


AN ABSTRACT OF THE THESIS OF

Ron S. Redick for the Master of Science Degree
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Abstract Approved: 

This study examined 26 Rorschach variables from data collected from 320 schizophrenics, 315 depressives and 142 non-patients. The schizophrenic and depressive data were collected from Exner's Comprehensive System's normative data on comparison samples. The non-patient data were collected through current testing. The 26 variables examined were considered to be central to interpretation and diagnosis by Mason, Cohen and Exner. Analysis compared the schizophrenic, depressive and non-patient samples and distinguished patterns of personality organizations between the three samples. While there were some similarities between the three populations, each group reflected unique personality characteristics. These findings supported the hypothesis that schizophrenics, depressives and non-patients differ in style of their responses to the Rorschach Inkblot Technique. However, the findings were not completely consistent with the Mason, Cohen and Exner study to which it was compared.

Personality Organizations as Expressed in the
Rorschach Inkblot Technique For Schizophrenic,
Depressive and Non-patient Populations

A Thesis

Presented to
the Division of Psychology and Special Education
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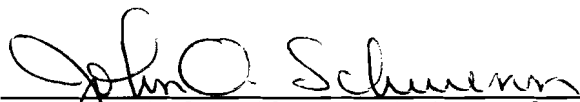
In Partial Fulfillment
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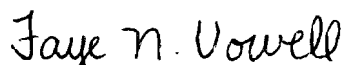
Ron S. Redick

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TABLE OF CONTENTS

CHAPTER

1.	INTRODUCTION.....	1
	Review of the Literature.....	3
	History.....	3
	Validity.....	5
	Assessment.....	7
	Purpose of the Study.....	11
	Statement of Significance.....	12
	Chapter Summary.....	13
2.	METHOD.....	14
	Subjects.....	14
	Procedure.....	15
	Statistical Procedure.....	16
3.	RESULTS.....	18
	Non-Patient Sample.....	23
	Depressive Sample.....	28
	Schizophrenic Sample.....	29
	Comparative Study.....	30
	Summary.....	30
4.	DISCUSSION.....	33
	Non-Patient Sample.....	33
	Depressive Sample.....	34
	Schizophrenic Sample.....	36
	Conclusion.....	36

REFERENCES.....	39
APPENDIX A.....	44
APPENDIX B.....	45
APPENDIX C.....	46
APPENDIX D.....	47
APPENDIX E.....	48

LIST OF TABLES

TABLE	PAGE
1. Demographics of the Non-Patient, Depressive and Schizophrenic Samples.....	19
2. Means and Standard Deviations of the Non-Patient, Depressive and Schizophrenic Samples.....	20
3. Comparative Analysis Between the Non-Patient, Depressive and Schizophrenic Samples.....	21
4. Clustered Rorschach Variables for the Non-Patient, Depressive and Schizophrenic Samples.....	24
5. Rorschach Variables of Related Significance.....	25
6. Rorschach Variables Significant for Specific Samples.....	26
7. Comparative Analysis Between Mason, Cohen and Exner Study and Current Study.....	31

CHAPTER 1

INTRODUCTION

In the mid-1800's, Francis Galton developed a method to help understand differences between individuals. Because of his interest in statistical analysis, motor skills, and reaction time, he began work in individual assessment that continued to grow even after his death. In the early 1900's, Alfred Binet began the development of mental measurements. It was Binet who uncovered an important feature for assessment: the key to studying individuals was through comparative use of normative data (Phares, 1988).

The comparative use of normative data allows assessment of significant differences between individual test subjects. The use of normative data allows a person to make comparisons between clinical populations. The results falling outside of the non-patient norm and inside a clinical norm can be used to describe that clinical group. Assessment devices that can give clear differentiation between non-patient norms and clinical norms could then be good devices in diagnosing individuals for the specified clinical norms. Currently, there are many assessment devices used for this purpose. Most assessment devices, however, are different in style.

Some assessment devices, like the Reynolds Depression Scales (Reynolds, 1987), measure only one

personality trait while others, like the Minnesota Multiphasic Personality Inventory (MMPI) (Graham, 1990), measure many personality traits. Even though assessment devices may be based on different personality theories, many people attempt to use normative data to assess individuals. One technique that is questioned because of its style is the Rorschach Inkblot Technique (RIT) (Weiner, 1986).

The RIT, a projective test, attempts to assess unconscious or covert personality characteristics (Exner, 1986). It attempts to differentiate, among other things, characteristics that are common in individuals with schizophrenia and depression. The method for differentiation between these characteristics is with a cluster of normative variables. For example, the assessment of depression can be identified by a cluster of variables relating to major affective disorders and the assessment of schizophrenia is indicated by a cluster of variables that relate to problems in thinking and perception. The RIT is frequently used in clinical settings for diagnostic and treatment purposes. Hertz (1986) found that out of 417 mental health clinics surveyed, 97% used the RIT as an assessment device. Despite its popular use in clinical settings, questions still remain surrounding the ability of the RIT to accurately differentiate between individuals within

different clinical populations. Exner (1986) devised a comprehensive system to help differentiate between clinical populations. The current study examined the effectiveness of the Exner Comprehensive System for identifying the cluster of variables that describe the differences between depressive, schizophrenic and non-patient populations.

