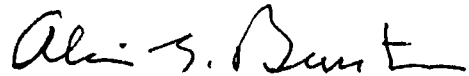


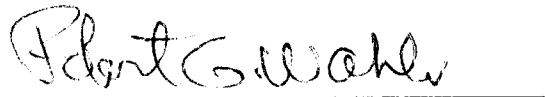
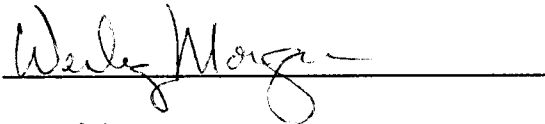
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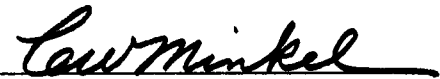


Alvin G. Burstein, Major Professor

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Associate Vice Chancellor
and Dean of The Graduate School

**AFFECTIVE COMPONENTS IN RORSCHACH'S TEST, THE
MULTIDIMENSIONAL PERSONALITY QUESTIONNAIRE
AND EARLY MEMORIES**

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Jean Marie Schaid

August, 1993

DEDICATION

This dissertation is lovingly dedicated to my mother, Helen M. Schaid, and to the memory of my father, Thomas W. Schaid.

ACKNOWLEDGMENTS

My deep appreciation goes to many individuals who contributed to this dissertation and to my development and growth as a clinical psychologist. In particular, I would like to give special thanks to Dr. Alvin Burstein, the chair of my doctoral committee, for his continued guidance, support and encouragement during the arduous dissertation process and throughout my graduate training. His generosity has been remarkable and I feel very grateful to him for the many ways in which he has assisted me during these years. I would also like to thank the other members of my committee for their helpful contributions. Dr. Wesley Morgan not only made methodological suggestions which enlarged the scope of my work but also painstakingly reviewed each draft of the dissertation which enabled me to produce a greatly improved finished product. Dr. Robert Wahler also made helpful suggestions during the dissertation process. Furthermore, he provided me with clinical supervision on some very difficult therapy cases which was pivotal in my development as a clinician. I am also grateful to Dr. Mark Hector for his contributions to my dissertation. Each time the committee met Dr. Hector aided me in communicating my thoughts. He was able to decipher some ideas that were difficult for me to explain and he restated them in an eloquent manner that made them easier to understand.

I am also sincerely grateful to the many members, past and present, of the Burstein-Loucks research group who have contributed to the data collection, scoring and reconciliation of the Rorschach data. They have also contributed

many ideas which have stimulated my thinking and greatly advanced my knowledge of the Rorschach. I am particularly grateful to Philip Green for his tremendous help in computer analysis. He is not only very knowledgeable when it comes to statistical analysis and computers but also a delightful person who has always been a pleasure to work with. Special thanks also go out to Keith Noland who lent his considerable skills in a pinch. He too was great to work with and I appreciate him making himself available on short notice.

Two special friends also have my gratitude for their help in my dissertation. Julie Shaing and Lynn Garvin each provided tremendous help in scoring the early memory data. They not only worked hard but made the process much more fun. In addition to their contributions to the dissertation they are both good friends who have enriched my life.

Many other friends deserve special mention for their help and support. During my training I have been grateful for the wonderful friendships that I have been fortunate to develop. People such as Terri Tucker, Karen Bartley, Lisa Kaley, Sue Dunn, Greta Hunter, Doug Creveling and Barbara Taylor have been supportive during my work on the dissertation and I am grateful to them for helping me find humor in the process. I am thankful to Janet Carnes for all the work she has done to get my dissertation into the proper form. I am also grateful to Connie Pierce for all the encouragement she gave me throughout my training. The loss of Connie has been very difficult for many people and it makes me especially sad that she never got to apply her great clinical talents. It has been a

loss not only for her friends and family but for the many patients she could have helped had she lived.

Other dear friends I have known for many years also deserve my gratitude and thanks. Carol Corgan has been with me through thick and thin, sharing all the tears and the laughter through the years. Her friendship is one of my greatest treasures. Tim Sasseen has also been a very special friend and the courage he has demonstrated has been inspirational. Joan, Paul and Bree Boston have been good friends as have Janice Edison, Dave Neudek, Janet and Dan Yelovich and Candice Kane. I am grateful to all of them and feel that I have been very blessed to enjoy such friendships.

In addition to the many friends that have contributed to my development I have had some training experiences that have been indispensable to me. I am especially grateful to one of my clinical supervisors, Lorrie Beevers, who made important contributions to my clinical growth. She was straightforward in confronting me with my weaknesses and, as painful as it was at times, she helped me access my talents, and, as a result, become a better clinician. I also feel extremely lucky that I was able to spend three years working at the Peninsula Village. It was a very special place for me and even though I have not worked there for two years I continue to process and learn from my experience there. I want to acknowledge Dr. Patte Mitchell, Dr. Beverly Gibbons and Dr. Vance Sherwood for all they taught me. Also, I feel grateful to all the patients, at the

Village and elsewhere, from whom I have learned, and continue to learn, a great deal.

During the long haul through graduate school, and throughout my life, my family has supported and nurtured me and I am eternally grateful to each of them. My mother, Helen Schaid, has always supported me even when she did not understand what I was doing or did not agree with my decisions. My sisters Mary Ellen and Elizabeth are not only my siblings but my very close friends who have always encouraged me in my efforts. My brother Michael's great sense of humor has kept me laughing and I am grateful to him for the help he has given me in such fun activities as moving. My two special nieces, Kara and Bethany have brought me tremendous joy and it is a source of sadness for me that I have not been closer to them geographically as they have grown. Also, I would like to acknowledge my uncle, Donald Schaid, who has been tremendously helpful and generous to me and to my family.

Finally, two family members who are no longer living but continue to influence me greatly are my father, Thomas Schaid (1930-1971) and my brother Thomas Schaid (1958-1988). The very sudden, early loss of my father has had a tremendous impact on my life and I have always felt sad that there was no opportunity to say good-bye to him. He lives on in my heart, nonetheless, and in my mind I continue to share my joys and my sorrows with him. Although it was terrible to watch my brother suffer I am very grateful to him for having let me be so close to him in his last days. I will also be forever grateful to Dr. Burstein for

fully supporting my decision to take a leave from my studies to be with my brother. Despite his great suffering Tommy was exceptionally brave and never lost his sense of humor. Through his process of dying he taught me much about living.

ABSTRACT

An assumption held in many psychological theories is the idea that people have characteristic ways of viewing their world as basically gratifying and benevolent, or ungratifying and malevolent in affective quality. The aim of this study was to investigate the affective quality of object representation as they appear in the Rorschach responses and earliest memories of 100 gifted college students. The affective ratings of these productions were compared to scores on the MPQ, an objective personality instrument which identifies two higher-order personality traits called "Positive Emotionality" and "Negative Emotionality." It was hypothesized that the affective ratings given to the Rorschach percepts would correlate with affective ratings of early memories and with the emotionality traits measured by the MPQ (Tellegen, 1982).

The Burstein-Loucks Rorschach scoring system (1989) was utilized to assess the affective quality of the Rorschach percepts. The Explicit Motivational Valuation category was used to determine whether Rorschach percepts containing human movement and/or human emotion were benevolent, malevolent or neutral in affective tone. Likewise, the Implicit Motivational Valuation category was used to evaluate the affective tone of percepts containing no human movement or human emotion. Items from an early memory rating system developed by Acklin and his colleagues (1991) were used to evaluate the affective quality of the earliest memory provided by each of the gifted college students.

Results from the study were mixed. The Explicit Benevolent, Implicit Benevolent and Explicit Malevolent Rorschach ratings were found to be related to Positive and Negative Emotionality on the MPQ. The Implicit Malevolent rating, however, was found to either unrelated to the MPQ factors, or related in the unanticipated direction. Overall, the Explicit ratings were better than the Implicit ratings in predicting the emotionality factors. The Rorschach and Early Memory ratings were generally found to be unrelated with only one significant correlation found in 18 comparisons. Furthermore, the Early Memory ratings were found to be unrelated to the Positive and Negative Emotionality factors on the MPQ. Instead, the Early Memory ratings appeared to tap into a different phenomenon having to do with behavioral constraint and control rather than emotionality.

TABLE OF CONTENTS

CHAPTER	PAGE
INTRODUCTION	1
I. LITERATURE REVIEW	4
1. Overview of Psychoanalytic Theory	4
Object Relations Perspectives in Psychoanalytic Theory	5
Concept of the Representational World	7
Kernberg's Model of Object Relations	8
The Role of Affect	9
2. Trait and Temperament Approaches to Personality	11
Trait Theory	11
The Five Factor Model or the "Big Five" of Personality	13
The MPQ and Tellegen's Conceptualization of Traits	16
Temperament	21
3. The Projective Hypothesis and the Rorschach	24
Rorschach Content	27
4. Object Representation Scoring Systems	29
The Mayman/University of Michigan Group	29
The Blatt/Yale University Group	30
Burstein-Loucks Rorschach Scoring System	35
Other Object Representation Scales	37
5. Early Memories as a Projective Technique	39

	xi
Freud and Screen Memories	40
Adler and Early Memories	41
Psychoanalytic/Ego Psychological Approach to EMs	43
Cognitive-Perceptual Model of Early Memories	46
Relationship Paradigms in Early Memories	48
6. Summary and the Research Hypotheses	49
II. METHODOLOGY	51
1. Introduction	51
2. Subjects	51
3. Procedures	54
4. Instruments	54
Rorschach Variables	55
Multidimensional Personality Questionnaire Variables	57
Early Memory Variables	58
5. Reliability	59
Rorschach Reliability	59
Early Memory Variables	60
6. Data Analysis Procedures	62
7. Pilot Study	63
8. Research Hypotheses	66
III. RESULTS	67
1. Descriptive Statistics	67

Rorschach Variables	67
MPQ Variables	78
Early Memory Variables	78
2. Results of Replication Study	85
3. Correlational Analysis of Combined Groups as a Single Sample	90
4. Multiple Regression	95
5. Early Memory and Rorschach Variables	96
6. Early Memory and MPQ Variables	100
7. Tellegen's Primary Personality Dimensions and the Rorschach	101
IV. DISCUSSION	107
1. Introduction	107
2. Replication of Pilot Data and Subsequent Combination of Groups . .	109
Replication	109
Combined Group of 100 Subjects	110
3. Interpretation of Early Memory Findings	112
4. The Rorschach and Tellegen's Primary Personality Dimensions	116
5. Response Productivity on the Rorschach	119
6. Is There an Affect Factor?	121
Positive and Negative Affective Factors and the Construct	
of Splitting	123
Emotionality and the Trait/State Debate	125
7. Conclusion	127

BIBLIOGRAPHY	129
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VITA	139
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LIST OF TABLES

TABLE	PAGE
1. Descriptive Statistics of Rorschach Variables	69
2. Descriptive Statistics for the MPQ Higher Order Factors	78
3. Descriptive Statistics for the Early Memory Variables	81
4. Spearman Correlations: Explicit and Implicit Motivational Valuation with Positive and Negative Emotionality in Both Groups of 50 Subjects	86
5. Spearman Correlations: R corrected Rorschach Explicit and Implicit Motivational Valuation with Positive and Negative Emotionality in Both Groups of 50 Subjects	87
6. Spearman Correlations: Combination of All Benevolent Scores and Combination of All Malevolent Scores with Positive and Negative Emotionality in Both Groups of 50 Subjects	89
7. Spearman Correlations: Explicit and Implicit Rorschach Motivational Valuation with Positive and Negative Emotionality in Combined Group of 100 Subjects	91
8. Spearman Correlations: R corrected Rorschach Explicit and Implicit Motivational Valuation with Positive and Negative Emotionality in Combined Group of 100 Subjects	93
9. Spearman Correlations: Combination of All Benevolent Scores and Combination of All Malevolent Scores with Positive and Negative Emotionality in Combined Group of 100 Subjects	94
10. Spearman Correlations: Early Memory Ratings and Rorschach Motivational Valuation	98
11. Spearman Correlations: Early Memory Ratings and R corrected Rorschach Motivational Valuation	99
12. Spearman Correlations: Rorschach Motivational Valuation and the Primary Dimensions of Positive Emotionality	102

13. Spearman Correlations: R corrected Rorschach Motivational Valuation
and the Primary Dimensions of Positive Emotionality 103
14. Spearman Correlations: Rorschach Motivational Valuation and
the Primary Dimensions of Negative Emotionality 105
15. Spearman Correlations: R corrected Rorschach Motivational Valuation
and the Primary Dimensions of Negative Emotionality 106

LIST OF FIGURES

FIGURE	PAGE
1. Explicit Benevolent Frequency Distribution	70
2. R corrected Explicit Benevolent Frequency Distribution	71
3. Implicit Benevolent Frequency Distribution	72
4. R corrected Implicit Benevolent Frequency Distribution	73
5. Explicit Malevolent Frequency Distribution	74
6. R corrected Explicit Malevolent Frequency Distribution	75
7. Implicit Malevolent Frequency Distribution	76
8. R corrected Implicit Malevolent Frequency Distribution	77
9. Positive Emotionality Frequency Distribution	79
10. Negative Emotionality Frequency Distribution	80
11. Frequency Distribution of Rater Affect Variable (N = 50)	82
12. Frequency Distribution of Caregiver Interaction Outcome Variable (N = 32)	83
13. Frequency Distribution of Perception of Environment Variable (N = 50)	84

INTRODUCTION

Over the past fifty years numerous works have appeared in the psychological literature criticizing the use of clinical methods of prediction (Meehl, 1954) and, more specifically, the use of projective methods for the assessment of personality. In the 1970s, in particular, projective techniques were described as having poor psychometric properties, weak predictive power and overly complicated interpretative strategies (Cleveland, 1976; Holmen and Docter, 1972; Munter, 1975). Notwithstanding the criticism, projectives have continued to be widely utilized in both clinical and training settings (Piotrowski, 1984). Of all the commonly used projective techniques the Rorschach has continued to be the most frequently used (Piotrowski, Sherry & Keller, 1985; Archer, Maruish, Imhof & Piotrowski, 1991).

Despite its continued popularity the Rorschach method has generated controversy that extends beyond its psychometric merits. One controversial feature involves the role theory plays in the Rorschach. Anastasi (1976), in a discussion of projective techniques, states that "specific techniques need not be evaluated in the light of their particular theoretical slants" (p.559). Exner (1986) also downplays the significance of theory, stating that "very few projective methods are strictly theory based, least of all the Rorschach" (p.17). Burstein and Loucks (1989), while acknowledging that the Rorschach is often presented as a relatively theory-free technique, argue that it can not be truly theory-free and still render meaningful information about personality.

Interpretation of the results of Rorschach testing is possible only in the context of theoretical expectations about the functions of the mind, the origins of psychopathology and the psychotherapeutic implications of such factors..... an attempt to find a theory free meaning condemns one to a trivial correlational sign approach that has proven relatively barren. The theoretical matrix for the test should be explicit (p. 5).

Psychoanalytic theory more than any other, has provided a comprehensive matrix within which different aspects of personality have been productively explored using the Rorschach. Recent developments in psychoanalytic theory have centered around the study of object relations phenomena. The basic premise of the object relational viewpoint is that relationships with significant people become internalized during early development. Through the process of internalization interpersonal events in the outside world get transformed into intrapsychic mental schemata or mental representations. These schemata of self and of other, respectively known as self-representations and object-representations, play a large part in regulating behavior and serve as templates through which meaning is constructed and the world is subjectively understood (Blatt & Lerner, 1983a). It is hypothesized that the percepts generated by a person in response to the Rorschach cards will reveal characteristic information about that person's mental representations or, in essence, their intrapsychic world.

In the psychoanalytic study of object relational phenomena the affective tone of mental representations has been a key area of investigative endeavor. The fundamental premise is that people have characteristic and relatively enduring

ways of viewing life in general, and relationships in particular, as basically gratifying and benevolent or ungratifying and malevolent, in affective quality. This interest in affective tone is not exclusively psychoanalytic. In fact, a wide range of theories including various theories of temperament and trait, highlight the stability and endurance of an individual's affective experience of the world. An assumption common to all these theories is that characteristic affective patterns should be measurable in some way.

This study is concerned with the affective quality of object-representations as they appear in the Rorschach responses and early memories of gifted college students. The affective ratings given to these productions will be compared to scores on the Multidimensional Personality Questionnaire, an objective personality instrument which identifies two higher-order personality traits titled "Positive Emotionality" and "Negative Emotionality" (Tellegen, 1982). It is hypothesized that affective ratings on the Rorschach will correlate with affective ratings of early memories and with the personality traits measured by the objective instrument. Chapter I of this study reviews object relations theory and the assessment of the affective tone of mental representations as they are expressed in projective test data. Various theories of trait, and of temperament, are discussed in terms of the role they afford affective experience. The chapter is concluded with an outline of the questions being investigated. Chapters II and III describe the methodology, the findings from a pilot study and the results of this study, while Chapter IV provides a discussion of the current research findings.

CHAPTER I

LITERATURE REVIEW

1. OVERVIEW OF PSYCHOANALYTIC THEORY

Although psychoanalytic theory is often thought of as monolithic and dogmatic this perception is not accurate. Contemporary psychoanalytic theory is characterized by its pluralism (Wallerstein, 1988) and its diversity. Rather than being dogmatic it is an intellectual movement in which competing points of view can be discussed and debated without the necessity of reaching final conclusions. In its relatively short evolutionary history psychoanalytic theory has grappled with, and in many cases, subsumed various ideas. Freud's work itself, far from being static, underwent significant development and revision during his life time. For instance, with his presentation of the structural model in the 1920s he began to address relational concerns that had been largely ignored in his earlier topographic model (Greenberg & Mitchell, 1983). After Freud's death psychoanalytic theory continued to evolve with the advent of ego psychology (Blanck & Blanck, 1974); object relational perspectives (Greenberg & Mitchell, 1983); and self-psychology (Kohut, 1984).

Psychoanalytic history has been one of intellectual ferment and controversy. Much of the controversy lives on today. One long running debate involves the question of whether drive factors or relational factors are primary in human development. In spite of all the controversy there are certain axiomatic beliefs that

unify psychoanalytic thinkers. One such belief is that early experience has a profound influence on later functioning. A more specific axiomatic belief, the one that is a basic premise of this study, is that interpersonal expectations and patterns established in childhood have an enduring impact on interpersonal functioning in adulthood (Westen, 1990).

Object Relations Perspectives in Psychoanalytic Theory

One of the most significant developments in the evolution of psychoanalytic thinking has been the advent of object relations theory. As is the case with psychoanalytic theory in general, object relations theory is not a singular, circumscribed theory. There are actually a number of theoretical viewpoints fitting under the rubric of object relations theory that vary in terms of what they choose to emphasize, and sometimes, in terms of what they see as basic human motivational forces. It is beyond the scope of this study to provide a detailed account of the similarities and differences in the various viewpoints. Instead, object relations theory will be described and discussed in more general terms.

