

**A CORRELATIONAL STUDY OF ELIZUR'S
HOSTILITY SYSTEM ON THE RORSCHACH
AND THE ACTING OUT SCORE ON THE
HAND TEST**



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OUT SCORE ON THE HAND TEST

An Abstract
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Diana Brent
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ABSTRACT

The purpose of the present study was to determine the relationship between Elizur's Hostility Scoring on the Rorschach and the Acting-Out Score on the Hand Test. Both of the instruments measure aggressiveness.

The subjects were 29 persons taken from the general population. The Rorschach and the Hand Test were administered individually to each subject in a single sitting.

The Pearson Product-Moment Correlation technique was used to compare the acting-out score with the hostility level. The correlational coefficients obtained in the study ranged from .40 to .64 and were all significant beyond the .01 level.

The results of the study indicate that there is a significantly positive relationship between the two measures of aggressiveness. The Hand Test could possibly be better utilized in giving direction to the aggressiveness as it also takes into consideration the positive or socially acceptable feelings manifested by the subject.

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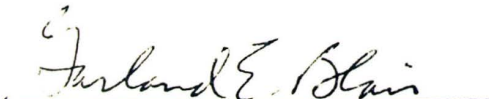
To the Graduate Council:

I am submitting herewith a Thesis written by Diana Brent entitled "A Correlational Study of Elizur's Hostility System on the Rorschach and the Acting Out Score on the Hand Test." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

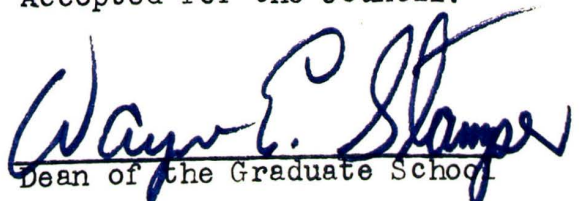

Major Professor

We have read this thesis and
recommend its acceptance:


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or
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Dean of the Graduate School

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CHAPTER I

INTRODUCTION TO THE PROBLEM

The relationship between the content of projective protocols and the overt behavior of the person tested is a question of major concern to the user of projective techniques and an area which has given rise to much research and debate. Piotrowski (1950), Wittenborn (1950), and Rosenzweig (1950), for example, either state or imply that direct prediction from projective records to overt behavior is possible. Gluck (1955) suggests that users of projective tests, both psychiatrists and psychologists alike, frequently are called upon to make predictions and to act in accordance with them.

Hostility, especially its direction and strength, is one of the major dynamic forces which the projective tester may be called upon to assess. Young and Higgenbotham (1942) found that the Rorschach does reflect "... potential forces and tensions within the individual ... the resolution of which appears in behavior relative to specific environmental stimuli" (p. 93).

In attempting to use the Rorschach as a measure of hostility the emphasis has been on content rather than other aspects of the response. Although a number of different systems have been devised for the scoring of hostile content (Arnaud, 1959; DeVos, 1952; Elizur, 1949; Finney, 1955; Fisher & Hinds, 1951; Hafner & Kaplan, 1960; Murstein,

1958; Pattie, 1954; Towbin, 1959), the present study will utilize the scoring system of Elizur (1949) because it has been used more often and most of the other systems are modifications or elaborations of Elizur's system.

In describing what his content scoring purports to measure, Elizur (1949) uses the term hostility to refer to "feelings of resentment and enmity, which are often repressed in our culture but almost inevitably show up in the individual's distorted attitudes toward people, either being too antagonistic or too submissive" (p. 248).

In light of the above one concludes that the Elizur scoring for hostility was not designed as a diagnostic indicator for aggressive acting-out, but the level of hostility (HL) on the Rorschach has generally been found to be related to overt acts of aggression.

In a study by Gorlow et al., (1952), the Rorschach records of 13 adolescent delinquents were compared with those of 13 non-delinquents matched on the basis of age, IQ, and socio-economic background. The delinquents were randomly selected from court files on the basis of the "antisocial" acts which they had committed. The results indicated that the delinquents obtained significantly higher HL scores.