Review of the Literature

The following literature review examines three topics. The first section is a brief history of the RIT. The second section reviews current research addressing the validity of the RIT. The third section is focused on assessments utilizing the RIT.

History

In 1921, Hermann Rorschach unveiled his inkblots for the first time to the public. According to Exner (1986), when Rorschach introduced the inkblots he did not perceive them as a test. Instead, he thought they would be used to explore individual perceptions differentiating schizophrenia from other populations. His research conducted with the use of the inkblots sufficiently supported his hypothesis in identifying schizophrenia. Later, he found clusters of responses that related to other specific psychological and behavioral characteristics (Exner, 1986). Rorschach's untimely death in 1922 prevented him from clarifying

his findings and left many unanswered questions.

During the 35 years following Rorschach's death, five different researchers developed independent scoring systems in an attempt to address the many unanswered questions left by Rorschach. The five systems were developed independently by Klopfer, Beck, Rapaport, Piotrowski and Hertz, each of whom tried to complete what Rorschach had begun (Exner, 1986). Their systems had similar elements, most of which incorporated Rorschach's original work, but the systems were different due to the individual work each had done. These differences left many problematic issues in scoring and interpretation.

In 1968, Exner began an analysis of the five previous RIT systems (1986). Questionnaires and surveys were conducted to address two issues; "Which of the five demonstrated the greatest empirical sturdiness?" and "Which of the five had the greatest clinical utility?" (pg. 20). A study by Exner and Exner (1972) researched these questionnaires and surveys and determined that individuals using the RIT as an assessment device would employ a combination of different methods and possibly add their own ideas. Such a random combination of approaches significantly threatened the reliability and validity of the RIT.

In 1974, the research headed by Exner and Exner (1972) resulted in an appropriate integration of the five previous systems along with strict administration and scoring procedures (See Appendixes A & B). This developed a procedure that went from the experimental method of Hermann Rorschach to a comprehensive system (Exner, 1986).

Validity

The RIT has experienced and is still going through significant criticism and evolution regarding its validity. The strongest criticism came before the Exner Comprehensive System was developed (Exner, 1986). None of the five prior systems provided refined scoring and administration procedures. Individuals who used the RIT, tended to mix and match the administration guidelines and scoring procedures from different systems. Occasionally a person would interject his/her own scoring styles and assumptions. Assessments through this process, were inconsistent between protocols, as there was no universal or set method that had been established or was accepted by professionals. This inconsistency led to Exner's concern for valid test results. The new Exner system attempted to create a consistency in the assessment procedures which would help to diminish some of the problems with validity. However, the validity question was not answered satisfactorily (Greenwald, 1990).

Many researchers continued to find that the RIT was invalid even with the Exner Comprehensive System. Occasional studies using the Exner Comprehensive System failed to differentiate between two or more clinical populations (Ball, Archer, Gordon & French, 1991). Further studies also found that the Exner Comprehensive System indices failed to identify a clinical population that were consistent with individuals assessed according to the Diagnostic and Statistical Manual of Mental Disorders 3rd edition revised (DSM-III-R) (American Psychiatric Association, 1987) (Modestin, Gruden & Speilmann 1990; Viglione, Brager & Haller, 1988; Vincent & Harman, 1991).

Studies by Mason, Cohen and Exner (1985), Greenwald (1990) and Wenar and Curtis (1991) helped support the idea that the Exner Comprehensive System had more strict administration and scoring procedures than the five previous systems. Validation studies have been conducted and published by Parker, Hanson and Hunsley (1988) and Atkinson, Quarrington, Alp and Cyr (1986). Atkinson et al showed that the published research indicated the RIT is "psychometrically" valid for differentiating between clinical and non-patient populations.

One major study compared the RIT to two assessment devices with excellent validity (Parker, Hanson & Hunsley, 1988). The RIT was compared to the MMPI and

the Wechsler Adult Intelligence Scale (WAIS). The WAIS was found to have higher validity for assessing intelligence than the other two for assessing personality, but the RIT and the MMPI had adequate properties if they were used for assessing personality. It has been asserted by Atkinson, Quarrington, Alp and Cyr (1986), many of the studies questioning the validity of the RIT (Ball, Archer, Gordon & French, 1991; Viglione, Brager & Haller, 1988) have come from poor research methodology. Despite the validity questions of the RIT, it is still used across many clinical settings (Piotrowski & Keller, 1989).

Assessment

Hermann Rorschach used a cluster of variables from the RIT to identify depression and schizophrenia. Following his death in 1922, people such as Rapaport, Theisen, Beck, Piotrowski and Lewis all attempted to continue what Rorschach had begun by identifying RIT variables that describe the characteristics of individuals (Exner, 1986). Their studies were somewhat productive but none shared identical variables. One common objective was that variables to assess schizophrenia should identify disordered thinking and inaccurate perception. Another objective was the cluster of variables used to assess depression needed to identify major affective disorders. The Exner

Comprehensive System was based on statistically valid features from previous work measuring these same cluster of variables.