Greenberg and Mitchell (1983) make the statement that "all psychoanalytic knowledge must begin with the individual's relations with others" (p.9). It is this focus on relationships, particularly early relationships, that is central in object relations theory. Broadly described, "object relations....denotes enduring patterns of interpersonal functioning in intimate relationships and the cognitive and affective processes mediating those patterns" (Westen, 1990, p.26). In contemporary psychoanalytic usage, the term "object," in its most literal sense,

refers to significant human "objects," or people, while the term "object relations" refers to human relationships and interactions. Object relations theory, however, encompasses not only relationships between people in the external, observable world but also internalized relationships that take place within the mind of an individual. The distinction is important. Interpersonal theories, such as the one proposed by Sullivan (1953), are primarily concerned with interactions that take place between two (or more) people in the social environment. Ticho (1978), while crediting Sullivan for bringing attention to the importance of interpersonal relationships, also criticized him for leaving "the great importance of the inner world out of the picture" (p.149).

Object relations theory stipulates that internal psychic structure, and personality in general, develops as a result of significant interpersonal relationships in early life (Fairbairn, 1952; Winnicott, 1965). Kernberg, a very influential object relations theorist, addresses this interplay of interpersonal and intrapsychic phenomena. He states:

In broadest terms, psychoanalytic object-relations theory represents the psychoanalytic study of the nature and origin of interpersonal relations, and of the nature and origin of intrapsychic structures deriving from, fixating, modifying, and reactivating past internalized relations with others in the context of present interpersonal relations. Psychoanalytic object-relations theory focuses upon the internalization of interpersonal relations, their contribution to normal and pathological ego and superego developments, and the mutual influences of intrapsychic and interpersonal object relations (Kernberg, 1976, p.56).

In essence, early relationships with significant people become internalized and, through the process of internalization, generate intrapsychic mental

representations or images. These mental representations play a significant part in how one functions in current interpersonal situations.

Concept of the Representational World

A significant shift in emphasis that occurred with object relations theory involved the development of the concept of the representational world (Sandler & Rosenblatt, 1962; Jacobson, 1964). Whereas objects had originally been viewed as the repositories of drives (Freud 1905/1953), and later as figures of fantasy (Klein, 1948), they came to be viewed as intrapsychic images of significant people. Intrapsychic images of the self, and of the self in relation to significant people, are the other components of the representational world. Sandler and Rosenblatt explained that "the child creates, within its perceptual or representational world, images and organizations of his internal as well as external environment...in order to know what is 'outside,' the child has to create a representation of that 'outside' as part of his representational world" (p.132).

Blatt and Lerner (1983a), in their discussion of mental representation, explain that the "concepts," or images, of the self and the other become a part of ones psychological structure and result from early interpersonal relationships with significant people. They note the interdependence of the intrapsychic and the interpersonal in stating that "these concepts or representations of self and others..shape and direct subsequent interpersonal relationships" (p.192). In essence, the interpersonal world helps shape the intrapsychic world, which then influences interpersonal functioning. Ogden (1983) points out that internalized

images of object relationships are more than simple reproductions of the actual, external object relationships. He also emphasizes the largely unconscious nature of the representational world.

Kernberg's Model of Object Relations

Kernberg's theoretical work, more than that of other object relations theorists, informs this study most directly. It is therefore important to present his ideas in some detail. Kernberg developed his model of object relations within the framework of traditional drive theory. His model of personality development draws heavily upon the separation-individuation work of Mahler (Mahler, Pine & Bergeman, 1975). Primary in Kernberg's (1976) model, and consistent with Mahler, is the belief that the infant initially has no sense of being a separate person from the mother. In more general terms, the infant lacks awareness of the distinction between self and other.

During the earliest phases of development experience is organized around primitive affect states which are subjectively felt to be either pleasurable or not pleasurable. Since there is no awareness of the separateness of self and other, mental images of self and other are fused. These undifferentiated self-object representations, as they are called, are essentially divided into two camps. Gratifying and pleasurable experiences with the mother (or the other) result in the formation of "good" self-object representations. Frustrating or displeasing experiences with the mother lead to the formation of "bad" self-object

representations. The "good" and the "bad" self-object representations are essentially split off from each other and can not be experienced simultaneously.

Through experiences of both gratification and tolerable frustration, in conjunction with physiological maturation, self and object images gradually become differentiated from one another. In other words, the infant is developing the capacity to discriminate between self and non-self. However, at this point "good" or libidinally invested configurations and "bad" or aggressively invested configurations are still split. Eventually, the libidinal and aggressive components of the self-representation become integrated into a self-concept or "ego identity." The libidinal and aggressive components of the object-representation also become integrated and the object can now be perceived as a whole, separate person. It is with these developmental accomplishments that the intrapsychic structures of the ego, superego and id are consolidated.

The Role of Affect

Kernberg identifies the three basic units of early psychological structure as the self-representation, the object-representation and the affective disposition that links the representations. It is important to emphasize the importance of the affective component in this theory. It is quite common in the psychological literature to find cognition and emotion presented as totally independent psychological functions. Kernberg rejects this artificial dichotomy and, instead, sees these functions as interacting with one another throughout the process of development. Kernberg was profoundly influenced by Jacobson (1953) who

acknowledged the complexity involved in conceptualizing affect and stated that affect could "be understood only from the study of the associated conscious and unconscious ideational processes" (p.47). Jacobson saw affects not only as discharge processes but as dispositions that have regulatory functions within the psyche. Citing Jacobson's work Kernberg (1980) made the statement: "I now conceive of affects as deriving from constitutionally determined pleasurable and unpleasurable subjective states that first arise in the undifferentiated psychophysiological self, are then integrated and differentiated in the context of internalized 'good' and 'bad' object relations" (p.89). Although Kernberg clearly identifies himself as a "drive" model object relations theorist, Greenberg and Mitchell (1983) argue that Kernberg is a drive theorist more in name than in actuality. They interpret Kernberg's ideas on affect in the following statement. "Kernberg's blending of Mahler's and Jacobson's ideas with those of Melanie Klein and Fairbairn led him to a perspective in which affects rather than drives represent the fundamental source of human motivation" (Greenberg & Mitchell, 1983, p.381).

It is noteworthy that psychoanalytic approaches to cognition have always been concerned with the interaction between cognitive and affective processes. The dominance of a behavioral viewpoint in American psychology resulted in the belief that emotional or affective phenomena were not important topics for psychologists to investigate. Even with the cognitive revolution approaches such as information-processing basically ignored the role of affect. Westen (1990)

argues that "for psychoanalysis , it is axiomatic that cognition is largely if not entirely in the service of affective and motivational processes, and that needs, wishes, and conflicts are involved in categorizing and selecting information to be consciously perceived and processed" (p.43).

2. TRAIT AND TEMPERAMENT APPROACHES TO PERSONALITY

Trait Theory

One of the most prevalent ways of conceptualizing personality has been through the "trait" approach. There is a basic assumption, evident long before the advent of psychology, that people have relatively stable and enduring personality attributes that characterize them as individuals. These attributes, or traits, are internally based and are thought to have a significant influence on behavior. In essence, knowing a person's traits should enable one to predict how that person is likely to behave in a certain situation. Within American psychology trait theorists have held a rather prominent place. Psychologists such as Allport, Cattell, Eysenck and Guilford were instrumental in not only developing specific trait theories but also in advancing the trait approach to personality (Digman, 1990; John, 1990).

In the late 1960s and early 1970s the trait approach, and more specifically, the construct of "traits," received considerable criticism. The most vocal of the critics, Mischel (1968), not only disparaged trait theory but also psychodynamic accounts of personality and the field of personality assessment. The premise of

both trait and psychodynamic approaches is that there are enduring internal personality traits that have a significant influence on how people behave. Mischel argued that behavior was not so much influenced by an individual's personality attributes but more by the situation the individual finds him or herself in. In other words, behavior is seen as situation specific. Mischel stated that "the principles that emerge from studies of the variables that control behavior..become the bases for developing theory, not about global traits and states, but about the manner in which behavior develops and changes in response to environmental stimulus changes" (1968, p.10).

Like many controversies within the field of psychology the "person-situation" debate has been more or less settled through an interactionist perspective which takes into account both personality and environmental/situational factors. Mischel (1973) himself moved away from a strictly situational perspective to a more interactionist position. It is also quite significant that he has called for the investigation of personal constructs and encoding strategies used by individuals. He states that "because people can and do cognitively transform stimuli focusing on selected aspects, their selective attention, interpretation, and categorization of events substantially alter the meaning and impact of those stimuli" (Mischel, 1990, p.118). Being more inclusive than he was in his earlier work, Mischel seems to be acknowledging that personal attributes are extremely important. Environmental factors are no longer seen as the only determinants of

behavior and, instead, attention is given to the person as an active agent who can have an impact on the environment.

The "embattled concept of the trait" (Kreitler & Kreitler, 1990), far from being discredited, is alive and well. Kendrick and Funder (1988) outline different questions raised by the person-situation controversy and provide evidence that traits are a viable tool for conceptualizing personality. Carson (1989), expressing some confusion about why the debate occurred in the first place, points out that "internal dispositions and external circumstancesare not mutually independent either conceptually or empirically" (p.228). McAdams (1992) sums it up by stating that:

There is growing consensus in personality psychology that traits exist, endure across time and situations, and can be measured reliably and validly, and that measurements of individual differences in traits can be used to great advantage in the prediction of human behavior (pp.329-330).

The Five Factor Model or the "Big Five" of Personality

The resurgence of "traits" was probably due, at least in part, to the development of the Five Factor model or the "Big Five" model of personality traits. A brief look at the history of the Five Factor model reveals that Fiske (cited in Digman, 1990), in an attempt to replicate Cattell's 16 primary factors, came up with a five factor solution. Later, Tupes and Christal, and Norman (cited in McAdams, 1992) replicated the five factor structure of personality traits. The Five Factor model has been described as a very broad categorization of personality factors. McCrae and John (1992) make the statement that "the five

factors do not exhaust the description of personality, they merely represent the highest hierarchical level of that description" (p.190). The model has gained many enthusiastic proponents and has reportedly been replicated in several different cultures, in children and adults, and across different observers (McCrae & John, 1992; Digman, 1990). The five factor structure has also been derived via different approaches. The "lexical approach" has involved the study of natural language descriptions of personality which has resulted in the five factor structure. Factor analysis of items from various personality questionnaires has also revealed five factors. Furthermore, in comparing the "Big Five" to other personality trait systems, striking parallels have been found and in some cases, the "Big Five" taxonomy has been able to subsume the factors identified in the other systems (Digman, 1990). All in all, there has been a great deal of empirical support for this taxonomy.

What, then, does this taxonomy involve? While the five factor structure has been consistently demonstrated the interpretations of, and the names given to the factors have varied. Perhaps one of the most well known, and most commonly utilized, is the five factor taxonomy provided by McCrae and Costa (1985). Their five factors are titled : I - Extraversion; II - Agreeableness; III - Conscientiousness; IV - Neuroticism; and V - Openness to Experience. Later, a comparison of these factors to those of Tellegen will be provided in that Tellegen's factors are the ones being investigated in this dissertation. McCrae describes the "Big Five" factors as follows:

What are these factors? N (for Neuroticism, negative affectivity, or nervousness) is the dimension underlying the chronic experience of distressing emotions, such as fear, guilt, and frustration. Most measures of maladjustment tap some aspect of N, and it is perhaps the dimension most familiar to clinical psychologists. Also familiar is E (for Extraversion, energy, or enthusiasm), which is seen interpersonally in sociability and dominance and temperamentally in high activity level and cheerfulness. O (for Openness to Experience or originality) is less wellknown: Open individuals are imaginative, aesthetically sensitive, intellectually curious, and attitudinally liberal; closed people are conventional in thinking and narrow in interests. A (for Agreeableness or altruism) is a dimension that contrasts trust, sympathy, and cooperation with cynicism, callousness, and antagonism. Finally, C (for Conscientiousness, control, or constraint) encompasses sense of competence and sense of duty, need for achievement, organization, planning, and self-discipline (p. 400).

While calling the Five-Factor model "a major conceptual and empirical advance in the field of personality psychology" (McAdams, 1992, p. 331) McAdams cautions that the model has limitations. He seems to feel that some thinkers have over-rated the model and act as though it might be the all encompassing theory personality psychologists have been searching for. Without diminishing the value of the construct of "traits" McAdams points out that trait theories can only reveal limited information about people because they do not take contextual and situational variables into account. He also discusses "core characteristics of human functioning" (p.337) that can not be adequately addressed by the "Big Five" model because they would not fit into trait dimensions which are typically linear. Furthermore, since a person's traits are often assessed via self-report there is less likelihood of tapping aspects of personality that are unconscious. John (1990), like McAdams, cautions that the "Big Five" are

nomothetic features of personality which are based on comparisons made across individuals. To gain an understanding of how a particular individual functions an idiographic approach may be necessary. McAdams concludes by stating that "conventional trait constructs are an indispensable aspect of any legitimate understanding of personality. But there is more to a comprehensive understanding of personality than traits" (p.337).

The MPQ and Tellegen's Conceptualization of Traits

Tellegen (1982), working at the University of Minnesota, has employed factor analytic methods in developing his self-report personality questionnaire called the Multidimensional Personality Questionnaire or the MPQ. Formerly named the Differential Personality Questionnaire, the MPQ is a 300 item, true-false, inventory designed to assess normal personality range. Tellegen used an exploratory approach in devising the test (Tellegen and Waller, in press). In essence, the test was not designed with the purpose of creating an instrument that could accurately measure an a priori construct. Rather, it was developed under the premise that the construct itself would evolve, change, and become more clear during the course of test development. As Reise and Waller (1990) explain, "the MPQ was developed over a 15 year time span during which numerous rounds of item writing, data collection and analysis, and construct redefinition took place" (p.45). Tellegen (1982) describes the test development process in stating that "constructs and data were allowed to shape one another throughout, with

constructs guiding item selection, and item data resulting in construct revision or consolidation" (p.1).

This test development process yielded eleven redundant, primary scales which, when intercorrelated, produce a higher order structure with three dimensions. The three higher-order factors, or Tellegen's three basic personality traits, are interpreted as Positive Emotionality (PEM), Negative Emotionality (NEM) and Constraint (CON). PEM is associated with the primary scales of Wellbeing, Social Potency, Achievement and Social Closeness. It is secondarily associated with the primary scale called Absorption. NEM is related to the scales of Stress Reaction, Alienation, Aggression and, secondarily to Absorption and to Control (negatively). The CON factor has three primary loadings in the Control, Harmavoidance and Traditionalism scales, with weaker (negative) relationships to Social Potency and Aggression (Tellegen & Waller, in press).

The higher-order factors of PEM and NEM are the factors under investigation in this dissertation. Tellegen describes the reasoning behind his interpretation of these two factors in the following statement:

The main idea is that in the case of both PEM and NEM the underlying trait structure includes a major and distinctive emotional response system, and that this system plays a fundamental role in the behavioral manifestations of the trait. It is in this sense that we consider PEM and NEM basic parameters of emotional temperament (pp.36-37).

The 1982 test manual provides general descriptions of these two emotional factors. PEM, also referred to as Positive Affectivity, consists of " a group of personality traits reflecting at the high end behavioral and temperamental

characteristics conducive to joy, excitement, vigor, and generally to states of positive engagement" (Tellegen, 1982, p.2). NEM, or Negative Affectivity, on the other hand, is "associated with anxiety, anger, and related states of negative engagement" (p.2).

The most salient distinction between the MPQ and its predecessor the DPQ involves the higher order factor of PEM (called Positive Affectivity in the DPQ). While both the DPQ and MPQ are described as three-factor tests "the MPQ also yields a meaningful four-factor structure in which PEM bifurcates into 'Agentic Positive Emotionality' (PEM-A) and 'Communal Positive Emotionality' (PEM-C)" (Tellegen & Waller, in press, p.38). Both PEM-A and Pem-C have high loadings on the Well-Being and Social Potency scales, and in that way are consistent with PEM. They differ in that PEM-C has a very salient loading on Social Closeness with almost no loading on Achievement or Absorption, while PEM-A has a very high loading on Achievement with a very minimal loading on Social Closeness. In descriptive terms, PEM-C entails interpersonal connectedness and positive feeling states. PEM-A, on the other hand, involves emotional responsiveness and a feeling of being personally effective. Therefore, the trait entitled Positive Emotionality appears to be made up of two separate components, one of which is associated with interpersonal relationships while the other is associated with feelings of personal competence.

Tellegen and Waller (in press) provide a review of the research literature on the MPQ. A joint factor analysis was conducted in comparing the MPQ with

the California Psychological Inventory (CPI) and the Eysenck Personality Questionnaire (EPQ). Each of the three tests has a dimensional structure of three higher-order factors which, when compared, were found to measure very similar, although not interchangeable, higher-order domains. Two hundred and eighty subjects took the MPQ, the PRF and the 16PF. The factor analysis of the forty-six primary scales generated by the three instruments yielded a four-factor structure. A majority of the MPQ primary scales showed salient loadings on only one of the four factors and the MPQ was judged to correspond with the four factor structure. In another study MPQ scores were correlated with trait ratings made by parents and friends of the college subjects and the correlations were determined to "compare favorably to those reported for other inventories" (p.48).

Watson, Clark and Carey (1988), in a study of psychiatric patients, found that Negative Affectivity can serve as a general predictor of psychiatric disorder while Positive Affectivity on the other hand, is related (negatively) to depressive diagnoses and symptoms. Pointing out the frequent overlap between depression and anxiety in the literature, Watson and his colleagues propose that by enhancing the Positive Affectivity features in depression scales finer discriminations between depression and anxiety may be achieved. The two factor mood structure of Positive and Negative Affectivity has also been found to have cross cultural convergence between American and Japanese subjects (Watson, Clark & Tellegen, 1984). Taken collectively, research on the MPQ has found it to be meaningfully

related to other personality measures and to external factors and is thus considered to have adequate construct validity.

The MPQ primary scales and higher-order dimensions have been compared to the "Big Five" factors of personality by various researchers. John (1990) identified many consistencies between the two systems. Tellegen's Positive Emotionality was found to be related to the "Big Five" factor of Extraversion. More specifically, Tellegen's primary scale Social Closeness was very similar to the Agreeableness factor in that they both include notions of positive emotions within an interpersonal context. Tellegen's Constraint was shown to share central features with the Conscientiousness factor of the "Big Five." The MPQ primary scale of Absorption was found to overlap with Openness to Experience.

Tellegen (Tellegen & Waller, in press) compared his own system with the "Big Five" and found a number of significant empirical relationships. Extraversion was found to be significantly correlated with Social Closeness, Agreeability to be negatively correlated with Aggression, Conscientiousness with Control, and Neuroticism with Stress Reaction. Tellegen emphasized the point that his dimension of Negative Emotionality is more general than the "Big Five" factor of Neuroticism and actually combines elements of Neuroticism and Agreeability. Finding Extraversion to be correlated with Well-Being, Social Potency and Social Closeness he concluded that Extraversion is basically a measure of Communal Positive Emotionality or PEM-C. All in all, clear and

salient relationships between Tellegen's system and the "Big Five" factors have been confirmed by various investigators.