Wolf (1957) found that aggressive acting-out patients had significantly higher hostility scores on the Rorschach ($P < .005$) than non-acting-out patients

as determined by both case history data and current progress notes.

A study by Coleman (1967) used peer ratings of aggressiveness among groups of normal boys (ages 10 to 13 years). The findings of his study showed high positive correlations between HL and aggressiveness (ranging from .62 to .67) for three of the four replications.

Haskell (1961) studied protocols of schizophrenics and failed to find any differences in HL between patients who previously acted-out aggressively and those who had not. He found a significant correlation between acting-out as measured by the Rorschach and therapists ratings of the patients at that time. Walker (1951) also found Rorschach hostility level to be related significantly to the ratings of therapists ($r = .78$).

Based upon the research it would appear that the clinical use of the Rorschach as a measure of general hostility would seem to show considerable promise. Goldfried, however, has the following to say about Elizur's system:

Most of the validity studies on Elizur's system have turned out quite well. Individuals who in the past have been known to act out aggressively are typically found to have higher HL scores than those who have no acting out history. When careful estimates of level of hostility (regardless of mode of expression) have been used as criterion measures--based on peer ratings, ratings of therapists, or estimates based

on interviews specifically designed to assess hostility level--the correlation with HL has proven to be relatively high. The predictive validity of the Elizur hostility scoring, on the other hand, has not fared nearly as well.... As a means of predicting whether or not someone is likely to act out aggressively, the hostility scoring system in itself seems to have little utility. This is not surprising, inasmuch as the score purports to reflect degree of hostility, and not style of expression. The use of some measure reflecting the way in which an individual expresses his feelings, in addition to HL scores, would most likely result in a more accurate estimate of acting out potential (p. 115).

Goldfried's point is well-taken since there is little research on the predictive validity of the hostility scoring and most of what there is neglects the important variable of impulse control. It is doubtful that the Rorschach hostility score alone can be used successfully to predict how members of a heterogeneous group of subjects are going to behave in a more typical life situation. Aforementioned research was conducted on select groups, and no data are available as to the clinical application of the Rorschach for the prediction of aggressive acting-out.

An instrument is needed which can determine the extent to which, and the way in which the individual expresses his impulses. Dr. Wagner believes that his instrument, The Hand Test, fulfills that need.

The Hand Test, designed and devised by E. Wagner in 1959, resulted from Wagner's continuing interest in the

projection of aggression responses (Wagner, 1961). In his search for a medium which would reflect some important action tendencies found in Rorschach M (human movement) responses, Wagner chose pictures of hands. Theoretically, it was assumed that "prototypal action tendencies" would be projected into hands, since the hand is considered important for interacting and relating to the external world; the hands supply kinesthetic feedback and, in coordination with the brain, enables one to organize his perceptions of reality (Wagner, 1962, p. 1). The Hand Test is particularly likely to reflect action tendencies close to the motor system action tendencies that are readily activated and which are therefore likely to be apparent in overt behavior (Bricklin, Piotrowski, & Wagner, 1962; Wagner, 1962).

Rabin (1968) states: "The theoretical rationale which guided Wagner's choice of stimulus materials is an excellent example of a theoretical system which is economical, close to the data, adequately comprehensive, and verifiable" (p. 474).

The first limited goal of the Hand Test (HT) was the prediction of overt aggressive behavior. Acting-out was defined by the author "as a subjects behaving in such a way as to bring him to the attention of the police, court, school authorities, guidance clinics, psychiatrists, etc.... as a result of overt aggressive behavior." The

acting-out score was not designed to predict specific motor acts, but rather a tendency to act-out in an aggressive way of any kind.

The acting-out score (AOS) is based on the principle that the probability of overt aggressive behavior increases as dominant and aggressive attitudes outweigh attitudes indicating social cooperation. Finding the arithmetic difference between the sum of aggressive and domineering action tendencies and the sum of cooperative or non-aggressive attitudes yields an acting-out score (Bricklin et al., 1962).

Most of the studies with the HT have been devoted to validating the acting-out score. In one study (Bricklin et al., 1962) 76 Ss representing acting-out cases were compared on AOS with 72 Ss representing non-acting-out persons. The χ^2 yielded significant differences ($P < .001$).