The Exner Comprehensive System used non-patient and clinical samples to identify a set of clusters that measured aspects of coping styles, cognition, affect, self-image and ideation. Along with these, the Exner Comprehensive System could formulate a cluster of variables to assess the probabilities of schizophrenia, depression and suicide. The variables were based on data of non-patient populations and clinical populations. The results from the non-patient served as the base-line for the other comparison groups (Exner, Viglione & Gillespie, 1984). The differences identified between non-patient populations and clinical populations yielded the six constellations or indices that the Exner Comprehensive System uses for diagnostic interpretation. Each diagnostic area from these indices produced specific clusters of variables used for assessment.

Ball, Archer, Gordon and French (1991), Lipovski, Finch and Belter (1989), Weiner and Exner (1978) and Nuovo, Tobino and Laicardi (1988) manipulated the clustering of variables similar to that of the Exner Comprehensive System's Indices. Adair and Wagner (1992), Frank (1990) and Mason, Cohen and Exner (1985) attempted to arrange different sets of clusters. Each of these

research methods found both significant and non-significant differences between clinical populations and normal populations.

Ball, Archer, Gordon and French (1991) studied the use of Exner's indexes by comparing adolescents in a hospital setting who were previously diagnosed as depressed to adolescents that were not depressed. They were unable to identify any differences between the two groups using the Exner Depression Index.

A study done by Viglione, Brager and Haller (1988) showed the Depression Index from the Exner Comprehensive System was insufficient for the diagnosis of depression. Their study assessed 54 psychiatric patients already diagnosed with depression using the criteria of DSM-III-R. They found no significant correlations with the Depression Index and the DSM-III-R classification of depression.

Other studies have also failed to assess a clinical group through the use of the Exner Indices (Archer & Gordon, 1988; Lipovski, Finch & Belter, 1989). Exner (1986) has urged caution in determining diagnoses exclusively by the use of Indices. Lack of significant results have led to further studies in attempting to develop a secondary method to determine differences between comparison groups.

Mason, Cohen and Exner (1985) utilized 27 variables

which they considered to be the core for interpretation and diagnosis. From these variables, they attempted to find other effective ways to measure differences between clinical populations. The 27 variables showed a common cluster for a depressed group, a schizophrenia group and a non-patient group. They also demonstrated that each group was significantly different from one another. This supported Mason, Cohen and Exner's (1985) hypothesis that subjects with schizophrenia and subjects with depression differ in style from each other and from a non-patient group.

Nuovo, Tobino and Laicardi (1988) continued the search for variable clusters. They studied two types of schizophrenics: florid and withdrawn. In a comparison to a non-patient group, the study found significant differences between the florid and the withdrawn groups by cognitive activities.

Differences between targeted clinical populations have not always been identifiable. Colligan and Exner (1985) found that only schizophrenics received significant differences in disordered thinking styles and inaccurate perceptions on the RIT Special Score variables. A study by Sarcuzzo, Sprock, Braff and Sudik (1984) identified a significant difference between schizophrenia through Deviant Verbalizations (DV), one of the 12 Special Scores possible from the RIT.

In a study by Viscarro-Guarch, Fernandez-Ballesteros and Fernandez-Trespalacios (1987), five groups of individuals suffering from different forms of schizophrenia were compared to a non-patient population. No significant differences were found between these groups.

Vincent and Harman (1991) compared schizophrenics, depressives and character disorders. This study found some differences in deviant verbalizations that occurred for the schizophrenic group but there were no differences between the depressive group and the character disorder group.

In summary of the literature reviewed, this current study found even though the Exner Comprehensive System was shown to be stronger in validity and assessment than the previous five systems using RIT, there is still a concern surrounding the use of a cluster of variables to differentiate between clinical populations. This concern might be reduced if a cluster of variables were found that could identify certain clinical populations. A valid system could also be used as a supplementary guide to the Exner Comprehensive System's Indices for diagnosis.

Purpose of the Study

The purpose of this study was to revisit research that attempted to validate the cluster of variables thought to differentiate between depressed, schizophrenic

and non-patient groups. Previous research has been inconsistent in determining the validity of differentiating between clinical groups by the RIT. Within the Exner Comprehensive System, indices are used in order to diagnose an individual. However, this is not always effective. In order to receive adequate information about assessment of individuals, a more thorough study of the variables may need to be conducted. One way to establish consistent data in differentiating between clinical populations would be to conduct a study replicating previous research that addressed the populations differences.

Mason, Cohen and Exner (1985) asked the following two questions: do clusters of variables that differentiate between individuals in a depressive group, a schizophrenic group and a non-patient group exist? and do these cluster of variables differ for each of the three groups? The hypotheses for this study will be based on the two questions that Mason, Cohen and Exner state.

Statement of Significance

The importance of this study was to identify a system which enables psychologists who use the RIT to make clinical diagnoses with greater confidence. If clusters of variables could be identified that differentiated between depressive, schizophrenic and

non-patient groups clinicians would not need to rely solely on the Exner Indices and instead could look at different combinations of variables to help determine their assessment.

