____
Thematic Apperception Test (TAT), etc.	_____

Appendix C

In comparing the following pairs of students in your Psyc 562 Assessment II course in terms of their abilities to interpret the Rorschach protocol, please circle the name of the student that you have judged to be the better interpreter of the pair. If you do not believe in the case of some pairings that one is clearly better than the other, please guess and mark one or the other as better. Thank you.

Name vs. Name

Name vs. Name

Name vs. Name

Appendix D

Please rate the following pairs of students in terms of each student's ability to be a provider of psychological services. Circle the name of the student that you have judged to be the better provider of the pair. In the case of a tie, please guess and mark one or the other as better.

Thank you.

Name vs. Name

Name vs. Name

Name vs. Name

Appendix E

Table 1

Summary of Descriptive Statistics for Study Variables

Variables	Mean	Standard Deviation	Mode	Range
R shape	10.7	.75	11.0	9-12
L shape	11.3	.80	12.0	9-12
R size	7.3	1.60	8.0	4-10
L size	9.1	2.50	8.0	4-12
R texture	8.8	1.60	8.0	6-12
L texture	9.4	2.20	11.0	6-12
R conf.	10.5	1.20	11.0	8-12
L conf.	11.2	1.20	11.2	8-12
RSS	11.3	2.40	10.0	5-16
LSS	12.5	3.10	13.0	5-17
V-GRE	586.7	72.50	630.0	460-730
Age	30.5		24.0	23-45

Sex:

73.3% female, N = 22

26.7% male, N = 8

Handedness:

Right, N = 25

Left, N = 3

Ambidexterous, N = 1

Class grades:

A = 15

B = 15

Table 2
Intercorrelations Between the Study Variables

Variables	L shape	R size	L size	R tex.	L tex.	R conf.	L conf.	RSS	LSS	TA rater
R shape	.52***	.21	.03	.20	.35*	.10	.21			
L shape		.07	.10	.12	.38**	.18	.44***			
R size			.17	.23	.17	.05	.06			
L size				.52***	.31*	.21	.03			
R tex.					.58***	.16	.05			
L tex.						.04	.00			
R conf.							.31*			
Favorableness								.14	.09	
I rater										.67*

Note. *p < .05. **p = .02. ***p < .01. ****p < .001

Appendix F

CORRELATES OF RORSCHACH INTERPRETATION

The exercises which follow are part of a research study. The goal of this research is to better understand the processes involved in interpreting projective personality tests. If you wish to know the results of this study, write your name and mailing address at the bottom of this page.

Participation in this study is completely voluntary. If you choose not to participate, you may discontinue any time by not completing the tasks. If you choose to volunteer for this study, the completion of the following exercises will show your consent to serve as a subject.

Some of your grades from the Psych 562 course and your GRE verbal score will be used as study variables. In no case, however, will your name be associated with these data or the results of the study. Signing below gives your advised consent for your score and grades to be obtained.

Thank you for your participation in this study. You have made one graduate student very happy.

Vivian Laverty

Signature

Date

Please send results to:

Address

If you have any questions, please contact Leon Peek, Ph.D. or Vivian Laverty at the NTSU Psychology Department.

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