Another study (Bricklin et al., 1962) compared a group of 37 recidivist criminals with an unmatched group of 37 non-recidivist criminals to test the hypothesis that the former group would have a significantly higher AOS. Utilizing the t-test, they obtained differences significant at the .05 level. The data were also analyzed in terms of difference categories of crime. Highest mean AOS was attained by rapists and men who committed armed burglary; lowest scores were achieved by alcoholics and vagrants.

The HT has also been used in studies of juvenile delinquents. Wagner (1962) in an initial study compared a sample of 30 delinquents with 30 non-delinquents matched for sex and age on the AOS. The delinquent group had a significantly ($P < .02$) higher AOS than the non-delinquents.

In another and better controlled study (Wagner, 1964), a sample of 30 "assaultive" and 30 "non-assaultive" delinquents, matched on sex, age, number of convictions, IQ, social class, and racial characteristics, was compared on the AOS. Assaultive delinquents had a significantly higher ($P < .001$) AOS than the non-assaultive group. Selg (1965) has also reported that the AOS differentiates between aggressive and non-aggressive children.

Wetsel et al. (1967) reported that the HT successfully predicted recidivism among a group of first-time juvenile offenders. Azcarate and Gutierrez (1969) in a study of 100 boys in the National Training School, Virginia, found that the AOS could be used in predicting overt, aggressive behavior.

Wagner and Medvedeff (1963) compared aggressive with non-aggressive schizophrenics. The AOS permitted correct classification of 67 percent of the aggressive cases.

The HT has undoubtedly proven itself useful in assessing acting-out tendencies and a beginning has been

made to demonstrate predictive validation which would be requisite for establishing its clinical utility.

The purpose of the present study was to determine the degree of relationship between Elizur's Hostility System of the Rorschach and the acting-out score on the Hand Test on a general heterogeneous population. A positive and significant correlation was hypothesized.

CHAPTER II

METHOD

The Sample

The sample used for the present study was taken from the population at large in Lombard and Addison, Illinois, and Indianapolis, Indiana. All participants volunteered to serve as subjects. The sample was composed of 29 subjects, of which 14 were males and 15 were females. No criteria were set up for selection, with the exception of age. The Ss were 16 years or older. They ranged in age from 16 to 60 years, with the mean age being 34 years.

Description of the Instruments

The Rorschach is a projective test consisting of ten cards, each one depicting an inkblot. The Rorschach cards are presented to the S individually. The subject responds to the blots by telling what he sees in them or of what they remind him. No attempt is made to elicit any special type of response. The responses are recorded verbatim and analyzed for content at a later time.

The Hand Test, too, consists of a set of ten cards with drawings of hands in various positions on them. The cards are presented to the S with the statement: "Tell me what this hand might be doing." The last card is blank and the subject imagines a hand doing something.

Scoring

Quite a few studies have demonstrated a relatively high interscorer agreement on total hostility level (Cummings, 1954; Elizur, 1949; Forsyth, 1959; Sanders & Cleveland, 1953; Siegel, 1956; Smith & Coleman, 1956); therefore, it is plausible to conclude that the interscorer agreement is reliable, the average correlational coefficient being about .90.

The HL was obtained for this study by assigning a weight of two to those responses scored H and one to the h score, and finding a total score. Using Goldfried's (1971) suggestion, a bonus weight of one was assigned to the hostile responses showing minus form level.

In considering the possible effect that the total response number has on the HL score, the research findings seem to conflict (Goodstein, 1954; Goodstein & Goldberger, 1955; Gorlow et al., 1952; Grauer, 1953; Lit, 1956; Sanders & Cleveland, 1953; Stotsky, 1952; Wolf, 1957). There does, however, seem to be a relationship. Computing an $HL\%$ (i.e. HL/R) does not completely eliminate the effect of R but it does reduce it (Sanders & Cleveland, 1953).

The AOS score was found by using the scoring criteria set forth in the monograph, The Hand Test, by Bricklin et al. (1962). A constant was added to eliminate all negative numbers.