Chapter Summary

Understanding the differences between individuals has been important since Galton's work in the mid-1880's and Binet's in the early 1900's. Rorschach's work with ink blots was instrumental in assessing personality characteristics. Because of the problems with accuracy of scoring and validity, other researchers have tried to identify systems to correct these concerns. One of the more recent attempts has been the development of the Exner Comprehensive System. This system integrated the statistically valid features from five previous systems attempting to make the RIT a stronger measuring device. Validity research showed there were seven previous studies that considered the Exner Comprehensive System to be valid and three studies that did not consider it valid. Cluster of variables measures the differences in non-patient and clinical populations. These clusters that make up the Exner Comprehensive System's indices have been questioned by previous research. It is from these arguments this current study attempted to find a set of variables to support the indices from the Exner Comprehensive System.

CHAPTER 2

METHOD

Subjects

The data from the Rorschach Inkblot Technique (RIT) protocols for the non-patient sample were gathered from a group of individuals living in an above average populated rural mid-west town of approximately 26,000. The sample was obtained strictly upon a voluntary basis and without reference to age, race, gender or religion. Only those individuals who stated they had no prior psychiatric history were used for the non-patient sample. Individuals' protocols who stated they were or had been in treatment were eliminated from the study. The volunteer subjects were asked to read and sign an informed consent form to allow their data to be used for this research project (Appendix C). Information necessary for the subjects to know about the study and the use of the results was provided to them. Confidentiality was followed as seen on Appendix C and D. Approval to conduct the study was obtained from the Emporia State University's Review Board for Treatment of Human Subjects. Altogether, 142 non-patient samples were used for this study.

The Exner Comprehensive System (Exner, 1990) normative data on patients with schizophrenia and depression data were used for the schizophrenic and depressive sample.

There were 320 schizophrenic samples and 315 depressive samples used for this study.

The non-patient sample included 66 males and 76 females with a mean age of 29.15 years (SD=15.28) and a mean of 13.06 years of education (SD=3.04). The schizophrenic sample included 153 males and 167 females with a mean age of 28.80 years (SD=17.72) and a mean of 11.72 years of education (SD=4.92). The depressive sample included 129 males and 186 females with a mean age of 37.59 years (SD=13.81) and a mean of 11.92 years of education (SD=5.53) (Exner, 1990).

Procedure

The RIT protocols from the non-patient sample came from two different sources. The first source was obtained as a part of the requirements for the Spring of 1992 graduate level RIT class. Students from this class who were willing to contribute their data to the study signed a consent form found in Appendix D. The second source was obtained from volunteers throughout the 1992 school year by the researcher of this study. All volunteer subject's protocols were scored by this study's researcher.

The administration and scoring procedures for all non-patient protocols were based on the guidelines established for the Exner Comprehensive System (Exner, 1990). These guidelines are listed in Appendices A

and B. All protocols not meeting these guidelines were considered invalid and were omitted from the study.

The administration and scoring procedures for the depressive and schizophrenic samples followed the same strict administration guidelines and scoring format as described by the Exner Comprehensive System (Exner, 1990). All data from the depressive and schizophrenic samples have been collected since 1986. Protocols from these samples were scored by workers of the Rorschach Research Foundation (Exner, 1986).

Upon gathering of the non-patient, depressive and schizophrenic samples' data, an inferential comparison was accomplished. Along with this, a comparison of the data from this previous study was accomplished towards the study by Mason, Cohen and Exner (1985). The results were tabulated and discussed.

Statistical Procedure

Twenty-six of the RIT variables were selected based upon the study by Mason, Cohen and Exner (1985). They believed these variables were the central factors for accurate interpretation and diagnosis. The names of the variables and their definitions are listed in Appendix E. The means for each variable for the three samples were compared using t-tests to determine statistical significance. The t-tests were going to be tested at the .05 level of significance. Because

of the high number of comparisons, however, the level of significance was dropped to .025. Reducing the alpha level from the usual .05 to .025 was suggested by Stevens (1990) as a way to insure a stronger probability of an item not being identified as significant "by chance".

CHAPTER 3

RESULTS

Demographics are presented in Table 1 for the schizophrenic, depressive and non-patient samples. Included in these demographics are the age, education and gender of the three samples. They include the mean and standard deviations for the age and education variables as well as the number and percentages of gender identification of the subjects. The mean age for the depression sample was the highest of the three samples. The non-patient sample had a higher mean of education. All three samples had more females than males in the study.

The schizophrenic, depressive and non-patient samples were assessed with the use of 26 variables. These variables, as mentioned earlier, are considered to be central for interpretation and diagnosis (Mason, Cohen and Exner, 1985). The means and standard deviations for all three groups are presented in Table 2.

Comparative analyses were conducted on the three groups using a t-test from independent samples. The level of significance at the .025 alpha level was found to be ± 1.96 . Any variable greater than 1.96 or less than -1.96 was considered to be significant. The t-scores for the 26 variables are presented in Table 3.