Temperament

Temperament research, like trait research, is primarily concerned with the study of individual differences. Although studies of temperament can involve people of any age group most of the temperament research has been done using infants and young children as subjects. The basic assumption is that the relationship between temperament and behavior is most direct early in development. Drawing from the work of various researchers, McCall (Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde & McCall, 1987) offers the following synthesized definition of the temperament construct:

Temperament consists of relatively consistent, basic dispositions inherent in the person that underlie and modulate the expression of activity, reactivity, emotionality and sociability. Major elements of temperament are present early in life, and those elements are likely to be strongly influenced by biological factors (p.524).

In a transcript of their round table discussion prominent researchers, two individuals and two research pairs, presented their views on the concept of temperament (Goldsmith, et al. 1987). Despite disagreements regarding the boundaries of the concept all of the researchers were able to reach consensus on certain issues. All supported the idea that the term "temperament" should not be used interchangeably with the word "trait." Rather, temperament is seen as a rubric for a group of traits that are related to each other in a meaningful way.

Another area of consensus, the one of most significance to the current study, is that emotionality is seen as one of the basic dimensions of temperament.

Thomas and Chess (Goldsmith, et al. 1987) identify nine categories of temperament, two of which are predominant quality of mood and intensity of mood expression. They propose that the nine categories combine in different ways to form three temperamental clusters which they describe as "easy," "difficult," and "slow to warm up." Rothbart, in the same discussion, talks about negative and positive reactivity. It is noteworthy that these researchers include not only emotionality but other major temperament components such as sociability and activity level. There are others, however, who limit their models to emotional factors. Of the roundtable discussion participants, Goldsmith addresses only emotional factors and states that "the term emotionality could substitute for temperament in our approach" (Goldsmith, et al. 1987).

Mehrabian (1991) is another researcher who presents a model of temperament that is based solely on emotions. One of the key concepts in this model is the "emotion state" which specifies that emotions are transitory feelings or affects experienced by an individual. These transitory feeling states are thought to mediate between situational, personality and behavioral variables. In the process of averaging emotion states in various situations one gets a picture of what the characteristic emotional state, or temperament, is. Situations are evaluated in terms of what kind of emotions they tend to evoke. Without going into further detail about Mehrabian's particular theory it is important to note the similarities

between his conception of the role of emotions and Kernberg's emphasis on affective states. In both models affects or emotions play central, mediating roles in how the world is not only perceived but acted upon.

In concluding this section it is important to reiterate that emotionality and affective experience are identified as basic components of personality in both trait and temperament conceptualizations. Although psychoanalytic and object relational theories of personality vary in significant ways from trait and temperament theories they too emphasize the importance of emotional/affective experience in personality. As discussed earlier, one's mental representations or images of self and other, and self with other, are held within the context of a particular feeling state. These intrapsychic representations are inextricable from their affective framework. In essence, then, this concept of emotionality traverses different theoretical systems and results in the widely held belief that people have relatively enduring and stable affective perspectives that strongly influence how they perceive the world. In the following section the conceptual underpinnings of the Rorschach test, and of projective tests in general, will be briefly discussed. The subsequent section will look at different methods for gleaning information about the affective components of object representations as they are manifested in Rorschach productions.

3. THE PROJECTIVE HYPOTHESIS AND THE RORSCHACH

The basic premise underlying projective tests is that all behavior reveals something about the individual personality that produces that behavior. Rapaport, Gill and Schafer (1968) define the projective hypothesis by stating that "manifestations of the human being's behavior, from the least to the most significant ones, are revealing of his personality" (p.224). This broad definition encompasses behavior that is generated in any context, including behavior elicited during the administration of an objective test. How then, does a projective test differ from an objective test, if they both reveal information about personality? Rapaport and his colleagues identify the features characteristic of projective tests by stating that "they are procedures in which the subject actively and spontaneously structures unstructured material, and in so doing reveals his structuring principles - which are the principles of his psychological structure" (p.225).

The Rorschach test could perhaps be considered one of the purest of the projective methods because of the basically incidental and non-representational form of the test stimuli. Rorschach (1942) himself described the inkblots as "accidental" and "non-specific." Schachtel (1966), disagreeing with many writers who characterize the Rorschach inkblots as unstructured, sees them as having unfamiliar structure. Because of their lack of familiarity, the individual can not rely on simple recognition or ready labels to define the inkblots. In Schachtel's words:

...the inkblots speak to something deeper in the person; they invite him to go to that depth where his own resources are, his resources for being a person of his own, capable of relating in a personally meaningful way to the new and unknown that cannot so easily be 'handled' by routine procedures (p.22).

Exner (1986) points out that projective methods in general, and the Rorschach in particular, are "not structured to elicit a specific class of response" (p.16). As an individual makes "sense" out of these unfamiliar, non-representational stimuli, she or he imparts information about her or his distinctive way of thinking and perceiving. While the Rorschach test yields a wealth of different responses it is also standardized, permitting comparisons to be made between different individuals' responses and patterns. Individual differences, as well as commonalities, can therefore be identified.

It is often thought, although incorrectly, that the Rorschach technique was designed to test imagination. Rorschach (1942) clearly pointed out that "the interpretation of the chance forms falls in the field of perception and apperception rather than imagination" (p.16). Rapaport, Gill and Schafer (1968) caution that perception is not a straightforward procedure in which a subject passively takes in information from the outside. Instead, perception is seen as an interactive process involving characteristics of both the perceived object and the perceiving subject. They provide the following explanation:

It is clear now that no sensory stimulation falls on an empty, passive-receptive organ but that all stimuli are taken in by a complicated receiving system, and that this receiving system is structured and directed by basic needs and interests of the organism, modified by experiences long past and by experiences of the recent past (p. 272).

Blatt (1990) expands on this theme and explains that the Rorschach is no longer simply thought of as a test of perception but also as an instrument for the evaluation of cognition. He differentiates between the two processes by stating that:

Although perception and cognition (or mental representation) are interrelated, there is a fundamental distinction between them. Perception involves the relatively clear-cut recognition and relatively immediate reading of primarily figurative aspects of available stimuli, whereas cognition and representation involves the construction of meaning and the establishment of operations and transformations of objects in ways that are different from how they appear in the perceptual field. Perception provides the basic information for the development of cognition, but cognition (or representation) goes beyond perception (p.398).

It is this "construction of meaning" that is central. During the first half of this century the predominant behavioral paradigm in American psychology focused on manifest behavior rather than internal processes or subjective experience. With a shift in theoretical emphasis psychologists became increasingly interested in cognition and in how one goes about constructing his or her own individual meaning. Instead of studying stimulus - response sequences psychologists began looking at how people acquire and organize knowledge and how they represent this knowledge internally. It became increasingly recognized that individuals develop cognitive schemes or representations which have a significant influence on how they see the world and how they conduct their lives. In Blatt's (1986) words:

Psychology has begun to shift from the view that reality is well defined and that we must understand how individuals come to perceive this reality veridically, to a view that reality is constructed by each individual based on his relative position and assumptions. The task for psychology is to appreciate the individual's

constructions of reality and especially the assumptions on which the individual comes to create a conception of reality and construct meaning (p.345).

Rorschach Content

The analysis of Rorschach content is a primary way of assessing the representational world. In attributing a specific content to the ambiguous stimuli of the Rorschach one reveals information about his or her phenomenological world. The stimulus calls for no particular content; it is the subject who "projects" this meaning onto the blot.

Schafer (1954) stipulated that content can be evaluated in terms of two broad categories, static content and dynamic content. Static content is most familiar in that it simply involves assigning a particular content area to a Rorschach percept, such as "Human," "Art," "Nature," "Animal," etc. While these content areas may reveal information about a person's interests or preoccupations Schafer contends that they are very limited in what they can reveal. He proposes that an analysis of the dynamic, or thematic aspects of Rorschach content will greatly enrich the yield of content analysis. For example, if an individual gives the percepts of "an, old haggard woman," a "decaying tree" and a "tattered shoe" the content would be categorized into three different areas, "Human," "Botany" and "Clothing," respectively. However, an analysis of the dynamic or thematic aspects of the responses suggests that there is concern about feeling old and worn out. This type of thematic analysis goes beyond general content categories and looks at how individuals describe and, perhaps embellish

their responses. Mayman (1967) speculates about the potential yield of thematic analysis in a series of questions:

What kind of world does each person recreate for himself in the ink-blot milieu? What kinds of animate and inanimate objects come most readily to mind? What manner of people and things is he prone to surround himself with? Does he put together, for example, a people-less world of inanimate objects? If so, which objects have special valence for him? Do they hint at a certain preferred mode of acting upon the world or of being acted upon by it (p.17).

While content analysis certainly has rich potential for revealing information about personality Lerner (1991) cautions that this is one area of Rorschach analysis that has been widely misused. Basically, the problem has centered around a lack of standardized criteria which has often resulted in people using their personal associations and inclinations to make judgements about the meaning of Rorschach content. Lerner does not suggest that content analysis be abandoned but, instead, calls for issues of validity to be addressed. He describes many of the difficulties inherent in establishing validity with inferential data and proposes potential strategies for confronting this complex task.

In the following section object relations scoring systems will be described. Each of these standardized systems provide systematic approaches to the assessment of Rorschach variables or, in some cases, productions from other projective tests and instruments such as TAT stories and dreams. Early memories constitute one type of projective material that has been assessed via object relational systems. The systems specifically designed for early memories will be described in the subsequent section. All of these scoring systems were developed

with the aim of having systematic approaches to object representation assessment wherein concerns of validity and reliability could be directly evaluated.

4. OBJECT REPRESENTATION SCORING SYSTEMS

The Mayman/University of Michigan Group

One of the pioneers in the evaluation of object representation in projective material is Martin Mayman of the University of Michigan. The basic conceptual premise of his work is that an "empathic -intuitive " approach to projective data is not only scientifically credible (Blatt and Lerner, 1983b), but necessary for gaining an understanding of the subject's internal experience. Mayman's work is grounded in ego psychological theory and is influenced by the ideas of Jacobson, Mahler and Kernberg. He uses the content of dreams, early memories and Rorschach responses to infer information about levels of ego functioning and capacity for object relations. Recognizing that there may be a symbolic or latent meaning to projective productions, he proposes that manifest content in itself can reveal a good deal about the persons's internal world.

In his seminal 1967 paper Mayman advances the notion that Rorschach content can be used to infer a great deal about an individual's capacity for interpersonal relatedness. While recognizing that all Rorschach content has the potential to be informative he emphasizes that "it is from the human responses that we infer something of a person's capacity to establish empathic contact with another human being" (p.19). The basic assumption is that the Rorschach images

provide a sample of the person's internal object representations. Mayman reports on a research study in which graduate students were instructed to study Rorschach responses without access to any structural information, scores or ratios. On the basis of the responses alone the students were told to assess level of possible psychopathology. When the students' ratings were compared with independent psychiatric ratings significant correlations were found. In a later paper (1977) Mayman discusses the potential of human content, or more specifically, human movement responses for inferring information about the fantasy life of an individual.

In their 1974 paper, Krohn and Mayman present an object representation scoring system designed for the assessment of dream content. They note that "studies of differences in manifest dreams of patients with various psychopathologies have directly affirmed that varying ego competencies are expressed in the manifest dream" (p.446). The Object Representation Scale for Dreams or ORSD is an 8 point scale that assesses how an individual perceives others as "fragmentary, absent, and alienated, at one extreme, and complete, differentiated, and alive, at the other" (Stricker & Healy, 1990, p.223). Object representation scores assigned to dream material correlated significantly with object representation ratings of early memories and Rorschach responses. All of these object representation ratings were found to be significantly correlated to independent therapists' ratings of level of object representation.

Urist (1977), one of Mayman's most prominent students, developed the Mutuality of Autonomy Scale (MOA) to assess developmental levels of separation-individuation represented in Rorschach animate and inanimate movement responses. Scores on this instrument range from a high rating of reciprocal individuality and mutuality to a low rating involving percepts of being overwhelmed by stronger powers with no ability to influence the other. Urist reported significant correlations between MOAs, autobiographical data and staff ratings of inpatients. Tuber (1983) modified the MOA scale so it can be used with children. He has assessed both clinical and nonclinical populations and has found it to be useful in delineating features of psychopathology (1989a, 1989b, 1992 and Meyer & Tuber, 1989). Recently, there has been controversy regarding what concepts the MOA actually measures. Blatt, Tuber and Auerbach (1990) conclude that the MOA may be more a measure of psychopathology than object relations.

The Blatt/Yale University Group

A second major research team studying object representations in projective data is a Yale University group headed by Sidney Blatt. The leading concern of these researchers is the development of clinical theory that bridges the gap between the metapsychology of psychoanalysis and clinical application (Blatt, Wild, & Ritzler, 1975). The theoretical foundation of the work is an integration of psychoanalytic ideas with the cognitive developmental concepts proposed by Piaget and Werner. Like Mayman, Blatt challenges "the myth that projective techniques

provide unreliable and invalid data that have little to contribute to research" (Blatt and Lerner, 1983b, p.211). He argues that many research studies have used these techniques in ways that are unsuitable for testing clinical hypotheses (Blatt, 1975).

In contrast to the Michigan group, Blatt's research focuses on the assessment of the structure, as opposed to the content or thematic aspects, of object representations. In a classic 1976 paper Blatt and his associates Brenneis, Schimek and Glick presented a comprehensive scoring system for evaluating object representations in Rorschach responses. The scoring system, titled Concept of the Object, examines human responses on the Rorschach along three dimensions: differentiation, articulation and integration.

The Differentiation dimension involves the type of human figure being perceived be it a full human, human detail, quasi-human or quasi-human detail. The Articulation category looks at how the figures are described in terms of features such as size, physical attributes or clothing. Articulation also assesses whether the figure has been identified regarding sex, age, role or specific identity. The dimension of Integration is scored according to the manner in which the object is integrated with any action in the percept and also according to the type of interaction, if any, with other objects. Additional areas evaluated are the content of the action, be it malevolent or benevolent, and the nature of the interaction between two objects, be it active-passive, active-reactive or active-active. Within each of the categories scores are assigned along a developmental continuum. The

scale yields developmental maturity scores for object representations in both accurately and inaccurately perceived percepts.

The Concept of the Object has been utilized in numerous research studies with impressive results. Blatt (et al., 1976) reports the results of a longitudinal study which demonstrates that, as hypothesized, representations consistently change during the course of development. Other significant, but unexpected results were found in a study of psychotic patients. In essence, the more reality based their representations the more they tended to be malevolently toned and at the lower end of the developmental continuum. Representations that were inaccurately perceived were generally more benevolently toned at a higher developmental level. Blatt and his colleagues provide the following explanation for these surprising results:

It seems that the capacity to perceive reality adequately does not aid psychotic patients to organize their experiences and to function at higher developmental levels. On the contrary, it seems as if establishing contact with reality, at least in a conventional sense, brings with it lower developmental levels of thinking and malevolent content. It is only in the inaccurately perceived responses, when idiosyncratic interpretations of reality are given, that psychotic patients function at developmentally higher levels and portray a world that is more differentiated, well articulated, and more benevolent and kind (1976, p.371).

In general, the Concept of the Object scale has shown promise when applied to issues of differential diagnosis. Blatt and Lerner (1983b) concluded that different forms of psychopathology may be manifested in specific configurations of object representations. Lerner and St.Peter (1984) found that "particular developmental and cognitive properties of human responses produced

on the Rorschach show distinctive patterns of differential impairment related to type and severity of psychopathology" (p.345).

It is important to note that while much of the Yale based work has utilized Rorschach responses to assess object representations, data from other projective sources have also been researched. Blatt, Wein, Chevron, and Quinlan (1979) presented a scoring system for use with spontaneous descriptions of self and significant others. Later to be called the Object Relations Inventory (ORI), the instrument was used in a study of patients in dynamically oriented, long-term, inpatient treatment. It was found that "significant changes in representational structures were closely related to changes taking place in the transference relationship" (Gruen & Blatt, 1990, p.399). Diamond, Kaslow, Coonerty and Blatt (1990), using the same instrument, found that "toward the end of treatment, representations of self and other show a clearer sense of boundaries and separateness, as well as a greater degree of empathic relatedness" (p.363). In a study of hospitalized, severely disturbed adolescents and young adults the findings suggested that "change in clinical functioning from admission to discharge was paralleled by significant change in the conceptual level and the degree of differentiation and articulation with which subjects described their parents" (Blatt, Wiseman, Prince-Gibson, & Gatt, 1991, p.273).

All in all, the work of Blatt and his colleagues has made a considerable contribution to the effort to establish the scientific validity, reliability and clinical

utility of the assessment of object representation. The work is highly influential and it widely used in continuing research (Fritsch & Holstrom, 1990).

Burstein-Loucks Rorschach Scoring System

Burstein and Loucks (1989) have developed a psychoanalytically based Rorschach scoring system which in addition to conventional scoring categories, includes expanded categories for the assessment of content. Having conceptual roots in the work of Mayman, Blatt and Holt (1970; Holt & Havel, 1960), the Burstein-Loucks system incorporates object relations dimensions and also psychosexual drive dimensions into a comprehensive Rorschach scoring system. This system is similar in structure to earlier Rorschach scoring systems and is, therefore, fairly easy to learn for anyone familiar with the earlier systems. However, it expands upon and refines some of the basic scoring components and ties these components more directly to theory. The system is advantageous and, perhaps unique, in providing both traditional Rorschach ratings, and object relational ratings within a single, unified system.

Interpersonal Expectations is the title of the category of scores that directly address object representation. The Human Articulation or HA score is applied to all responses in which human content is present. These scores range from HA1 to HA4 with HA1 being assigned to percepts where the human content is vague or very general, while HA4 is assigned to human content where a specific identity or a full social role is attributed to the percept. The HA2 score is ascribed when one clearly identified characteristic, such as body part or mode of dress, is attributed

to the percept. A score of HA3 is given when more than one of these characteristics are attributed. In recent work (White, 1991) HA has been revised and expanded into a 6 range, rather than 4 range, category of scores.

Motivational Articulation, the second grouping of scores in the Interpersonal Expectations category, is applied to all percepts in which either human movement or human emotion is attributed. The range of MA scores is, again, 1 to 4. MA1 is given to percepts involving vague or unspecified activity or postural movement or tension. MA2 is given when there is either a specified activity or a human emotion or motivational state articulated in the response. MA3 is assigned to percepts having both human movement and human emotion components. The MA4 score is given to percepts where "human or human like interaction rooted in specific contexts of cause and/or outcome, i.e. more complex, story-like actions" (Burstein, et al, 1989, p.52) are present.