Interscorer reliability coefficients average .80

for the Hand Test protocols. This is not as high as those for the HL scoring but most disagreements over the scoring of the HT protocols were not of a serious nature and were mostly within rather than between major scoring categories (Wagner, 1962).

Administration

Each of the tests was administered individually and the testing extended over a period of approximately one month. The Hand Test was administered first, followed by the Rorschach. Both tests were given in a single sitting. The instructions for administering the HT were taken from the manual (Wagner, 1962). In administering the Rorschach, the cards were presented and the subject responded according to the free association method. An inquiry was made when the cards were presented a second time in order to establish form level.

CHAPTER III

RESULTS

The Pearson-Product Moment Correlation technique was used to determine whether there was a relationship between the AOS obtained on the Hand Test and HL% using Elizur's Hostility System. A correlational coefficient was also computed for HL and AOS and AGG-DIR (aggressive and directive responses on the HT) and HL. The results are depicted in the following table.

TABLE I

The correlations between AOS and HL%, AOS and HL, and AGG-DIR and HL.

Item	r^*
1. AOS and HL%	.40
2. AOS and HL	.54
3. AGG-DIR and HL	.64

*All correlations were significant beyond the .01 level.

In analyzing the scores of the 14 male subjects a correlational coefficient of .41 was found. Using the t-test, the score was found to approach significance at the .05 level. A positive correlation was also obtained on the 15 female subjects. The Pearson r was .44, which was significant beyond the .05 level. In splitting the group, degrees of freedom were lost resulting in a lowered level of significance.

CHAPTER IV

DISCUSSION

Analysis of the data obtained from the present study eventuated in a correlational coefficient of .40, which was significant at the .01 level. Considering the results it was concluded that the two instruments could possibly be measuring the same mode of behavioral expression-acting-out or aggression.

Since many of the previous studies using Elizur's system used HL rather than HL% a correlation was also found for HL and AOS. A correlational coefficient of .54 was found. The data were included for purposes of comparison only.

A correlational coefficient of .64 was obtained between the AGG and DIR content of the HT protocols and the HL. The AGG and DIR tendencies are considered the undesirable, hostile indicators on the HT (Bricklin et al., 1962). Direction is determined when they are compared with the desirable or socially acceptable indicators. Elizur (1949) states that his scoring reveals hostility but does not predict direction. The higher coefficient between these scores (HL and AGG-DIR) lends support to his original hypothesis (p. 248).

A significant correlation between HL% and AOS, indicates that the instruments appear to be measuring the

same thing. A truer picture of what is operating may be found when these two tests are used in conjunction. That is to state, that there is a higher correlation between the actual hostility, as measured on both tests, than there is when the AOS is compared with the HL%. It appears that the acting-out score gives direction to the hostility level as measured on the Rorschach.

A weakness of both instruments is a lack of normative data. This limits their use in the clinical setting.

In analyzing the scores of the males and females, the Pearson-Product Moment Correlations were found to be comparable to the correlational coefficient found on the overall group. No real difference was indicated between the two groups.

CHAPTER V

SUMMARY

A correlational study of Elizur's Hostility System on the Rorschach and the acting-out score on the Hand Test was conducted on 29 subjects from the general population to see whether there was a relationship between the two measures of aggressive behavior.

The selection of the criteria instruments--The Hand Test and Elizur's Hostility System--was based on previous findings of the authors and other researchers. Both have numerical scoring systems indicating hostile and aggressive tendencies and have been found to measure these tendencies.

The correlational coefficients obtained in the study ranged from .40 to .64. Using a t-test of significance, they were all found to be significant beyond the .01 level with the exception of the comparison of males and females.

In light of the results of the study, it was concluded that there was a significant positive relationship between HL% and AOS; but that the AOS might better be utilized in predicting in what direction the hostility, as measured by HL, will be manifested in overt behavior. With such a small sample, and it not being representative of the overall population, the results could not be generalized to the population at large. Further research would be needed to validate the findings as very few studies on aggressiveness have been conducted on a general population. If

normative data could be obtained it is hoped that the instruments would be beneficial in helping to predict overt aggressiveness or acting-out.

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