TABLE 1

Demographics of the Non-Patient, Depressive and Schizophrenic Samples

	Non-Patient	Depressive	Schizophrenic
Age			
<u>M</u> years	29.15	37.59	28.80
<u>SD</u>	15.28	13.81	17.72
Education			
<u>M</u> years	13.06	11.92	11.72
<u>SD</u>	3.04	5.53	4.92
Males			
<u>N</u>	66	129	153
%	46	41	48
Females			
<u>N</u>	76	186	167
%	54	59	52

TABLE 2

Means and standard deviations of the Non-Patient,
Depressive and Schizophrenic Samples

Variables	NON-PATIENT N=142		DEPRESSIVE N=315		SCHIZOPHRENICS N=320	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
R	21.14	6.97	22.70	8.52	23.44	8.66
W	8.85	4.11	8.48	4.13	8.79	5.11
D	9.67	6.25	9.94	6.01	9.79	6.47
Dd	2.63	2.83	4.28	5.25	4.86	5.04
D+	5.63	3.08	5.96	3.33	6.93	4.32
Do	13.47	6.48	13.99	7.86	14.87	7.80
Dv	1.39	1.51	2.46	1.97	1.43	1.74
M	3.56	2.33	3.57	2.17	6.00	4.33
FM	2.83	1.79	3.12	2.76	2.41	2.43
m	1.52	1.56	1.69	1.89	1.18	1.17
FC	2.39	2.07	1.58	1.95	1.54	1.60
CF	1.37	1.37	1.58	1.38	1.24	1.38
C+Cn	0.37	0.72	0.48	0.56	0.36	0.54
Sum C'	1.35	1.60	2.16	1.79	1.50	1.57
Sum T	0.92	1.09	0.86	1.35	0.46	0.99
Sum V	0.67	0.95	1.09	1.23	0.60	1.20
Sum Y	0.80	1.07	1.81	1.40	2.12	2.62
H	2.42	1.81	2.05	1.45	3.17	2.44
LAMBDA	0.88	0.85	0.94	1.68	1.57	3.47
Col-Shad	0.63	0.96	0.95	1.13	0.67	1.26
Zf	11.70	4.11	11.38	4.31	12.67	5.21
Afr	0.53	0.20	0.47	0.16	0.52	0.20
P	4.93	1.96	5.22	1.90	4.67	2.08
X+%	0.55	0.14	0.53	0.11	0.40	0.14
3r +(2)/R	0.40	0.19	0.33	0.15	0.38	0.18
Sum Sp.Sc	4.73	3.33	3.40	2.20	5.07	3.23

Table 3

Comparative Analysis Between the Non-Patient, Depressive
and Schizophrenic Samples

	Non-Patient vs. Schizophrenics	Non-Patient vs. Depressives	Depressive vs. Schizophrenics
R	1.36	1.01	5.29*
W	-0.06	-18.50*	0.32
D	0.55	-1.13	-0.33
Dd	1.01	0.68	-2.76*
D+	1.05	1.32	0.98
Do	1.06	0.38	-14.67*
Dv	0.17	2.33*	4.48*
M	1.22	-0.06	1.13
FM	-0.66	0.30	2.15*
m	0.87	0.52	0.71
FC	1.81	6.75*	0.97
CF	-13.00*	21.00*	-0-
C+Cn	0.06	-0.69	6.00*
Sum C'	-5.00*	4.26*	3.00*
Sum T	4.60*	-0.23	1.11
Sum V	-0.28	1.50	16.33*
Sum Y	0.85	3.06*	0.25
H	1.19	1.03	1.13
LAMBDA	0.26	0.07	0.35
Col-Shad	0.13	1.88	-2.15*
Zf	0.88	-1.60	1.43
Afr	-0-	1.50	1.25
P	-2.17*	-4.83*	-3.06*
X+%	-0-	0.67	-4.33*
3r +(2)/R	2.00*	1.75	1.67
SumSp.Sc.	-2.83*	1.16	1.62

* Significant at the .025 alpha level

Eighteen of the 26 calculated variables showed significance. For the following abbreviated variables, refer to Appendix E for clarification. The CF variable was found to be significant for the non-patient sample. The DV variable was found to be significant for the depressive sample. No variables were found to be significant exclusively for the schizophrenic sample.

Variables differed among two groups independently. The number of R, the use of detail (Dd & Do), animal movement (FM), shading (C+Cn & Sum V), conventional use of form (X+%) and blends of color and shading (Col-Shad) variables differed between the depressive and schizophrenic samples. The number of whole responses (W), light-dark shading (Sum Y) and Form Color (FC) variables differed between the depressive and non-patient samples.

The total of texture shading (Sum T), the total of special scores (Sum Sp. Sc.) and the proportion of reflection plus pair response ($3r + (2)/R$) variables differed between the non-patient and schizophrenic samples. The total of achromatic color (Sum C') and the popular response (P) variables differed between all three samples. The responses using a frequently used detail of the blot (D), the objects seen as separate but related (D+), the proportion of movement on a static blot (M & m), the number of human responses (H), the

ratio comparing frequency of form responses to all other responses (LAMBDA), the frequency of Z responses (Zf) and the ratio comparing number of responses of the last three cards to the first seven cards (Afr) of the Rorschach Inkblot Technique (RIT) variables did not show significance to any of the samples.

Tables 4, 5 and 6 present a listing of variables that help differentiate between each of the three samples. Table 4 presents all the clusters of variables that were significant for the separate samples in the study. Table 5 presents the individual variables that were significant when comparing two samples together. It also presents the variables which produce no significance. Table 6 presents the variables that were significant specific to each sample and the three variables which appeared in all samples.