A third class of scores within the Interpersonal Expectations category is called Explicit Motivational Valuation scores. These scores, which are the focus of this dissertation, are given to any Rorschach percepts containing Human Movement (HM) or Human Emotion (HE). Thought to be "a measure of the quality of the more conscious and preconscious interpersonally-oriented fantasies" (p.52), these scores address whether the motivation, emotion, or action of the percept is benevolent, neutral or malevolent in affective tone. The benevolently toned percept is given a score of B while the neutrally and malevolently toned percepts are given scores of N and M respectively.

Implicit Motivational Valuation scores are given to all Rorschach responses that contain no Human Emotion or Human Movement. Like the explicit scores the implicit scores are either benevolent (B), neutral (N) or malevolent (M) in affective quality. Burstein and Loucks caution that these implicit scores are "unavoidably subjective." Work is currently being done in efforts to improve the reliability of this scoring category. It is important to note, however, that the Burstein Loucks system assigns affective ratings to all the responses in a protocol, whether or not they contain human content. This is rather unique in that most object representation scoring systems only evaluate human content. Burstein and Loucks hypothesize that the implicit scores reveal information about how an individual perceives the non-interpersonal environment.

Other Object Representation Scales

A large body of research has been generated from the idea that object representation can be assessed in projective data. While Mayman and Blatt are considered to be the founding fathers of this type of research there are many others who have utilized and, often, expanded upon their work. It is beyond the scope of this dissertation to outline all the different object representation scoring systems that have been developed. However, a few of the more well known scales will be briefly described.

Coonerty (1986) developed the Separation-Individuation Theme Scale. Directly tied to the developmental theory of Mahler (Mahler, Pine & Bergman, 1975), the scale evaluates Rorschach responses in terms of their thematic

associations with the different stages of the separation-individuation process. In a comparison of two diagnostic groups schizophrenic patients were found to have more pre-separation themes while borderline patients verbalized more separation individuation themes.

The Psychoanalytic Rorschach Profile, developed by Burke, Friedman and Gorlitz (1988), was designed to address some of the weaknesses the authors found in pre-existing systems. Measuring both structural and content variables the scale combines the methods proposed by Blatt and Mayman, respectively. The PRP consists of 10 scales which are organized into three subgroups: impulse, ego functioning and object relations. Like Coonerty's scale, preliminary studies suggest that the PRP can discriminate between borderline and schizophrenic groups.

Developed at the University of Alberta, the Quality of Object Relations Scale (Azim, Piper, Segal, Nixon & Duncan, 1991) has gone through several revisions over the past 17 years. The scale is grounded in psychoanalytic object relations theory and attempts to provide "more meaningful descriptions of people" (p.323) than earlier systems. The QORS is arranged according to five organizational levels: mature, triangular, controlling, searching and primitive. Within each level criteria are listed under the headings of behavioral manifestations, affect regulation, self-esteem regulation and antecedent or etiological factors. The authors report significant correlations between QORS ratings and patient-rated and therapist-rated measures of therapeutic alliance.

Found to be unrelated to DSM-III-R Axis I diagnosis the scale was found to be significantly related to, although not synonymous with, an Axis II diagnosis.

Perhaps one of the most prolific object representation researchers is Drew Westen of the University of Michigan. His work involves an integration of object relations theory and ideas based on research in social cognition. Westen and his colleagues (Westen, Lohr, Silk, Kerber & Goodrich, 1985) have developed a rating scale for the Thematic Apperception Test. Ratings are made on four major dimensions: complexity of representations of people, affect-tone of relationship paradigms, capacity for emotional investment in relationships and moral standards, and understanding of social causality. Westen's work is particularly relevant to this dissertation because it has demonstrated, with TAT and interview data, that affect-tone of relationship paradigms are consistent across different forms of data (Barends, Westen, Leigh, Sibert & Byers, 1990). It is the aim of the current study to identify consistencies between Rorschach, early memory and trait ratings of affect tone.

5. EARLY MEMORIES AS A PROJECTIVE TECHNIQUE

The use of early memories as a projective technique is not a new phenomenon. While early memories, or EMs, are not as frequently employed, they preceded the more commonly utilized methods such as the Rorschach and the TAT (Munroe, 1955). Bruhn (1984) estimates that EMs were first used as a

means of studying personality in 1893 and their popularity has waxed and waned since that time.

In the early part of this century there were two major approaches utilized in the study of early memories; the first approach, based in Freudian theory, focused on the latent content of memories while the second approach, developed by Adler, focused on the manifest content of memories. Each of these approaches will be briefly described and similarities and differences will be noted. In recent years there has been a renewal of interest in the use of EMs in personality assessment and various methods for rating EMs have been developed. The most prominent of these newer approaches will be presented and research findings will be briefly reviewed.

Freud and Screen Memories

With his 1901 publication of The Psychopathology of Everyday Life, Freud presented the concept of screen memories. In discussing childhood memories that are recalled during adulthood he pointed out that they are often, surprisingly, mundane and seemingly inconsequential, rather than laden with affect and obvious meaning. He proposed that these ostensibly unimportant memories veiled highly important memories that were not consciously available. He provided the following explanation for this process:

The indifferent memories of childhood owe their existence to a process of displacement; they are substitutes, in (mnemic) reproduction, for other impressions which are really significant...As the indifferent memories owe their preservation not to their own content but to an associative relation between their content and

another which is repressed, they have some claim to be called 'screen memories,' the name by which I have described them (Freud, 1960/1901, p. 43).

Freud's conceptualization of screen memories reflected his belief that the function of memory is very deliberate in nature. Far from being random, memory is psychically purposeful. The distortions or disguises inherent in "screen memories" serve to protect one from experiencing the painful anxiety that might accompany the memory of an actual experience or event. Bruhn (1990) believes that Freudian theory espouses the position that early memories, while containing distortions, ultimately can be analyzed down to actual historical events. This interpretation is, perhaps, overly simplistic and draws conclusions that Freud himself never reached. In his paper on screen memories Freud clearly states that:

One is ..forced by various considerations to suspect that in the so-called earliest childhood memories we possess not the genuine memory-trace but a later revision of it, a revision which may have been subjected to the influences of a variety of later psychical forces (pp. 47-48).

Rather than stating that early memories could, via analysis, be traced to actual events that occurred in childhood, Freud seems to be saying that early memories are psychologically meaningful and significant, whether or not they depict actual, historical events.

Adler and Early Memories

Early memories as a source of projective data have been most frequently and consistently employed in the Adlerian school of psychology. Adler, with his theory of the individual "style of life," was concerned with the distinctive and

unique way in which an individual views and deals with the world. He considered early memories to be an extremely important tool for gathering information about ones "style of life." He explained that:

There are no chance memories...out of the incalculable number of impressions which meet an individual, he chooses to remember those which he feels, however darkly, to have a bearing on his situation. Thus his memories represent his 'Story of My Life,' a story he repeats to himself to warn him or comfort him, to keep him concentrated on his goal, to prepare him by means of past experience to meet the future with an already tested style of action (Adler, 1931, p.73).

In contrast to Freud, Adler was most interested in the manifest content of early members. He did not see the memories as screens which concealed more important information, but instead, felt that the manifest content was meaningful in and of itself. Rather than attempting to gain an understanding of the patient's past he was concerned with how early memories might reveal information about the current attitudes and life circumstances of the patient. Bruhn (1990) explains Adler's position in stating that "an individual selects from his past those events, real or fantasized which have a bearing on his current situation...early memories are of particular relevance in depicting ones fundamental attitude toward life" (p.25).

It is important to note that Adler regarded the historical accuracy of an early memory as irrelevant. He clearly acknowledged that some early "memories" may actually be fantasies which are developed in the service of present needs. Consequently, he believed that early memories can change substantially as one undergoes changes in life style. Psychotherapy was seen as one of the most

common vehicles for life change and, subsequently , for changes in early memories.

No theoretical school of psychology has generated as much early memory research as the Adlerian school. The popularity of EMs has varied since 1920 when Adler first used them as a source of projective data. However, they have been more consistently utilized by Adlerian researchers than they have by any others. Watkins (1992), in a review of Adlerian EM research conducted from 1981 through 1990, summarizes the general research findings:

First, EMs are consistent with current interpersonal behavior. Second, the EMs of psychiatric patients, when compared to normal controls, tend to be more negative in emotional tone, show more fear/anxiety themes, and reflect greater passivity or an external locus of control. Third, the EMs of psychiatric patients show changes over the course of treatment, with EM content becoming more positive in nature as favorable life changes occur. Fourth, the EMs of male delinquents and criminals, when compared with memories of control subjects, reflect more negative emotionality, injury or illness, rule breaking, victimization, and being alone in an unpleasant situation. Fifth, EMs elicited during a hypnotic induction differ from EMs elicited during an awake state, but the nature of these differences is not all that clear at this time. Sixth, EMs of individuals in different college majors or occupations show differences, but again the meaning of these differences remains unclear at this time (p.259).

Psychoanalytic/Ego Psychological Approach to EMs

In his classic 1968 paper titled "Early Memories and Character Structure" Mayman presents an ego psychology approach to the analysis of early memories. While recognizing the great significance of Freud's "screen memory" concept he warns that "distrust of manifest content is appropriate only in the context of an id-

psychology" (p.303). The manifest content of early memories, according to Mayman, can provide information about the functioning of the ego and, more generally, about the character structure of an individual. He states that:

A persons's adult character structure is organized around object relational themes which intrude projectively into the structure and content of his early memories, just as they occur repetitively in his relations with significant persons in his life (p.304).

In essence, Mayman proposes that the manifest content of EMs provides clues as to how the ego functions, both defensively and adaptively, in helping the person balance internal needs and external demands. Consistent with what both Freud and Adler had suggested earlier, Mayman (1968) cautions that:

...early memories are not autobiographical truths, nor even 'memories' in the strictest sense of this term, but largely retrospective inventions developed to express psychological truths rather than objective truths about a person's life...(p.304).

In a later paper (Krohn and Mayman, 1974) the use of early memories for the assessment of the level of object representation is investigated. The authors found high correlations between object representation scores on three sources of projective data: early memories, the Rorschach and dreams. Furthermore, they found high correlations between these object representation scores, criterion ratings of psychopathology and therapists ratings of level of object representation. Of course, the concept of object representation continues to be widely studied in various forms of projective data. Recently, early memories were utilized to assess object representations of borderline patients who had been sexually abused as children. Interestingly, "a reported history of sexual abuse, but not a reported

history of physical abuse, predicted the presence of extremely malevolent representations" (Nigg, Silk, Westen, Lohr, Gold, Goodrich and Ogata, 1991, p.864).

While Mayman may be the most prominent of the psychoanalytically informed early memory researchers there are others who hold similar views.

Levy and Grigg (1962) stated that:

...the early memory, given in response to the realistic request to relate it, is a product of preconscious ego-processes, manifesting the synthetic function of the ego in its attempts to weave underlying emotional states pushing for an expression into an early recollection (p.84).

Langs and his colleagues (1960) presented a psychoanalytically based early memory scoring system. Although the system basically focuses on the manifest content of memories Langs, et al. emphasize that the Freudian and Adlerian approaches are not mutually exclusive, as they are often thought to be. Their scoring system is an attempt to combine Freudian and Adlerian techniques. They state that "all childhood memories, as is true of all symptoms, function as screens. In a similar way, the manifest content of all childhood memories reflect ego adaptive and defensive operations" (p.523). Rosenheim and Mane (1984), also utilizing a psychoanalytically oriented, ego psychological approach, note an interesting trend in their analysis of the validity of personality predictions made from EMs, Rorschach data and TAT stories. They state that the "EM apparently more successfully tap higher, more organized ego functions, while projective tests reflect more regressive, primary layers" (p.100).

Cognitive-Perceptual Model of Early Memories

Last and Bruhn (1983, 1985) used their Comprehensive Early Memory Scoring System, or CEMSS (Last, 1983), to evaluate the early memories of children. The scoring system was developed with the intention that it would require as little rater inference as possible. The system draws from various earlier approaches such as Mayman's ego psychological approach and the taxonomic approach of Manaster and Perryman (1974). Using the CEMSS, Last and Bruhn were able to discriminate between groups of well adjusted, mildly maladjusted and severely maladjusted children. They also found the system to be useful in discriminating between diagnostic types. Findings from these studies led to the conclusion that the CEMSS variables can be categorized into content and structural variables. Content variables, such as characters, settings and themes, were found to reveal more information about diagnostic classification while structural variables, such as relation to reality, were more indicative of degree of psychopathology.

In his continuing work with early memories Bruhn (1990, 1992a, 1992b) eventually developed a model of personality called the Cognitive-Perceptual Model. This model is based on the premise that all personality models are grounded in the supposition of the existence of an adequately functioning autobiographical memory. It is the autobiographical aspect of memory which "provides an identity to the self, especially the self in relation to others" (1990, p.41).

The Cognitive-Perceptual Model views EMs as fantasies about the past that reflect present concern. While the model does not negate that many EMs may be grounded in reality, or in events that actually took place, the historical accuracy is not deemed to be important in making useful interpretations from the EMs. In describing his theory Bruhn emphasizes the selective nature of memory and of perception itself. He makes the statement that "we attend to and remember what has the greatest perceived usefulness or that which makes us most adaptive. Information that does not fit existing schemas is unlikely to be processed and stored" (1990, p.42). Essentially, Bruhn conceptualized memory not as traces or images, but rather as schemas of the world. He defines schemas as:

...general rules, derived from past experience, about what can be expected from others and the world, as well as how the self is expected to function in relation to both. Schemas determine whether we perceive data as meriting attention. If there is no schema for the perceptual data being scanned, it is unlikely that we will process it unless life experience provides a compelling reason (1990, p.54).

Bruhn has developed the EMP, or Early Memories Procedure (1992a,1992b) which he describes as a projective test of autobiographical memory. This technique is considerably more detailed than other EM procedures and calls for the subject to write six spontaneous early memories and fifteen directed memories such as "happiest memory" and "first memory of being punished." By producing the memories in written form, it is felt that the subject undergoes a more introspective and reflective process than would be required if the memories were expressed orally. Although Bruhn is careful to acknowledge the usefulness

of the Rorschach and other projective tests, he feels that the EMP is superior in assessing object relations phenomena.

In that this dissertation focuses on differences in prototypic affective experience, Bruhn's model raises interesting questions. The model is quite specific in attributing meaning to positive and negative affect in EMs. Early memories involving negative affect are felt to reflect personal issues that have not been worked through or are still in process; unfinished business as it were. Positive affect EMs, on the other hand, are thought to reveal information about how the individual's major needs are likely to be met. In addition, positive affect EMs are thought to express wishes while negative affect EMs are thought to express tension, fear or uncertainty about personal issues that are still in process. It will be interesting to see if the data examined in this dissertation lend any support to Bruhn's specific hypotheses about the meaning of positive and negative affect.

Relationship Paradigms in Early Memories

Acklin and his colleagues (1991) have developed a rating system to examine relationship paradigms as they are expressed in early memories. The rating system is grounded in the psychoanalytic tradition that has informed object representation researchers such as Mayman (1967, 1968) and Blatt and Lerner (1983a, 1983b). It also incorporates ideas from social-cognitive psychology, with its emphasis on relationship schemas and expectancies. Acklin's system is based on the premise that early memories reveal themes which are indicative of a

person's view of self, other, and self in relationship to other. This relationship paradigm approach to early memories is thought to be particularly appropriate for the current study because it is consistent with the object relational belief that people have prototypic ways of relating to the world, and that these prototypic patterns will be expressed in projective data. In that early relationships are hypothesized to be the primary building block of intrapsychic structure it seems obvious that a person's earliest memories, and the relationship patterns they reveal, can provide valuable information about current intrapsychic and interpersonal functioning.

The system is comprised of 24 ratings; three of which are dichotomous ratings with the remainder being assessed on a 5 point Likert scale. The system was developed with clinical and non-clinical populations and has been found to have convergent validity with measures of attachment style, mood and clinical symptomatology, as well as with MMPI scales. For this dissertation the following four ratings are used: Rater Affect, Caregiver Interaction , Caregiver Interaction Outcome, and Perception of Environment.

6. SUMMARY AND THE RESEARCH HYPOTHESES

In the psychoanalytic study of object relations the affective tone of mental representations has been a major area of interest. The central assumption that fuels this interest is the idea that people have characteristic and relatively enduring ways of viewing their world as basically gratifying and benevolent, or ungratifying

and malevolent in affective quality. This idea is not only held in psychoanalytic circles but by many trait and temperament theorists as well. A supposition common to all these theoretical perspectives is that characteristic affective patterns should be measurable in some way.

This study aims to investigate the affective quality of object representations as they appear in the Rorschach responses and earliest memories of gifted college students. The affective ratings given to these productions will be compared to scores on the MPQ, an objective personality instrument which identifies two higher-order personality traits called "Positive Emotionality" and "Negative Emotionality" (Tellegen, 1982, in press). The fundamental hypothesis of this study is that affective ratings on the Rorschach will be related to affective ratings of early memories and to the emotionality traits measured by the MPQ. In other words, affective tone is hypothesized to be consistent across the three personality measures.

CHAPTER II

METHODOLOGY

1. INTRODUCTION

In this study the Burstein-Loucks Motivational Valuation scores are used to assess the affective quality of both human and non-human percepts on the Rorschach. The scores are subsequently compared to ratings of affective quality in early memories and self-report personality traits. This chapter outlines the subjects, variables and procedures used in the study.

2. SUBJECTS

The subjects in this study are intellectually gifted young people who were students at the University of Tennessee-Knoxville at the time of their participation. The students were recruited from Honors Physics classes, Honors Chemistry classes and the College Scholars program at the university. The College Scholars program is an interdisciplinary program in which talented students custom design an individualized major as an alternative to the traditional academic curricula in which majors and minors are declared in distinct subject areas. Admittance to the College Scholars program requires that the student has demonstrated above average academic ability and achievement. While there are no specific ACT or SAT scores required for acceptance into the program prospective students must demonstrate their talent through their application materials and letters of

recommendation. They must also be approved by a four member evaluative interview committee. Acceptance into the Honors Chemistry curriculum requires a minimum ACT score of 29 or a minimum SAT score of 1200. Honors Physics students must have achieved an ACT score of at least 28 or an SAT score of at least 1150. In addition, both Chemistry and Physics students must have prerequisite high school courses and meet grade point average cut-off scores.

The subjects were first contacted by letter. The letter described a Clinical Psychology department longitudinal research project involving the study of personality characteristics of exceptional students. The letter was followed up with a telephone call from a member of the research group. All subjects were volunteers and were offered no monetary, or any other type, compensation for their participation. They were offered, however, the opportunity of having a follow-up interview to discuss their test results with a graduate student in Clinical Psychology. Their participation in the follow-up interview was entirely optional. The test data of 100 subjects was used in this particular study. These subjects were randomly chosen from a larger group of subjects who have participated in the longitudinal research program over the past 10 years. The Committee for Research Involving Human Subjects at the University of Tennessee-Knoxville approved both the larger, longitudinal research project and the use of data from that project for this particular study (CRP#3594A).