Non-Patient Sample

The responses from the non-patient sample were found to cluster along two sets of variables. These clusters consisted of cognitive and affective types of variables. The cognitive variables came from responses to the whole blot (W), which is thought to represent organized cognitive activity, and totals of special scores (Sum Sp. Sc.), which indicates cognitive processing. The non-patient sample demonstrated more

Table 4

Clustered Rorschach Variables for the Non-Patient,
Depressive and Schizophrenic Samples

Non-Patient	Depressive	Schizophrenic
W	W	
FC	FC	
CF	R	R
Sum C'	Sum C'	Sum C'
Sum T	Dv	Sum T
Sum Y	Sum Y	
P	P	P
3r + (2)/R		3r + (2)/R
Sum Sp. Sc.		Sum Sp. Sc.
	Dd	Dd
	Do	Do
	FM	FM
	C+Cn	C+Cn
	Sum V	Sum V
	Col-Shad	Col-Shad
	X+%	X+%

TABLE 5

Rorschach Variables of Related Significance

Non-Patient vs Depressive	Depressive vs Schizophrenic	Schizophrenic vs Non-Patient	No Significance
W	R	Sum T	D
Sum Y	Dd	Sum Sp. Sc.	D+
FC	Do	$3r + (2)/R$	M
	FM		m
	C+Cn		H
	Sum V		LAMBDA
	X+%		Zf
	Col-Shad		Afr

TABLE 6

Rorschach Variables Significant for
Specific Samples

Non-Patient	Depressive	Schizophrenic	All
CF	Dv	None	Sum C' P 3r + (2)/R

organized cognitive activity than the depressive sample and better cognitive processing style than the schizophrenic sample.

In the RIT, the affective variables were manifested in the total responses of color and shading factors (FC, CF, Sum Y, Sum T and Sum C'), which are assumed to be related to emotional expression, affection, dependency and affective internalization. The non-patient sample expressed their emotions more appropriately than either the schizophrenic or the depressive samples. The non-patient sample responses demonstrated a higher affection and dependency level than the schizophrenic sample. Their responses also indicated different internalization process than both the schizophrenic sample and the depressive sample.

The non-patient sample differed in the number of popular responses (P) and the proportion of reflection plus pair responses ($3r + (2)/R$) when compared to the schizophrenic and depressive samples. The P variable indicates conventional and perceptual accuracy because they appear in 1 of 3 universal responses, and the $3r + (2)/R$ variable is calculated to suggest self-image or egocentricity. The perceptual and accuracy variable differed between all three samples. The Self-image variable differed between the schizophrenic sample.

The non-patient sample had the highest degree of self image when compared to the other two samples.

Depressive Sample

The responses from the depressive sample clustered along variables pertinent to self-image, low mental activity and poor affect. The impression of lower self-image and high self-inspection is implied by the total of vista shading variables (Sum V).

The mental activity is represented by the number of responses (R), the number of whole responses (W), the reported form of objects (Dv & Do), and the number of animal movement (FM). The Dv variable implies intellectual limitations and was significant when compared to the other two samples. The W variable suggests organized cognitive activity and was found to be significantly less when compared to the non-patient sample. The Do variable represents conservative processing. The R variable implies processing and decision operations. The FM variable suggests mental activity. Each of these latter three variables were found to be significantly lower than the schizophrenic sample.

The affect came from the blends of color and shading features (Col-Shad.) and the total of achromatic color (Sum C'), which implies affective ambivalence and internalizations. These were both significant when

compared to the schizophrenic and non-patient samples. The total light-dark shading (Sum Y) and color usage (FC), which represents emotional experience, were also found to be significantly greater when compared to the non-patient sample.

Schizophrenic Sample

The responses from the schizophrenic sample clustered around a set of variables related to mental processing. These came from the number of responses (R), the use of detail (Dd & Do) and the total special scores (Sum Sp. Sc.) variables. These variables consisted of high processing and decision approaches (R), atypical and obsessive thinking styles (Dd), high conservative processing (Do) and high cognitive processing (Sum Sp. Sc.).

Other variables that differentiated the schizophrenic sample with the other two samples came from the shading (Sum V, Sum T & Col-Shad) and popular response (P) variables. These showed that the schizophrenic sample has a lower self-inspection than the depressive sample (Sum V), a lower affection and dependency than the non-patient sample (Sum T), higher affective ambivalence than the depressive sample and lower conventional and perceptual accuracy than both the samples (P).

Comparative Study

The findings of this study and the results found by Mason, Cohen and Exner (1985) were compared. Table 7 presents a comparative analysis of the data collected from the two studies. The schizophrenic and depressive samples had 13 of the 26 variables as significant in both the Mason, Cohen and Exner study and the current study. The non-patient sample had the fewest significant variables at 7 of the 26 in both studies. The non-patient sample appears to have a closer set of data in this current study with the study done by Mason, Cohen and Exner. The schizophrenic and depressive samples appear to have a different set of data.

Summary

In summary, the comparative analyses of the 26 variables for this study showed 18 variables to have significant differences between the non-patient, depressive and schizophrenic samples. The variables represented features of cognitive and mental capabilities, affective traits and self-imaging traits. The non-patient sample differed from the schizophrenic and depressive samples through cognitive and affective variable clusters. The depressive sample differed from the non-patient and schizophrenic samples through self-imaging, mental activity and affective variable

TABLE 7

Comparative analysis between Mason, Cohen and Exner
Study and Current Study

	Schizophrenics	Depressives	Non-Patients
R	41.50*	6.76*	-0.74
W	1.34	4.17*	0.14
D	6.50*	-13.50*	-1.37
Dd	1.09	0.70	1.37
D+	2.47*	3.53*	-1.54
Do	3.76*	2.58*	-0.11
Dv	1.70	0.00	-1.61
M	1.71	-1.94	-1.95
FM	2.29*	0.80	-0.82
m	0.29	1.80	0.55
FC	2.83*	0.50	-10.31*
CF	2.50*	-0.36	-3.36*
C+Cn	0.76	0.21	0.70
Sum C'	2.57*	3.38*	0.37
Sum T	0.32	0.83	-0.21
Sum V	0.07	-1.00	1.19
Sum Y	0.93	-6.67*	2.25*
H	2.07*	8.33*	4.89*
LAMBDA	0.25	0.21	0.41
Col-Shad	0.33	2.83*	0.57
Zf	9.15*	-3.00*	0.18
Afr	3.00*	0.00	-4.00*
P	2.85*	-0.50	-2.41*
X+%	4.00*	15.00*	-3.50*
3r +(2)/R	0.00	3.00*	0.33
Sum Sp.Sc	0.76	-1.97*	1.57

* Significant at the .025 alpha level

clusters. The schizophrenic sample differed from the non-patient and depressive samples through mental processing variable clusters. A comparison of the current study to Mason, Cohen and Exner (1985) showed differences between some sets of variables.

CHAPTER 4
DISCUSSION

The data from this study compared the RIT variables of the non-patient, depressive and schizophrenic samples. The data gathered indicated a clustering of variables consistent with the criteria of the Diagnostic and Statistical Manual of Mental Disorders-3rd edition-revised (DSM-III-R) (American Psychiatric Association, 1987) for differentiating the schizophrenic and depressive samples. The variables showed differences in areas of mental and cognitive abilities, affective behavior styles and self-imaging. The following sections discuss each sample.

Non-Patient Sample

The responses from the non-patient sample showed a clustering of variables differing from the other two samples through cognitive abilities and affective behavior styles. In comparison to the depressive sample, the non-patient sample obtained typical expected patterns. They had more organized cognitive activity and differed in internalization processes along with having lower conventional and perceptual accuracy. They expressed their emotions more appropriately and had a higher degree of positive self-image. The summary suggests non-patient people can think more clearly, rationalize more appropriately, display their emotions

appropriately, have better self-esteem and tend to deal with reality in a common but not highly conventional manner.

In comparison to the schizophrenic sample, the non-patient sample has a better cognitive processing style, and like the depressive comparison, may internalize experiences in a different way. The non-patient sample has a more conventional and perceptual accuracy than the schizophrenic sample. They also have a higher degree of affection and dependency and express their emotions more appropriately.

The composite of the differences is consistent with the expectation that non-patients think in a more conventional style. Their thoughts are clearer and rationalized more appropriately as seen by the use of the RIT whole blots and the sum of special scores. The emotions of non-patient people are displayed in a typical manner, and as a whole, they tend to have different needs from people with schizophrenic symptoms as seen by the color-shading variables.

Depressive Sample

The Rorschach Inkblot Technique (RIT) elicits a cluster of variables that relate to major affective expressions. In the diagnosis of depression, affect is the major concern. The findings of this study are consistent with these factors related to affect. This

study found that the depressive sample demonstrated different affective internalizations and more ambivalence than either the non-patient or schizophrenic samples for example in the Col-Shad variables. The depressed people also displayed a stronger experience of emotions compared to non-patients.

This study found additional clusters besides affective characteristics, which would be typical of depressed individuals as categorized by the DSM-III-R. The responses of the depressive sample showed significant clustering in the variables related to mental activity. The findings suggest people with depression respond to the RIT with a dulled mental activity. When compared to non-patient subjects, depressed people tend to be less organized in their cognitive activity. Compared to people with schizophrenia, depressed people have more conservative thought processing, decision operations and lower mental activity.

Depressed people also saw themselves in a different way than the other two samples in the study. Their self-image was lower than the non-patients and the people with schizophrenia. Their self-inspection was greater when compared to people with schizophrenia. This suggests depressed persons tend to belittle themselves.

Schizophrenic Sample

Traditionally persons with schizophrenia have given responses to the RIT which related to problems in thinking and perception. The findings from this study are consistent with this factor. They tended to have atypical and obsessive thinking styles when compared to the depressed group and have higher cognitive processing than the non-patient group.

Persons in the schizophrenic group processed their cognitive style in a less conservative manner than those of the depressed group. Their accuracy in perception was lower and used a less conventional method than the non-patient and depressed groups. However, people with schizophrenia tended to have higher thought processing and approached their decisions more rapidly than people who were depressed.