Many studies assessing object relational phenomena investigate the differences between clinical groups categorized according to diagnosis. The

sample used in this study has not been assessed in regards to clinical diagnosis. Indeed, the sample was not chosen on the basis of subjects reporting, or not reporting, clinical symptomatology. Rather, the individuals in this sample are bright, young people who are presumed to be coping with the demands and pressures of an honors academic curriculum. Since these students are of above average intelligence it is assumed that they can successfully generate and articulate Rorschach percepts as well as narratives of an early recollection. The differences seen in the affective coloring they attribute to their productions are not likely to be influenced by intellectual differences but by differences in personality characteristics.

It is acknowledged that this sample is certainly one of opportunity. A plethora of dissertation research in psychology is conducted with college students as subjects. This sample is unique, however, in that it is comprised of gifted students. It seems prudent to study, and try to understand those who possess increased potential for making important contributions to society. As with any sample of subjects, the question of generalizability arises. Significant findings obtained with this sample should be replicated in samples comprised of other types of subjects such as non-students, older people, those of average intelligence, etc. Without such replications the generalizability of the findings is speculative at best.

The major theoretical hypothesis of this study centers on the idea that people in general have prototypic ways of experiencing the world as basically benevolent and satisfying or malevolent and unsatisfying in affective quality. The

subjects in this study constitute one sample within which this hypothesis can be tested.

3. PROCEDURES

Participation in the study required each subject to attend two testing sessions which lasted approximately two to three hours each. One of the testing sessions was conducted in a small group format in which subjects provided demographic information and completed self-report personality measures, one of which was the MPQ or Multidimensional Personality Questionnaire (formerly called the DPQ or Differential Personality Questionnaire) developed by Tellegen (1982). In the other testing session a research group member met with individual subjects to administer the Rorschach Inkblot Test and conduct an interview. The data each subject provided can only be identified by a number because all names were replaced with numbers once data collection commenced.

4. INSTRUMENTS

All subjects in this study completed the Rorschach Inkblot Test, the Multidimensional Personality Test (MPQ) and a procedure requiring them to write about their earliest recollection. The specific variables of interest measured by each instrument are described in this section.

Rorschach Variables

A Rorschach scoring and interpretation system grounded in psychoanalytic theory has been developed by Burstein and Loucks (1989). Their system, designed to correct deficiencies in earlier scoring systems, utilizes object relations and drive theory dimensions, in addition to conventional scoring dimensions found in earlier systems. In the Burstein-Loucks system Rorschach data is scored under the following eight categories: Location; Cognitive Complexity; Justifications; Imaginal Aspects; Social Appropriateness; Conceptual Content; Interpersonal Expectations; and Perceptual-Cognitive Characteristics. The Interpersonal Expectations category is of specific interest in the current study. It is within the Interpersonal Expectations category, based on the work of Blatt and Lerner (1983) and Mayman (1967), that object relations features, or object representations are assessed. Burstein and Loucks describe the category by stating that "four components are evaluated, one characterizing human percepts, two characterizing percepts involving imagining human movement and/or human emotions, and a final one evaluating the affective tone ambience of non-human percepts. These variables are called, respectively, 'Human Articulation,' 'Motivational Articulation,' 'Motivational Valuation' and 'Implicit Motivational Valuation' (p. 15). The last two, Motivational Valuation (also called Explicit Motivational Valuation) and Implicit Motivational Valuation are the scoring features used in this study.

The Explicit Motivational Valuation score assesses the qualitative nature of interpersonally-oriented fantasies. The score can only be given when Rorschach percepts include human movement and/or human emotion. Obviously, movement and emotion are not actual physical characteristics of the blot. When a subject gives a Rorschach response that includes human movement and/or emotion they are revealing something, not about the actual blot, but about their own inner experience. The Explicit Motivational Valuation score judges whether the fantasy of movement or emotion presented by the subject is benevolent, malevolent or neutral in affective tone. For example, the percept "a happy, little girl" would be given a benevolent rating while the percept "an angry face" would be rated malevolent in affective tone. A neutral affective rating would be given to percepts like "a man walking" because there is no clear benevolent or malevolent tone.

The Implicit Motivational Valuation score is applied to all responses which contain no Human Movement or Human Emotion. These responses are thought to reveal information about the quality of fantasies regarding the non-interpersonal environment. As with the explicit measure the implicit measure assesses whether percepts are benevolent, neutral or malevolent in affective tone. Frequently the percepts involve non-human content but they sometimes involve human content. The implicit score is only applied to human percepts that involve no movement or emotion. Therefore, each response in a Rorschach protocol gets either an Explicit or an Implicit Motivational Valuation rating as stated previously, Burstein and Loucks caution that the "judgements of implicit motivational valuation are

unavoidably subjective" (p.53). Studies are currently underway to achieve increased objectivity with this measure.

Multidimensional Personality Questionnaire Variables

The Multidimensional Personality Questionnaire (MPQ) (Tellegen, 1982), formerly called the Differential Personality Questionnaire (DPQ), is a 300 item, true-false, self-report measure designed to assess normal personality range. It consists of eleven non-redundant, primary scales which, when inter-correlated, produce a higher order structure with three dimensions. The three higher-order factors are interpreted as Positive Emotionality (PEM), also called Positive Affectivity (PA), and Negative Emotionality (NEM), also called Negative Affectivity (NA) and Constraint (CON). It is the higher-order factors of PEM and NEM that are of particular interest in the present study.

The PEM factor is associated with the primary scales titled Wellbeing, Social Potency, Achievement and Social Closeness. It is secondarily associated with the scale called Absorption. The NEM factor is related to the primary scales of Stress Reaction, Alienation, Aggression and, secondarily, to Absorption and to Control (negatively related). Tellegen describes the reasoning behind his interpretation of these two factors by stating that "the main idea is that in the case of both PEM and NEM the underlying trait structure includes a major and distinctive emotional response system....we consider PEM and NEM basic parameters of emotional temperament" (In press, p.36-37).

Early Memory Variables

Early memories (EMs) have often been used as projective techniques for the assessment of personality. First prominent in the Adlerian school of psychology, EMs have become a tool employed by object relational thinkers, such as Mayman and Ryan (1972), to evaluate object representation. In this study subjects were given a brief questionnaire which instructed them to write a narrative of their earliest recollection. Questions were then asked about the most salient aspect of the memory, the feelings associated with it, and the age at which the events in the memory took place.

The EM provided in each narrative was assessed using four rating criteria from an early memory scoring system developed by Acklin (Acklin, Bibb, Boyer & Jain, 1991). Three of the four ratings were made on a 5 point Likert scale; the other rating was a dichotomous rating. The four rating areas are as follows:

- A. *Rater Affect* - The overall affective tone of the memory is rated in terms of how an objective observer might have experienced the events in the memory. (Likert rating with "1" being unpleasant and "5" being pleasant).
- B. *Caregiver Interaction* - Dichotomous rating of the presence or absence of a caregiver in the memory. Caregivers are defined not only as parents but people such as grandparents, relatives, teachers, police or any authority figures who have the capability of providing support or nurturance.
- C. *Caregiver Interaction Outcome* - A rating of the outcome of any interactions between a caregiver and the protagonist of the EM. (Likert rating with "1" being negative and "5" being positive).
- D. *Perception of the Environment* - A rating of the global perception of the environment as being a basically dangerous or safe place. The

environment is construed as containing animate and inanimate features. (Likert rating with "1" being dangerous and "5" being safe).

5. RELIABILITY

Data from both the Rorschach and the Early Memory rating system were analyzed to determine inter-rater reliability. Data from the MPQ, the only self-report measure used in this particular study, were collected and scored using established procedures. The MPQ data were entered into a computer program which totaled responses and yielded summary scores for each test record. The procedure is a standard part of the established, longitudinal research project and involves undergraduate research assistants entering the data under the supervision of the research lab coordinator. All data are entered into the computer twice and compared for any discrepancies. This traps non-redundant data entry errors.

Rorschach Reliability

The longitudinal research project has established procedures for collecting and analyzing data. All of the established procedures were utilized in this study. Each Rorschach protocol was scored by two, independent scorers. A third, highly experienced scorer, reconciled any differences that occurred between the scores assigned by the two, independent scorers. Many of the scoring discrepancies were not only reconciled by an experienced scorer but were discussed, in some detail, with all members of the research lab. This process served as a learning tool for less experienced scorers and also helped identify specific areas of scoring

difficulty. The frequent discussion also served as a process by which scoring criteria became more clearly defined.

Recent work in the Burstein-Loucks longitudinal research project focused on the interscorer reliability of Rorschach scores. Whereas earlier work (Coursol, 1990) established reliability measures using the scores assigned by the two original, independent scorers, the recent work goes a step further. Rather than having one person reconcile the scores assigned by the two independent scorers, two individuals, working independently, reconciled the same pair(s) of scores. Reliability measures were then calculated between the ratings made by the two independent reconcilers. Using a random sample of 20 Burstein-Loucks protocols the two reconciliation ratings were found to be in exact agreement 99.4% of the time when the Explicit Motivational Valuation scores were evaluated. When the Implicit Motivational Valuation ratings were compared there was exact interscorer agreement 85.6% of the time.

Early Memory Variables

Reliability ratings for the early memories were generated from two sources. Acklin (1991), in an article introducing his early memory relationship scoring system, presented reliability data from a pilot study involving 61 volunteer, undergraduate psychology students. In addition, he provided reliability data from a follow-up study involving 122 psychiatric outpatient admissions to an urban community mental health center. Kappa coefficients were calculated for the

dichotomous variables and Pearson product-moment correlations were calculated for the scaled data to ascertain inter-rater reliability.

The reliability coefficients for "EM affect" ratings were .91 for the non-clinical population and .93 for the psychiatric population." Care-giver interaction outcome" reliability ratings were .84 (non-clinical) and .86 (psychiatric). The "Perception of the Environment" category generated reliability ratings of .80 for the non-clinical and .89 for the clinical sample. The only dichotomous variable used in the current study had Kappa coefficients of .9573 (non-clinical) and .9396 (psychiatric) in the Acklin data.

Reliability procedures for this study began with ratings of EMs of hospitalized adolescents. These memories were identified only by number and were scored by two, independent raters. Rater 1 was the author of this work. Rater 2 was a clinical psychology graduate student from Syracuse University. The raters had comparable amounts of clinical experience.

Training procedures commenced with a thorough review of the scoring manual and discussion of any anticipated scoring difficulties. The frequent discussion also served as a process by which scoring criteria became more clearly defined. The EMs were then coded independently by the raters in three groups of ten EMs each. Percentage of agreement was calculated for each group of ten and, subsequent to the calculation of agreement, any discrepancies were discussed. The reliability percentages were then averaged over the three groups of ten EMs.

For "EM Affect" inter-rater reliability was 87% with a range of 80% to 90% across the three sets of 10 EMs. In other words, of the 30 EMs 26 were rated identically. The four remaining EM ratings were within one point of each other. The percentage of agreement between raters for the only dichotomous variable "Care-giver Interaction" was 100% signifying that there was perfect agreement on whether or not a caregiver was depicted in the memory. Of the 30 EMs scored, 24 involved caregivers while 6 were without caregivers. The "Caregiver-Interaction Outcome" category had an overall reliability rating of 88% with 21 of the 24 ratings being identical. The three ratings that were not identical were within one point of each other. The range in scoring across the three groups of ten went from 78% to 100%. "Perception of the Environment" was rated at 80% reliability with 24 of the 30 ratings being identical. The remaining 6 ratings were within one point of each other. The range for the "Perception of the Environment" category went from 70% to 90%. Following the calculation of all reliability measures, disagreements between scorers were conferenced until an agreement was reached for each item.

6. DATA ANALYSIS PROCEDURES

The data was analyzed using correlational procedures. Spearman rank-order correlation coefficients (one-tailed) were generated using the SPSS-X statistical package on the University of Tennessee mainframe IBM computer. The one dichotomous variable from the EM data was compared to the other data via

point-biserial correlations. Once correlations were generated within two groups of 50 subjects each, the corresponding pairs of correlations were tested to determine the significance of the difference of the correlation coefficients. To gain a more precise estimation of the relationship between the Rorschach and MPQ variables the two groups of 50 were combined and correlations were computed on the sample of 100. Multiple regression analysis was then conducted to separate the effects of the independent or Rorschach variables on the dependent or MPQ emotionality variables. The earliest memories of 50 subjects (2nd group) were then compared to the Rorschach and the MPQ variables via one-tailed Spearman correlations.

7. PILOT STUDY

In a preliminary study involving fifty subjects, the affective quality of mental representations as they appear in Rorschach responses was investigated. The study employed the Burstein-Loucks "Explicit" and "Implicit" Motivational Valuation scores which assess the affective tone, be it benevolent, malevolent or neutral, of human, animal and inanimate percepts on the Rorschach. The main purpose of the study was to evaluate the construct validity of these Explicit and Implicit Motivational scores by comparing them to measures of Positive and Negative Emotionality on the Multidimensional Personality Questionnaire (Tellegen, 1982). The MPQ, a self-report inventory, has been used in various studies which have shown it to have "established empirical relationships with

various behavioral and clinical criteria" (Lubinski, Tellegen and Butcher, 1981, p.726). It was hypothesized that a preponderance of benevolent percepts on the Rorschach would be positively correlated with high Positive Emotionality scores on the MPQ. Likewise, large numbers of malevolent percepts were hypothesized to be positively correlated with high Negative Emotionality scores.

All comparisons involving benevolent Rorschach scores were in the predicted direction with some reaching significance levels of .05 or better. Explicit Benevolent was found to be positively related to Positive Emotionality on the MPQ (.2328, $p=.052$). In addition to this significant relationship, it was found to be significantly correlated to the MPQ primary personality factors of Wellbeing (.2876, $p=.021$), Social Closeness (.2729, $p=.028$), and Aggression (-.3061, $p=.015$).

Rorschach response productivity differences were controlled for by comparing the percentages of each type of response to the MPQ affectivity scores. The R corrected Explicit Benevolent variable was found to be significantly related to Positive Affectivity (.2451, $p=.043$), Wellbeing (.3132, $p=.013$), Social Closeness (.2672, $p=.030$) and Aggression (-.3122, $p=.014$). The R corrected Explicit Malevolent scores were found to have a significant relationship with Alienation (.2665, $p=.031$) while there was a trend toward a positive relationship with Negative Affectivity (.1854, $p=.099$).

All benevolently toned Rorschach percepts, both Explicit and Implicit, were combined and compared to the MPQ variables. The combined Benevolent

Rorschach variable was significantly related to Wellbeing (.3160, $p=.013$), Stress Reaction (-.2388, $p=.047$), and Control (-.2683, $p=.030$). In addition, there were clear trends for the combined Benevolent variable being positively related to Positive Emotionality (.2036, $p=.078$) and negatively related to Negative Emotionality (-.2001, $p=.082$). Again, controlling for Rorschach response productivity, the combined Benevolent scores were found to be significantly related to Wellbeing (.2938, $p=.019$) and Stress Reaction (-.2546, $p=.037$). There was a positive trend in the relationship between the R corrected Benevolent combination score and Positive Emotionality (.2142, $p=.068$).

Findings from this pilot study lend support to the construct validation of the Motivational Valuation scores in the Burstein-Loucks Rorschach system. Judgements of benevolent affective quality in the Rorschach percepts are positively related to the MPQ trait of Positive Emotionality, and inversely related to Negative Emotionality. Although these correlational relationships are not large and do not all reach statistical significance the consistency of the trend pattern is noteworthy.

The correlational relationships involving the implicit scores were found to be generally weaker than those involving the explicit scores. This finding was not surprising given that the implicit ratings are thought to be made more subjectively than are the explicit ratings.

8. RESEARCH HYPOTHESES

The aim of this dissertation is fourfold:

- 1) To investigate the hypothesis that benevolently toned Motivational Valuation variables in the Rorschach will be positively related to the Positive Emotionality factor in the MPQ.
- 2) To investigate the hypothesis that malevolently toned Motivational Valuation variables in the Rorschach will be positively related to the Negative Emotionality factor in the MPQ.
- 3) To investigate the hypothesis that significant correlations found between the Rorschach and MPQ variables in the pilot study will be replicated in a sample of 50 additional subjects.
- 4) To investigate the hypothesis that pleasantly toned early memory ratings will be related to benevolently toned Rorschach percepts and to the MPQ Positive Emotionality factor. Likewise, it is hypothesized that early memories assessed to be negative or unpleasant in affective tone will be related to malevolently toned Rorschach variables and the Negative Emotionality factor on the MPQ.

CHAPTER III

RESULTS

1.DESRIPTIVE STATISTICS

Rorschach Variables

The Rorschach Motivational Valuation scores were utilized in two ways in this study. First, the raw sums of each type of Motivational Valuation rating in a Rorschach protocol were compared to scores on the Multidimensional Personality Questionnaire and to Early Memory ratings. The sum totals of each type of rating, Explicit Benevolent, Implicit Benevolent, Explicit Malevolent, and Implicit Malevolent, constitute four Rorschach variables.

Recognizing the wide differences that can be found in response productivity across Rorschach protocols a response corrected score was also used. R corrected scores were obtained by dividing the sum of each type of Motivational Valuation score in an individual Rorschach protocol by the number of responses (R) in that protocol. In this section the R corrected scores are given in the form of percentages in order to promote easier understanding. For example, the Explicit Benevolent ratings from a particular protocol are totaled, divided by the total number of responses in that protocol and then multiplied by 100 to obtain the percentage score. Thus, a R corrected Explicit Benevolent score of .16 would indicate that 16% of the responses in that protocol were given Explicit Benevolent ratings.

In Table 1 the mean, standard deviation, median and range for each type of Rorschach variable is presented. One notes that the mean occurrence of Implicit Malevolent responses is considerably larger than the mean occurrences of the other variables.

Frequency distributions for the Rorschach variables are presented in Figures 1 through 8. In Figure 1 the frequency distribution for the Explicit Benevolent variables reveals that in 33 of the 100 protocols examined no Explicit Benevolent ratings were given. Figure 2 contains the frequency distribution for the R corrected Explicit Benevolent scores. In comparing Figure 1 and Figure 2 one notices that the distribution is more widely spread with the R corrected as opposed to the non-corrected scores.

Figure 3 and Figure 4 present the Implicit Benevolent and the Implicit Benevolent percentage or R corrected scores, respectively. Again, the R corrected or percentage scores are found to be more widely distributed than are the raw sum scores of Implicit Benevolent responses.

Likewise, Figure 5 presents the frequency distribution of the Explicit Malevolent raw sums while Figure 6 contains the distribution for the R corrected counterparts. Finally, Figure 7 and Figure 8 present the distributions for the Implicit Malevolent raw sums and the Implicit Malevolent percentages, respectively. In all of these pairs of figures it is apparent that the R corrected or percentage scores are more widely distributed than their raw sum counterparts.

Table 1

Descriptive Statistics of Rorschach Variables

Variables	Mean	Standard Deviation	Median	Minimum	Maximum
Explicit Benevolent	1.84	1.88	1	0	9
Implicit Benevolent	3.26	2.53	3	0	11
Explicit Malevolent	2.92	3.21	2	0	22
Implicit Malevolent	7.36	4.49	6.5	0	24
Explicit Benevolent % (R corrected scores)	6.53%	6.56%	6%	0%	31.58%
Implicit Benevolent % (R corrected scores)	11.45%	8.24%	10.17%	0%	47.37%
Explicit Malevolent % (R corrected scores)	11.10%	10.73%	7.62%	0%	57.14%
Implicit Malevolent % (R corrected scores)	25.68%	10.68%	26.21%	0%	50%
Total Rorschach Responses Per Protocol	28.58	13.75	25	9	79

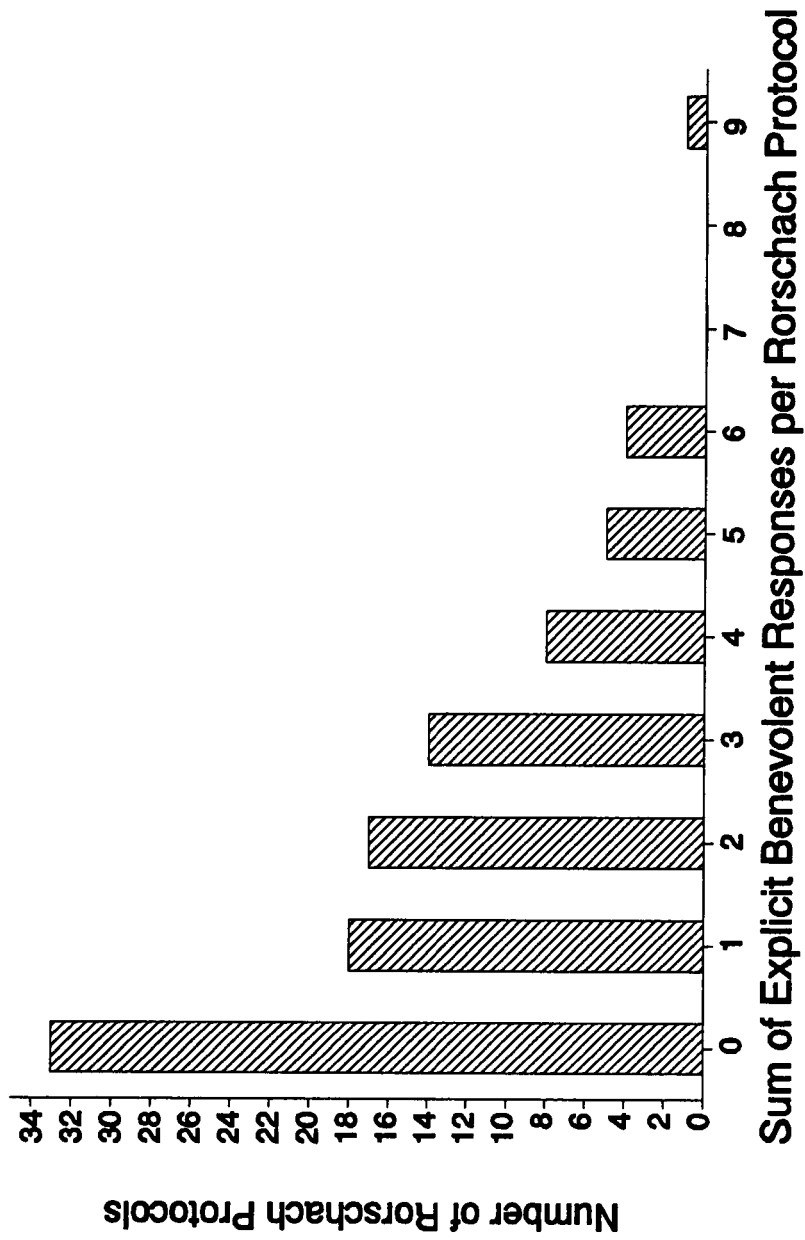


Figure 1. Explicit Benevolent Frequency Distribution

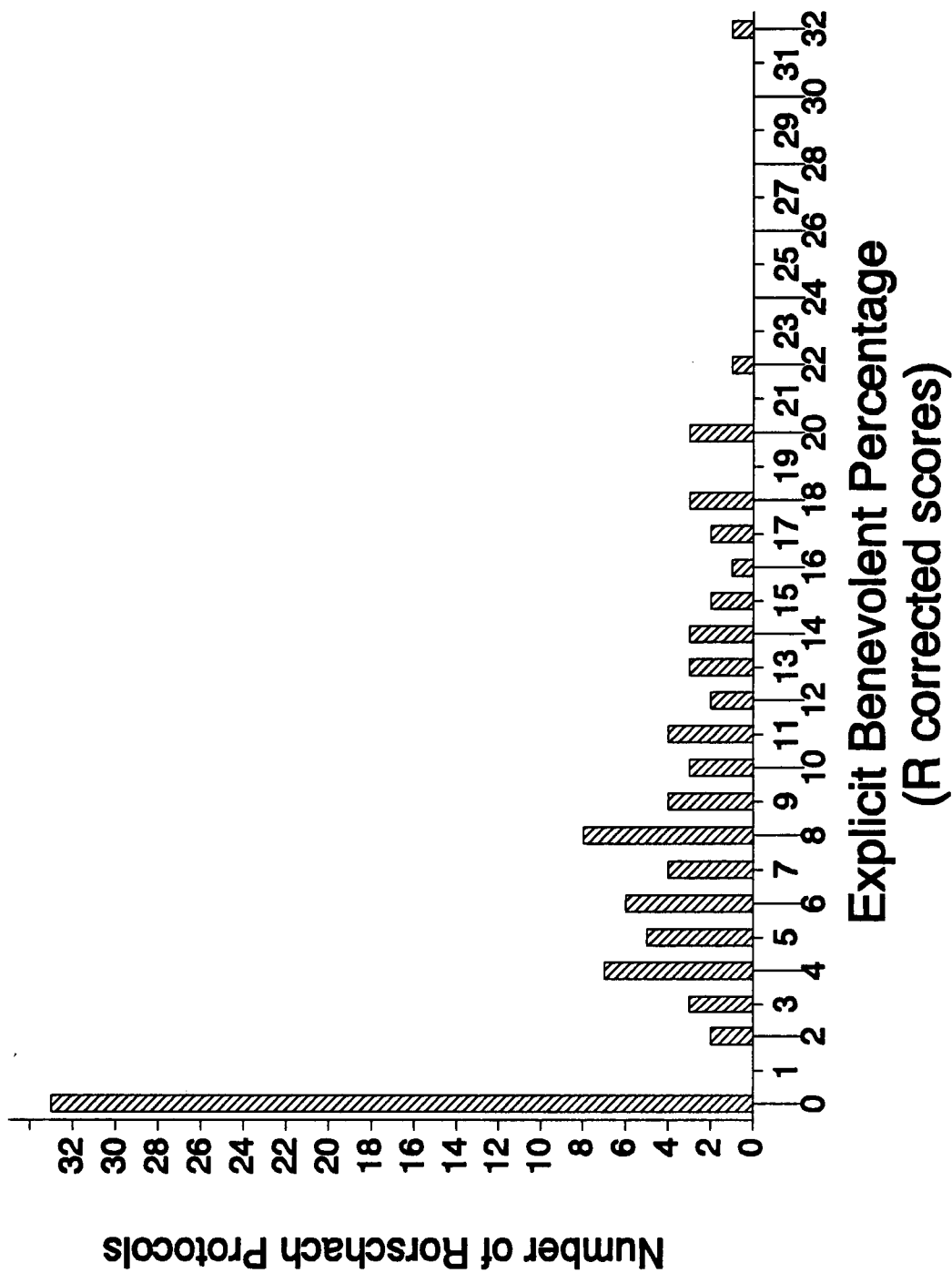


Figure 2. R corrected Explicit Benevolent Frequency Distribution

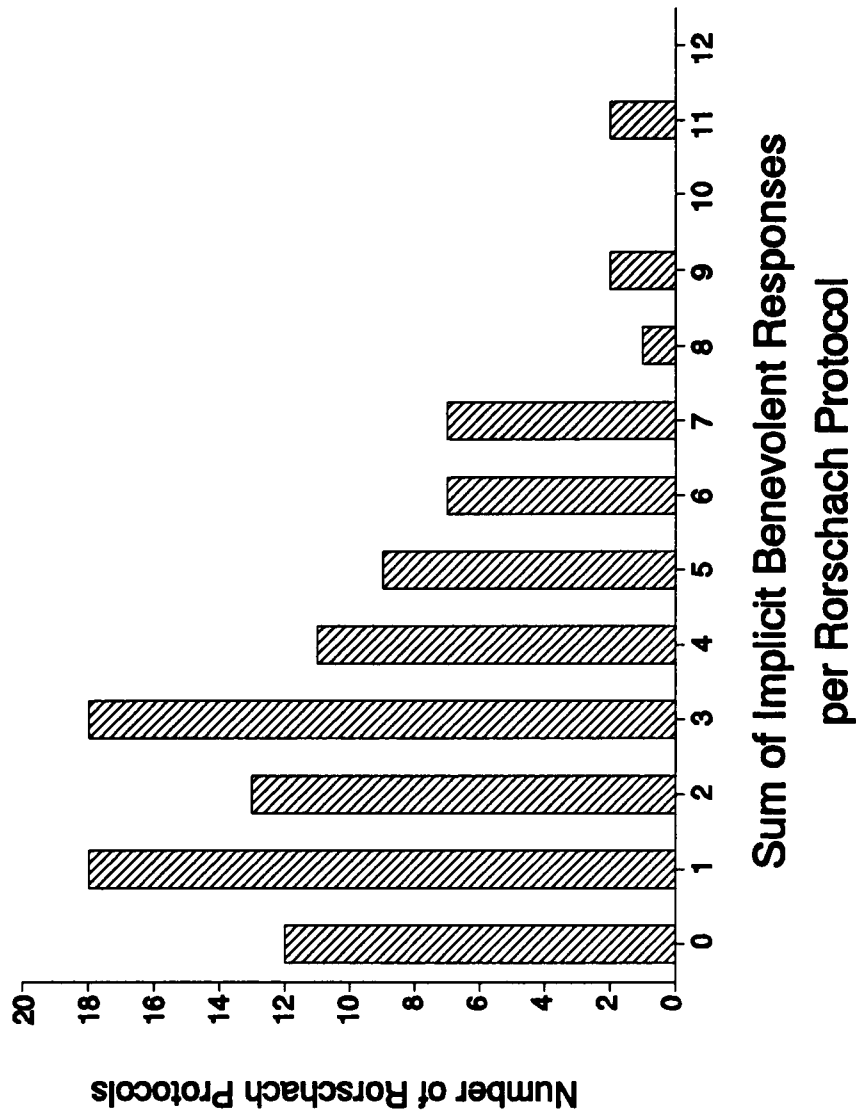


Figure 3. Implicit Benevolent Frequency Distribution

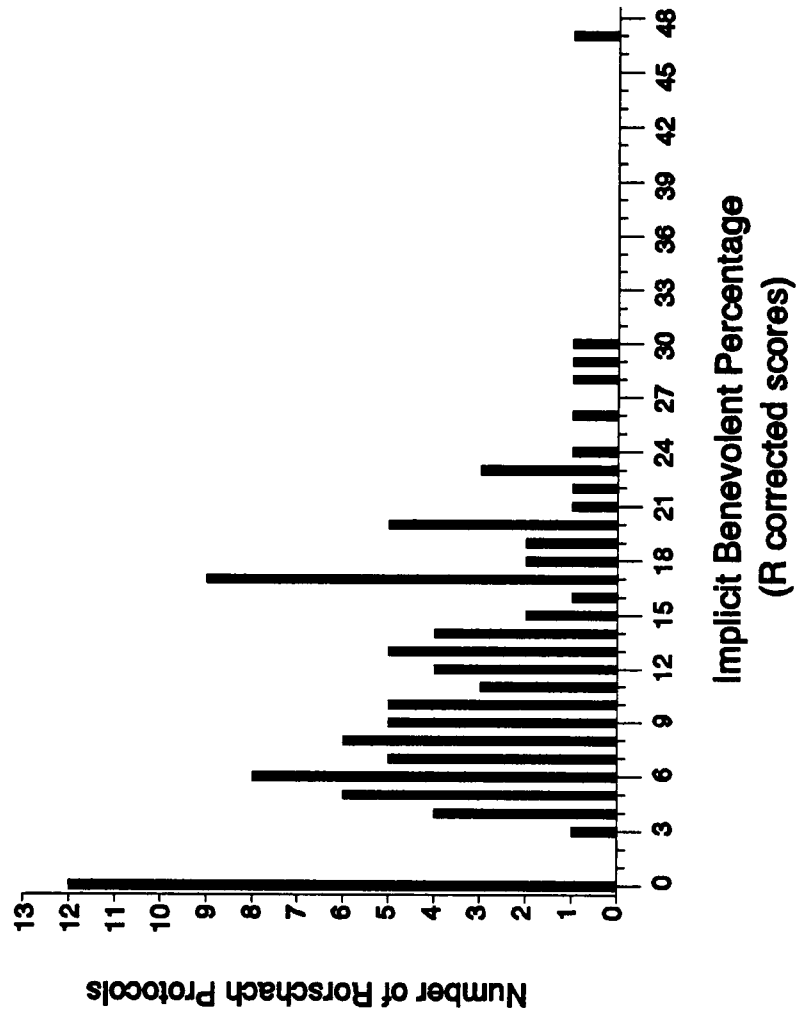


Figure 4. R corrected Implicit Benevolent Frequency Distribution

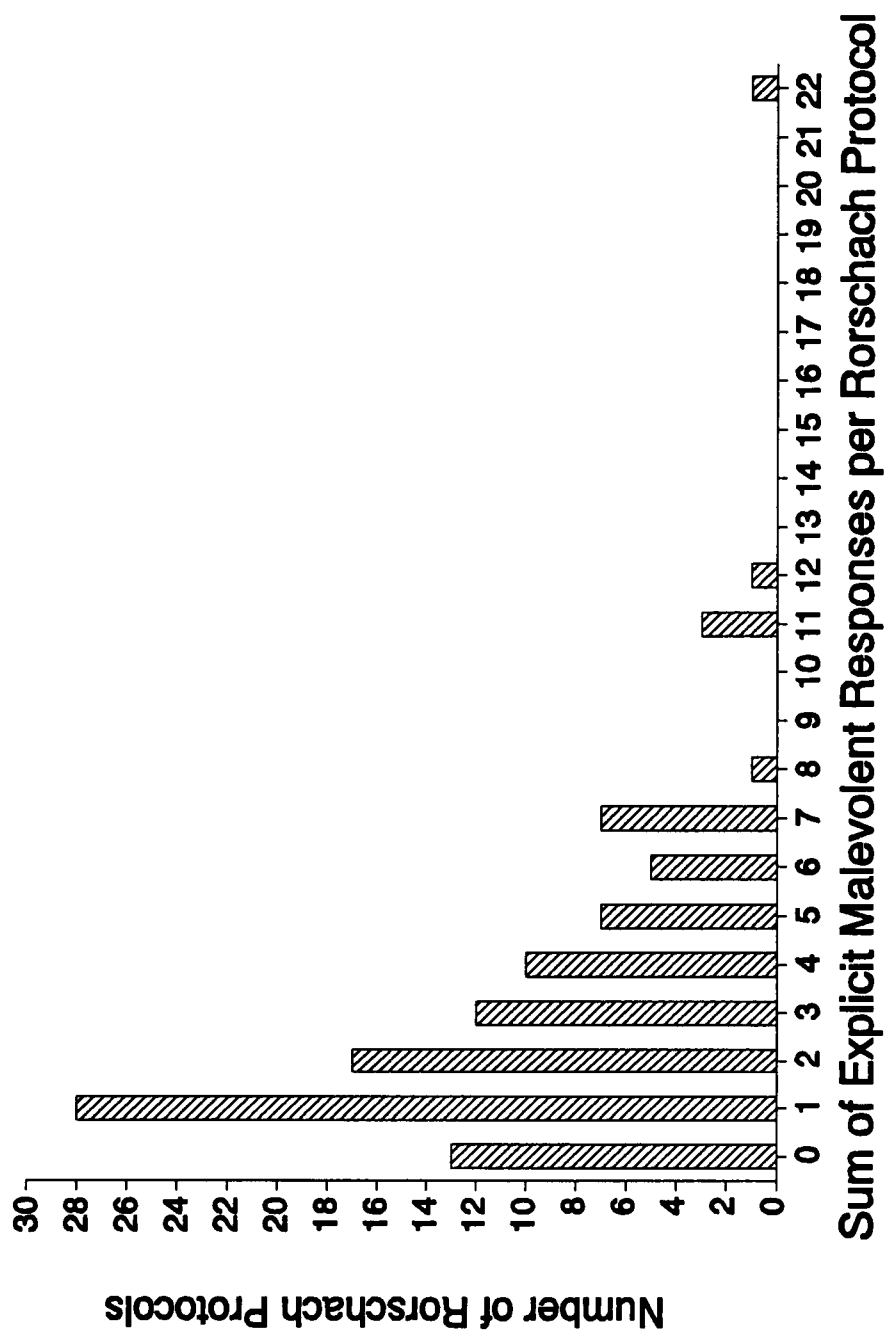


Figure 5. Explicit Malevolent Frequency Distribution

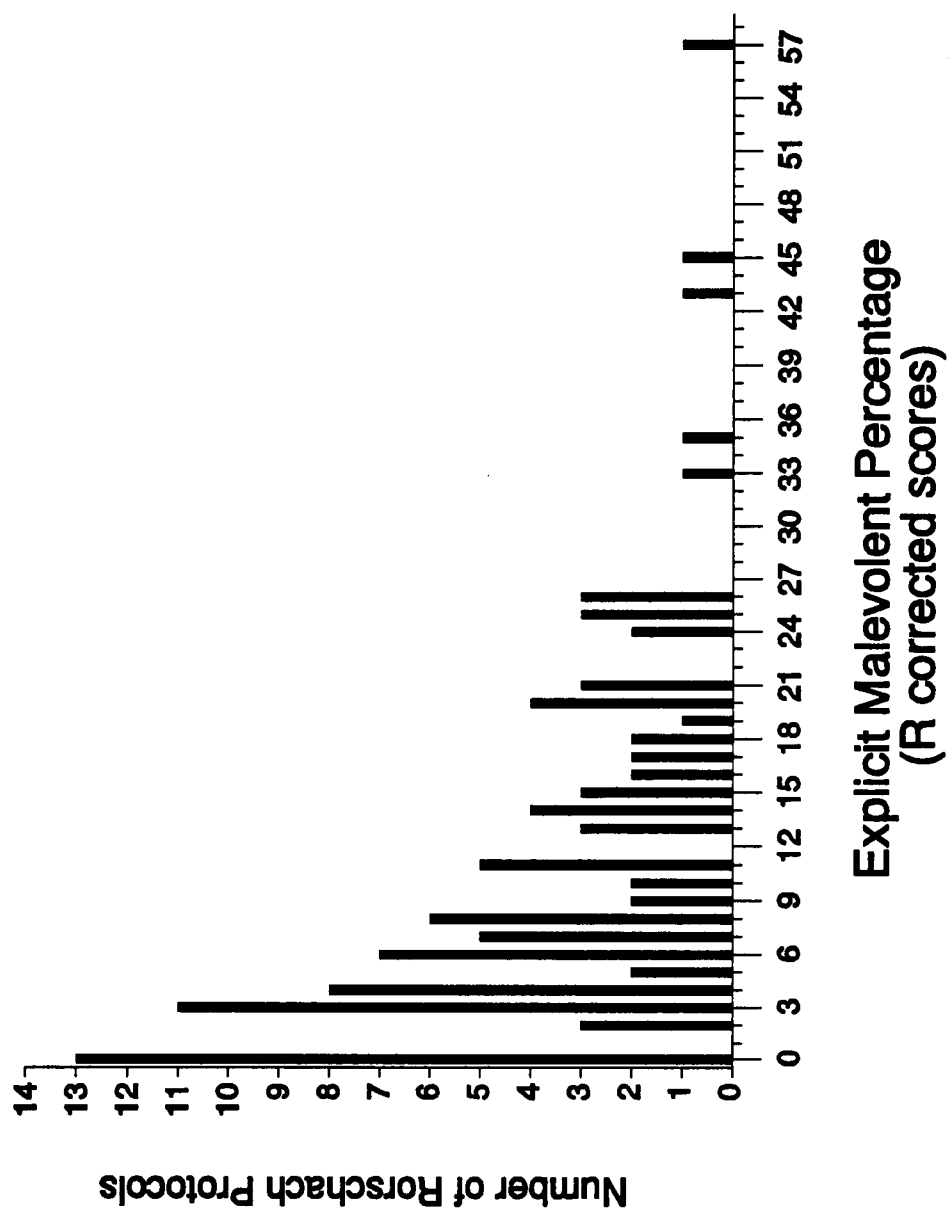


Figure 6. R corrected Explicit Malevolent Frequency Distribution

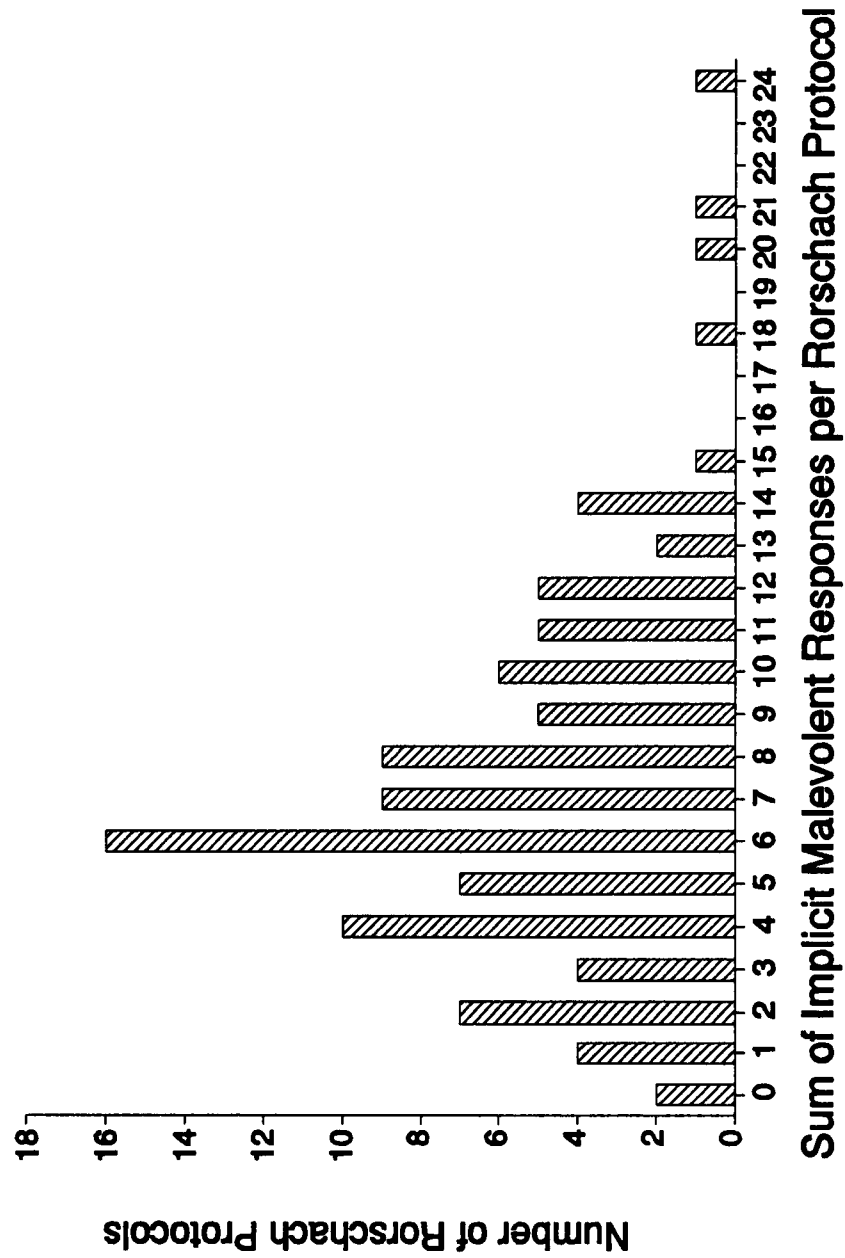


Figure 7. Implicit Malevolent Frequency Distribution

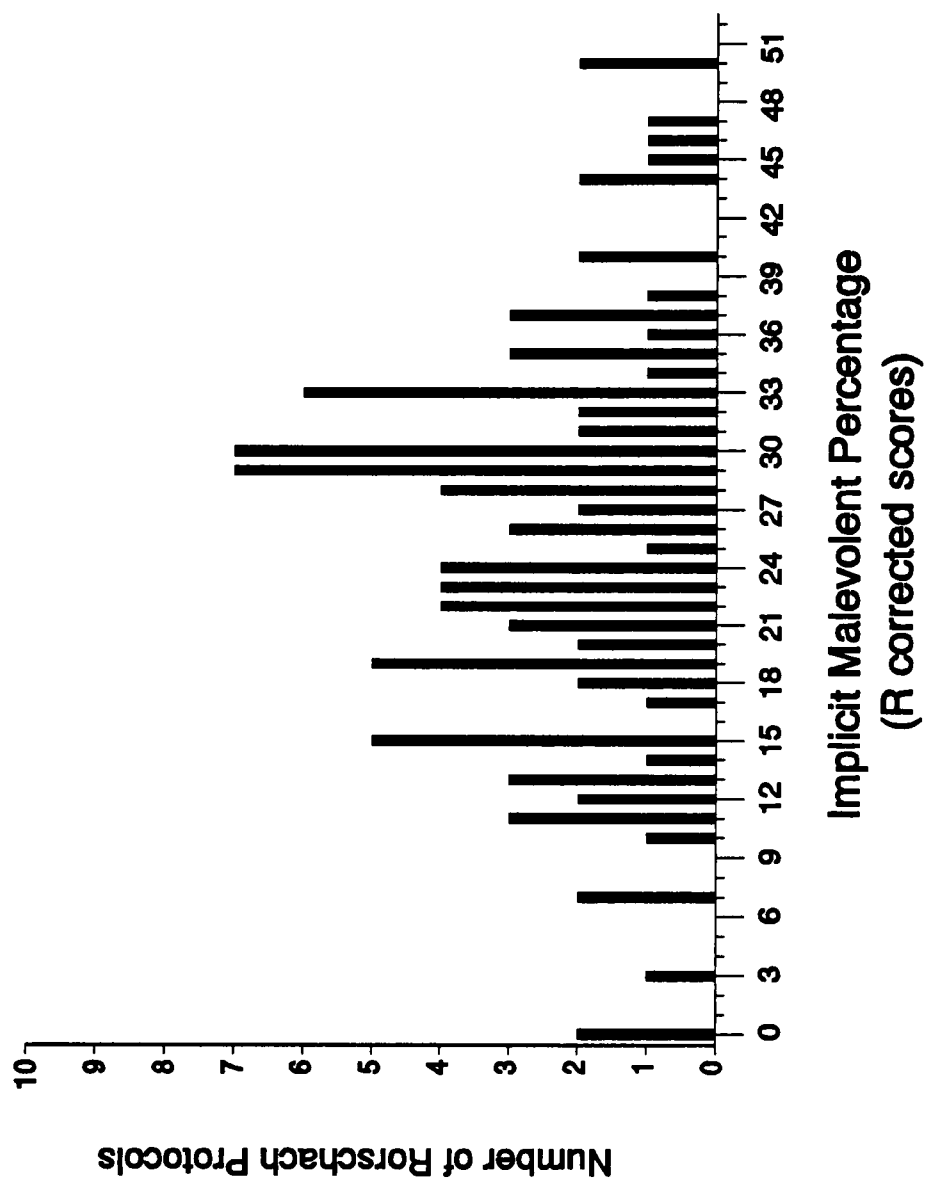


Figure 8. R corrected Implicit Malevolent Frequency Distribution

MPQ Variables

Table 2 contains the means, standard deviations and ranges for the MPQ higher order factors of Positive Emotionality and Negative Emotionality.