In this study, people with schizophrenia had a lower self-introspection rate when compared to depressed subjects. They also had lower affection and dependency traits than the non-patient group. Based upon these findings, people with schizophrenic symptoms would be expected to be more loners and non-caring about their appearance than either of the two other groups.

Conclusion

The results of the study provide some support for the hypothesis that the Exner Comprehensive System yields

clusters of variables that differentiate between samples of non-patient, depressive and schizophrenic groups. The clusters were accurate in assessing characteristics of diagnostic groups consistent with the DSM-III-R criteria.

The results of the current study differed in some aspects from the Mason, Cohen and Exner (1985) study. Some of the differences may be related to differences in the type of data that was collected as well as the way it was collected. Another difference between the two studies is Mason, Cohen and Exner showed the strongest difference to be between the schizophrenic and non-patient populations, whereas, the current study showed that the strongest differences were between the schizophrenic and depressive samples.

It is recommended further attempts be made to strengthen the Indices of the Exner Comprehensive System. This could help to provide a crisper diagnostic process for the RIT. New methods might be designed to study raw data on all populations. Replication of statistical methods from previous research is also recommended.

In conclusion, it is important for clinicians and any other mental health professional who use the RIT to understand that the variables from the RIT may vary between different clinical groups. The variables can

also assess differences within each clinical group to measure accurately the personality characteristics as described by the DSM-III-R. Responses to the RIT may not always be consistent in the way variables cluster but they are consistent in their attempt to define clinical populations.

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APPENDIX A

**SUMMARY OF THE
ADMINISTRATION GUIDELINES**

<u>Procedure</u>	<u>Instructions and Rationale</u>
Material	Use standard blots in chronological order
Seating	Sit side by side in order not to influence subject and to obtain a better view.
Introduction to the Test	Prepare for the test procedure, and minimize mistrust or anxiety about the situation. Explain where test results will go and when they will be available.
Instructions	After card is placed in hand of subject state "What might this be?"
Response Phase (Association)	Record responses verbatim. Provide non-directive encouragement and defer questions. Do not inject bias. Minimize potential rejection by reviewing purpose of assessment. Avoid leading remarks and suggestions.
Inquiry Phase	To clarify responses. "I want to see it like you do."
Valid Procedure	Protocols must have 14 or more responses.

APPENDIX B

SCORING GUIDELINES

1. What is the location?
2. What is the developmental quality?
3. What are the determinants?
4. What is the form quality?
5. Is there a pair?
6. What are the contents?
7. Is it popular?
8. Should there be a Z score?
9. Are there any special scores?

APPENDIX C

SUBJECT

INFORMED CONSENT

I hereby agree to participate in testing by _____ for _____ class. I understand that this procedure is for the education of the tester and that the results therefore may not be valid. Tests will be scored and discussed anonymously for learning purposes only. I understand the results will be used for research material without the use of names. I am also aware that the nature of testing may cause some discomfort and I should inform the tester if this occurs. I may withdraw at any time without consequences.

Tester:

Subject:

Date:

Date:

APPENDIX D

STUDENT CONSENT FORM

I, _____ agree to allow Ron Redick to
print name

use data from my Rorschach Protocols for his Thesis Project. I understand that all information will be anonymous and that it will be used only for educational purposes. Mr. Redick has explained his intentions and procedure to me and I understand that it will require no additional class work for me.

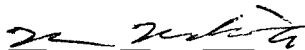
SIGNED

APPENDIX E

DEFINING VARIABLES

Variable	Definitions
R	Number of responses
W	Number of responses using entire blot
D	Number of responses using frequent area of the blot
Dd	Number of responses using infrequent area of the blot
D+	Number of responses with two or more objects described as separate but related
Do	Number of responses with an object reported with natural form demand
Dv	Number of responses with an object reported with no form demand
Zf	Number of responses with Z Frequency
M	Number of responses with human movement
FM	Number of responses with animal movement
m	Number of responses with inanimate movement
Col-Shd	Number of responses containing blends using color and shading techniques
FC	Number of responses created by primary form and secondary color
CF	Number of responses created by primary color and secondary form
C+Cn	Number of responses with either use of color or naming color with no form
Sum C'	Number of responses with achromatic color
Sum T	Number of responses with texture shading
Sum V	Number of responses with depth shading
Sum Y	Number of responses with light-dark shading
H	Number of responses containing Human form
L	Ratio comparing frequency of Form responses to all other responses
X+%	Conventional use of Form
P	Number of Popular responses
Afr	Ratio comparing number of responses of last three cards to the first seven cards
3R+2/R	Proportion of reflection & pair responses to total record
Sum Spec Sc	Number of responses with the Sum of all special scores

I, Ron S. Redick, hereby submit this thesis/report to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without permission of the author.

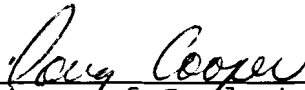


Signature of Author

07/21/93

Date

Personality Organizations as Expressed in the Rorschach Interpretation Technique
Title of Thesis/Research Project



Signature of Graduate Office
Staff Member

July 28, 1993

Date Received