Table 2

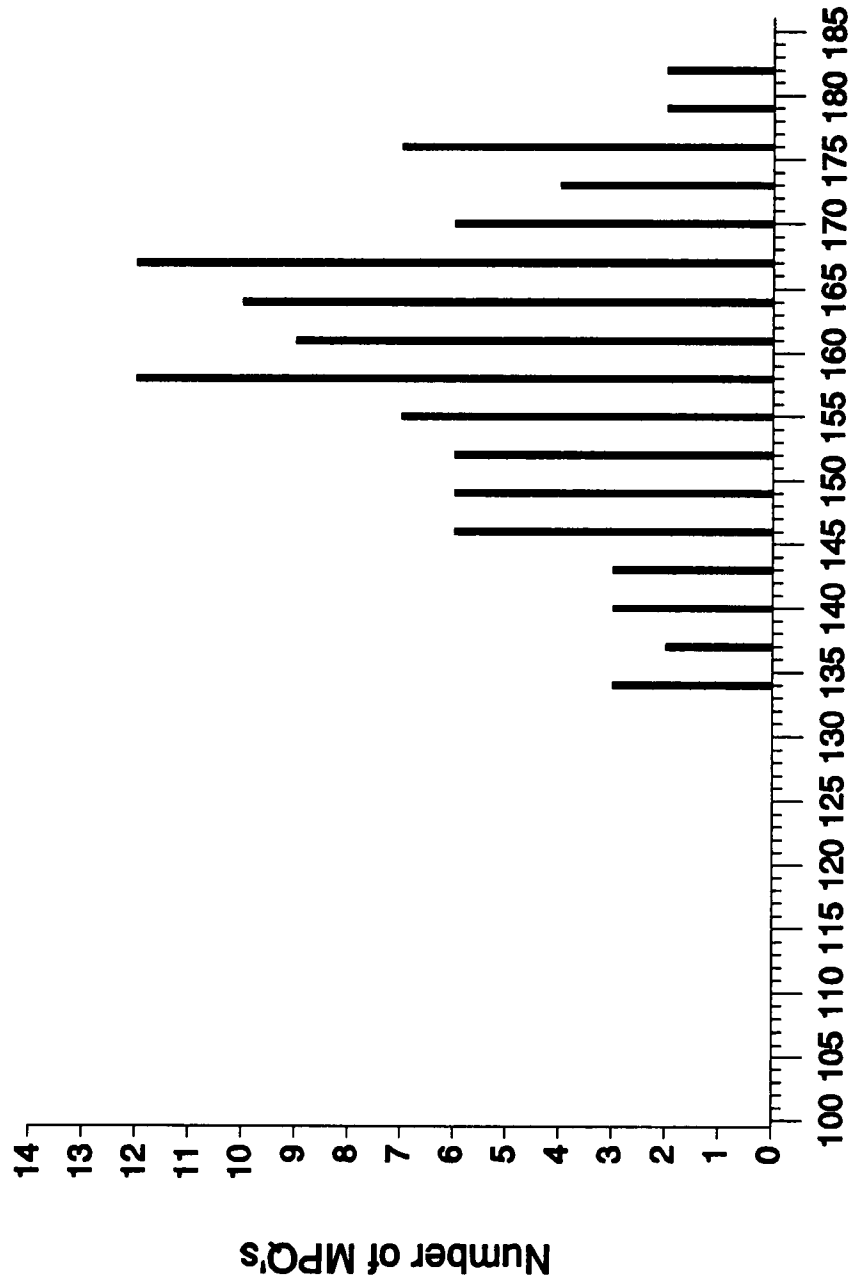
**Descriptive Statistics for the MPQ
Higher Order Factors**

Variables	Mean	Standard Deviation	Minimum	Maximum
Positive Emotionality	159.41	11.48	135	182
Negative Emotionality	128.48	13.26	105	171

Figure 9 and Figure 10 depict the frequency distributions for these factors respectively. It is notable that the mean PEM score is considerably higher than the mean NEM score in this sample. In general, the sample tended to score higher on Positive Emotionality than they did on Negative Emotionality.

Early Memory Variables

In Table 3 the descriptive statistics for the Early Memory variables of Rater Affect, Caregiver Interaction Outcome and Perception of Environment are presented. The Caregiver Interaction Outcome variable has an N of 32 while the other two variables each have an N of 50. One recalls that each



Positive Emotionality Scores

Figure 9. Positive Emotionality Frequency Distribution

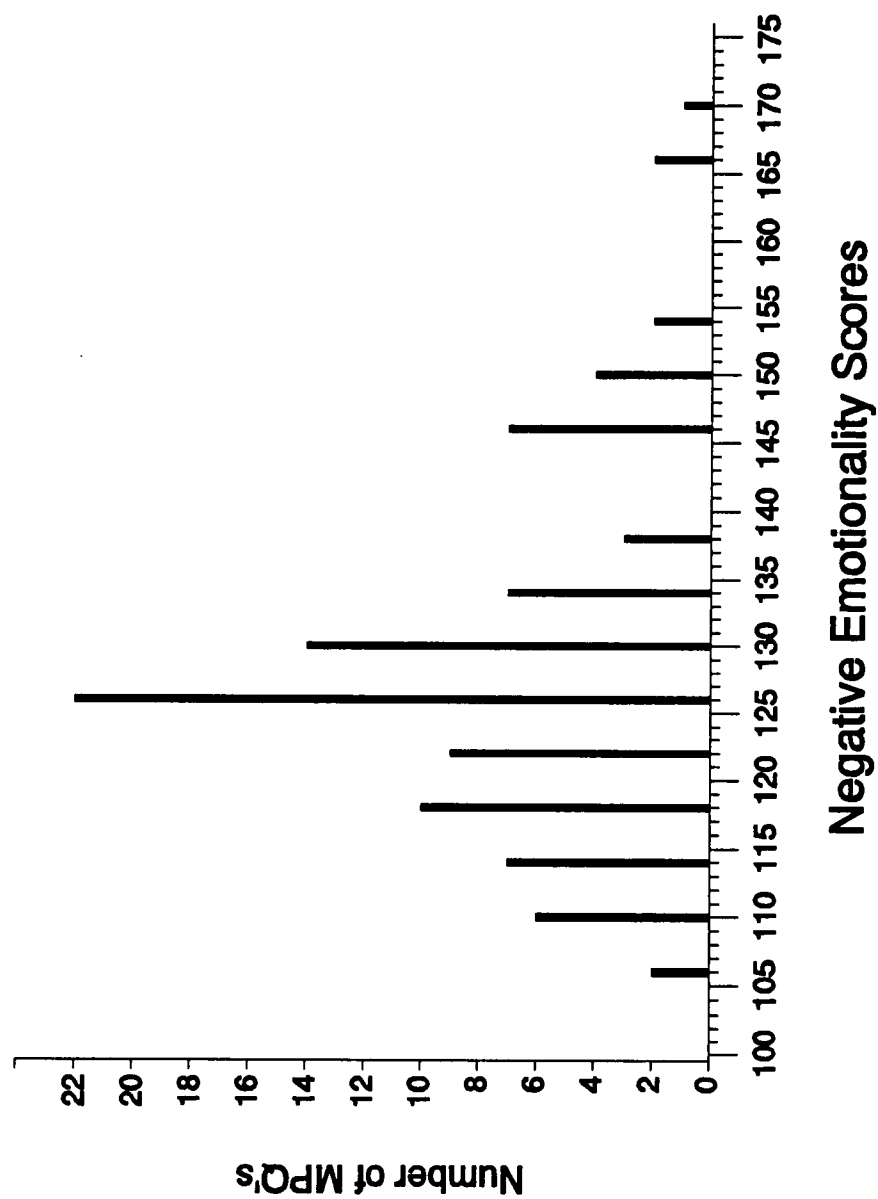


Figure 10. Negative Emotionality Frequency Distribution

Table 3
Descriptive Statistics for the
Early Memory Variables

Variable	Mean	Standard Deviation	Median	Minimum	Maximum
Rater Affect (N = 50)	2.82	1.3	3	1	5
Caregiver Interaction Outcome (N = 32)	3.1	1.4	3	1	5
Perception of Environment (N = 50)	3.5	1.3	3.5	2	5

Early Memory was rated on the dichotomy of whether or not it depicted a caregiving figure. Of the 50 Early Memories rated, 32 contained caregivers. Obviously, then, only 32 of the EMs can be rated for Caregiver Interaction Outcome.

The frequency distributions for the Early Memory variables are depicted in Figures 11, 12 and 13. Rater Affect and Caregiver Interaction Outcome variables generated the full range of scores from 1 on the unpleasant/negative side to 5 on the pleasant/positive side. Both of these variables had median scores of 3, indicating a neutral rating. The Perception of the Environment variable, on the other hand, did not generate the full range of scores. None of the 50 memories contained ratings of 1, portraying the environment as highly dangerous. The

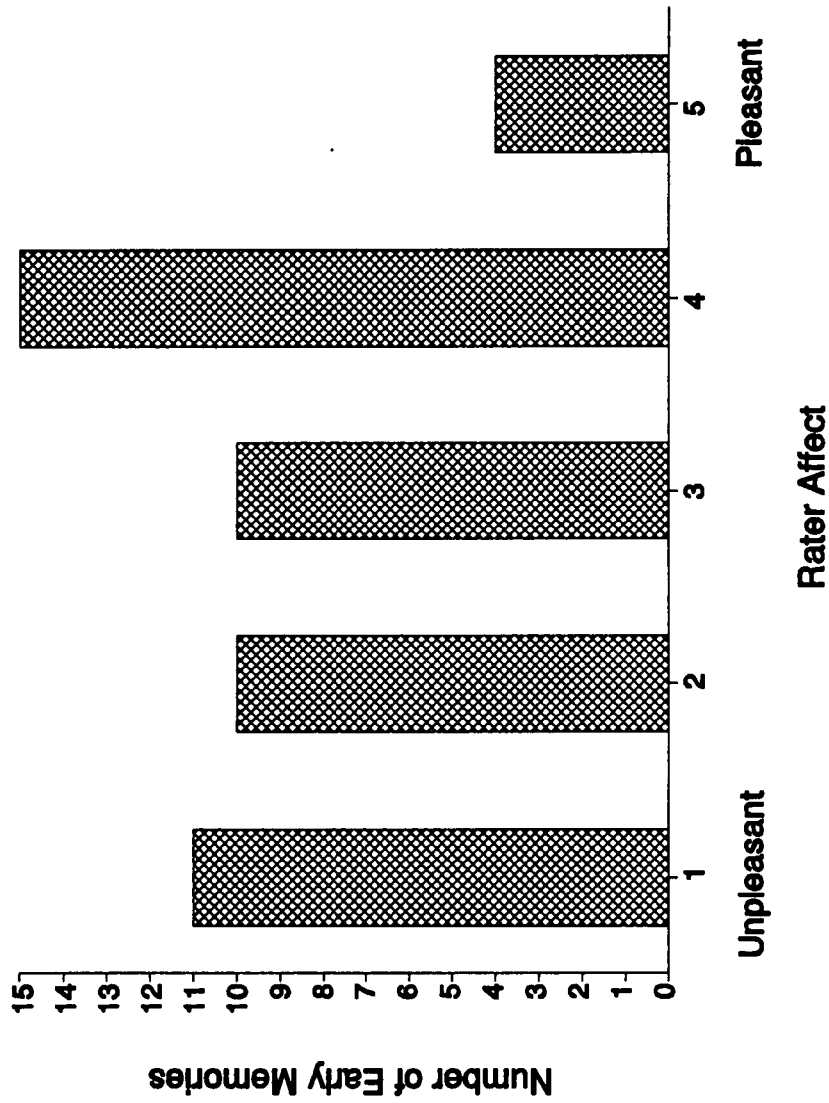


Figure 11. Frequency Distribution of Rater Affect Variable (N = 50).

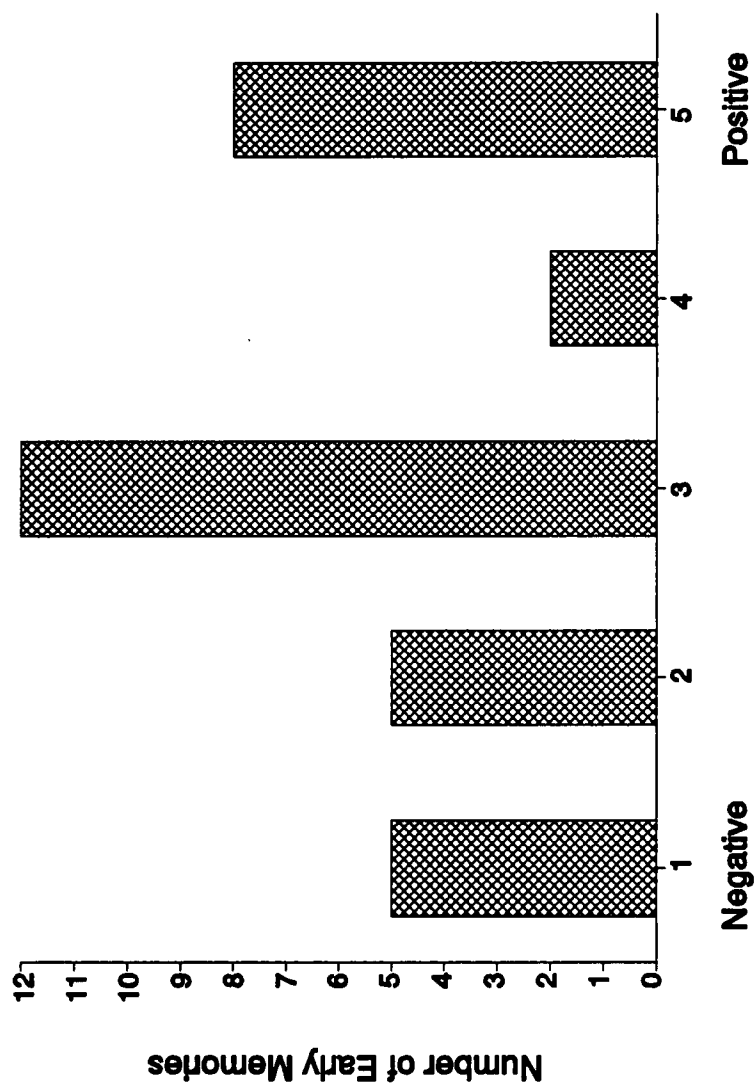


Figure 12. Frequency Distribution of Caregiver Interaction Outcome Variable (N = 32).

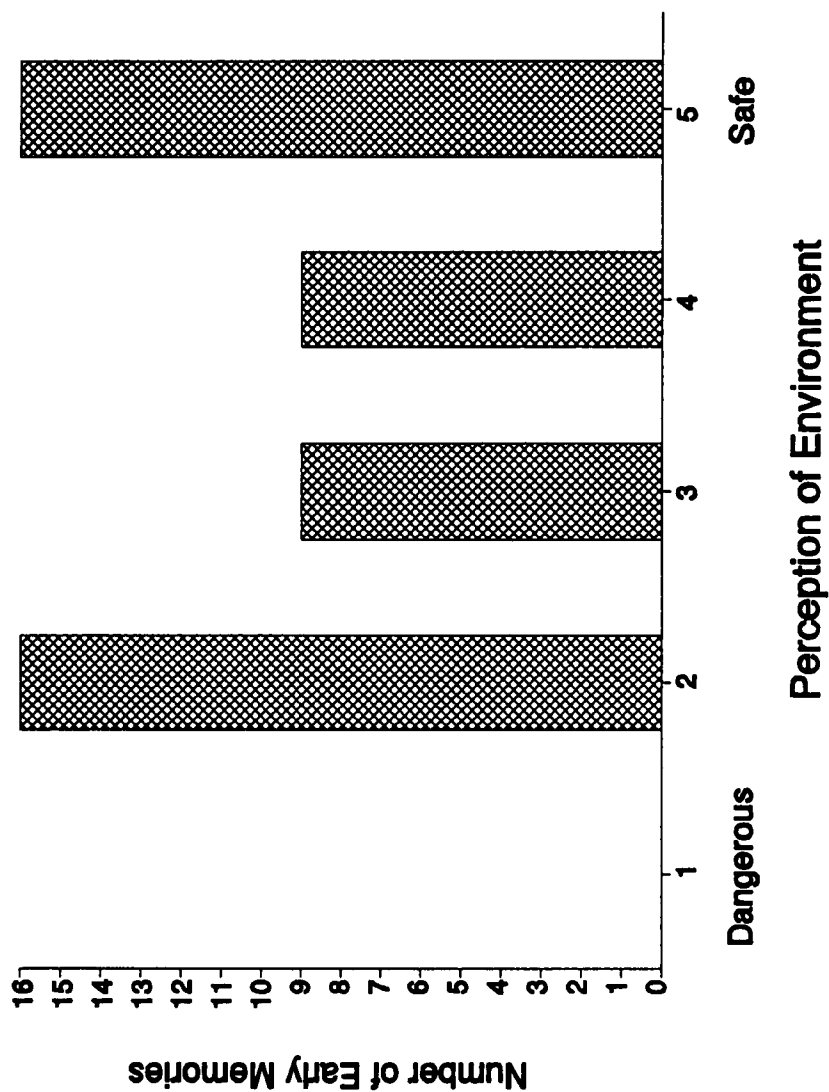


Figure 13. Frequency Distribution of Perception of Environment Variable (N = 50).

mean for this variable was slightly higher than the means for the other two Early Memory variables.

2. RESULTS OF THE REPLICATION STUDY

The hypothesis regarding Explicit Benevolent Rorschach percepts being positively related to Positive Emotionality is confirmed in the first, or pilot group and replicated in the second group. This is true when using both raw sum of EB scores and EB scores which were corrected for the number of Rorschach responses. These results are presented in Tables 4 and 5.

While the first group of Implicit Benevolent scores generate no significant correlations with Positive or Negative Emotionality, the Implicit Benevolent or IB scores in the second group are significantly related to both PEM (+ correlation) and NEM (- correlation). Surprisingly, correcting for R does not strengthen the relationship with the Emotionality variables. In fact, the R corrected IB scores are found to be significantly related to PEM but not to NEM. However, the correlational relationship with NEM approaches significance.

In general, the Benevolent variables are found to be better predictors than the Malevolent variables. There are no significant correlations between Explicit Malevolent scores and the Emotionality factors across both groups. However, in the second group Explicit Malevolent is significantly correlated with NEM in the predicted direction. Implicit Malevolent is significantly correlated with NEM in

Table 4

Spearman Correlations: Explicit and Implicit
Motivational Valuation with Positive and Negative
Emotionality in Both Groups of 50 Subjects

Variables	Positive Emotionality	Negative Emotionality
Explicit Benevolent	Grp 1 .2328* (p = .052) ----- Grp 2 .3301** (p = .010)	Grp 1 -.1710 (p = .118) ----- Grp 2 .0245 (p = .433)
Implicit Benevolent	Grp 1 .0540 (p = .355) ----- Grp 2 .2540* (p = .038)	Grp 1 -.1495 (p = .150) ----- Grp 2 -.2524* (p = .039)
Explicit Malevolent	Grp 1 .0320 (p = .413) ----- Grp 2 -.1045 (p = .235)	Grp 1 .1655 (p = .125) ----- Grp 2 .2110 (p = .071)
Implicit Malevolent	Grp 1 .0899 (p = .267) ----- Grp 2 -.0539 (p = .355)	Grp 1 .0003 (p = .499) ----- Grp 2 -.2849* (p = .022)

* significant $\leq .05$

** significant $\leq .01$
one-tailed test

Table 5

Spearman Correlations: R corrected Rorschach Explicit and
Implicit Motivational Valuation with Positive and Negative
Emotionality in Both Groups of 50 Subjects

Variables	Positive Emotionality	Negative Emotionality
Explicit Benevolent ^a	Grp 1 .2451* (p = .048) ----- Grp 2 .3146** (p = .013)	Grp 1 -.1885 (p = .095) ----- Grp 2 -.1485 (p = .152)
Implicit Benevolent ^a	Grp 1 -.0031 (p = .491) ----- Grp 2 .2685* (p = .030)	Grp 1 -.1016 (p = .241) ----- Grp 2 -.2119 (p = .070)
Explicit Malevolent ^a	Grp 1 -.0160 (p = .456) ----- Grp 2 -.1264 (p = .191)	Grp 1 .1854 (p = .099) ----- Grp 2 .3245** (p = .011)
Implicit Malevolent ^a	Grp 1 .1385 (p = .169) ----- Grp 2 -.0524 (p = .359)	Grp 1 .0246 (p = .433) ----- Grp 2 -.0724 (p = .309)

* significant $\leq .05$

** significant $\leq .01$

one-tailed test

^a R corrected

only the second group. Nevertheless, this relationship is not in the predicted direction. Implicit Malevolent is found to be negatively related to Negative Emotionality, rather than positively related as expected.

In Table 6 the Benevolent scores, both explicit and implicit, are combined and then compared with the Emotionality variables. In the second group the combined Benevolent scores correlate positively with Positive Emotionality and negatively with Negative Emotionality. Although the correlations in Group 1 (pilot) are not significant there are strong trends in the predicted direction. Correcting for R does not strengthen the relationship between the Rorschach and MPQ variables. There is only one significant correlation found in Group 2 between the combined Benevolent (R corrected) scores and Positive Emotionality. In Group 1 there is a strong trend in the same direction. However, there are no significant correlations found with Negative Emotionality.

The combined Malevolent scores in Table 6 yield no significant correlations. Correcting for R does not heighten the measured relationship between Malevolent scores and Emotionality factors. This pattern is consistent with a pattern described earlier. The Benevolent Rorschach scores are again found to be better predictors of Emotionality than the Malevolent scores.

Table 6

Spearman Correlations: Combination of All Benevolent Scores and
Combination of All Malevolent Scores with Positive and Negative
Emotionality in Both Groups of 50 Subjects

Variables	Positive Emotionality	Negative Emotionality
Explicit and Implicit Benevolent	Grp 1 .2036 (p = .078) ----- Grp 2 .3123* (p = .014)	Grp 1 -.2001 (p = .082) ----- Grp 2 -.2459* (p = .043)
Explicit and Implicit Malevolent	Grp 1 .0380 (p = .283) ----- Grp 2 -.1233 (p = .197)	Grp 1 .0908 (p = .265) ----- Grp 2 -.1369 (p = .172)
Explicit and Implicit Benevolent ^a	Grp 1 .2142 (p = .068) ----- Grp 2 .4032** (p = .002)	Grp 1 -.1922 (p = .091) ----- Grp 2 -.1191 (p = .205)
Explicit and Implicit Malevolent ^a	Grp 1 .0968 (p = .252) ----- Grp 2 -.1748 (p = .112)	Grp 1 .1325 (p = .179) ----- Grp 2 .1909 (p = .092)

* significant $\leq .05$

** significant $\leq .01$

one-tailed test

^a R corrected

3. CORRELATIONAL ANALYSIS OF COMBINED GROUPS AS A SINGLE SAMPLE

In efforts to gain the best estimate of the relationship between the Rorschach Motivational Valuation variables and the MPQ Emotionality variables the two groups were combined into a single group of 100 subjects. Before combining the groups however, it was necessary to determine whether the correlations generated from the two sets of data were significantly different. By converting each pair of the correlation coefficients into Fisher z scores a test of the difference between two correlations from independent samples was conducted. This test provided clear evidence that the correlations obtained between the two groups were not significantly different. Indeed, of the 208 correlations compared only four were shown to be significantly different at the .05 level; many fewer than would be predicted by chance.

Table 7 contains the correlations found between the Rorschach and MPQ variables for the group of 100 subjects. Whereas Explicit Malevolent (uncorrected) was not found to be significantly correlated to either of the Emotionality factors in the separate groups, the combined group yields a significant positive correlation between Explicit Malevolent and Negative Emotionality. This lends support to the original hypothesis that malevolently toned percepts on the Rorschach would be related to Negative Emotionality.

Another interesting finding involves the significant negative relationship between Implicit Benevolent scores and Negative Emotionality. While Implicit

Table 7

**Spearman Correlations: Explicit and Implicit Rorschach
Motivational Valuation with Positive and Negative
Emotionality in Combined Group of 100 Subjects**

Variables	Positive Emotionality	Negative Emotionality
Explicit Benevolent	.2739** (p = .003)	-.0630 (p = .267)
Implicit Benevolent	.1591 (p = .057)	-.2003* (p = .023)
Explicit Malevolent	-.0557 (p = .291)	.1979* (p = .024)
Implicit Malevolent	.0012 (p = .495)	-.1297 (p = .099)

* significant $\leq .05$

** significant $\leq .01$
one-tailed test

Benevolent approaches significance in its relationship with Positive Emotionality it is clearly better in predicting Negative Emotionality. Consistent with the earlier analysis, Explicit Benevolent is significantly correlated with Positive Emotionality.

The R corrected Rorschach variables were then compared to the Emotionality factors in the combined groups. Table 8 contains these correlations. The R corrected Implicit Benevolent score is found to correlate (+) with Positive Emotionality. In looking back to Table 7 one recalls that Implicit Benevolent was found to be significantly related not to Positive Emotionality (although the correlation was just short of being significant) but to Negative Emotionality (- correlation). In these R corrected scores Implicit Benevolent significantly correlates with Positive Emotionality and only approaches significance with Negative Emotionality. One finding consistent in the R corrected and uncorrected Explicit Malevolent variables is a positive correlation with Negative Emotionality. Correcting for R simply strengthens the measured relationship.

Table 9 presents the correlations found between the MPQ Emotionality factors and the Rorschach variables in which Explicit and Implicit scores are added together. The combined Explicit and Implicit Benevolent summary score is found to be significantly correlated with both Positive Emotionality (+) and Negative Emotionality (-). Correcting for R strengthens the relationship with Positive Emotionality but, surprisingly, weakens the relationship with Negative Emotionality (although the correlation approaches significance). The Explicit and Implicit Malevolent summary scores are not found to be related to either Positive or Negative Emotionality. Correcting for R yields a correlation

Table 8

Spearman Correlations: R corrected Rorschach Explicit and
Implicit Motivational Valuation with Positive and Negative
Emotionality in Combined Group of 100 Subjects

Variables	Positive Emotionality	Negative Emotionality
Explicit Benevolent ^a	.2736** (p = .003)	-.0279 (p = .392)
Implicit Benevolent ^a	.1709* (p = .045)	-.1509 (p = .067)
Explicit Malevolent ^a	-.0928 (p = .179)	.2475** (p = .007)
Implicit Malevolent ^a	.0208 (p = .419)	-.0179 (p = .430)

* significant $\leq .05$

** significant $\leq .01$
one-tailed test

^a R corrected

Table 9

**Spearman Correlations: Combination of All Benevolent Scores and
Combination of All Malevolent Scores with Positive and
Negative Emotionality in Combined Group of 100 Subjects**

Variables	Positive Emotionality	Negative Emotionality
Explicit and Implicit Benevolent	.2505** (p = .006)	-.2070* (p = .019)
Explicit and Implicit Malevolent	-.0507 (p = .308)	-.0011 (p = .496)
Explicit and Implicit Benevolent*	.2941** (p = .001)	-.1505 (p = .067)
Explicit and Implicit Malevolent*	-.0773 (p = .222)	.1590 (p = .057)

* significant $\leq .05$

** significant $\leq .01$
one-tailed test

* R corrected

approaching significance between the Explicit and Implicit Malevolent variable and Negative Emotionality.

4. MULTIPLE REGRESSION

Once the correlational analysis of the combined sample was completed a step-wise multiple regression was conducted to determine the separate effects of the various independent variables (Rorschach variables) in predicting Positive and Negative Emotionality. The first regression equation contained the four Rorschach variables of Explicit Benevolent, Implicit Benevolent, Explicit Malevolent and Implicit Malevolent. The dependent variable in the first equation was Positive Emotionality. The only Rorschach predictor variable found to be significant was the Explicit Benevolent variable. It accounted for 5.7% of the variance in the Positive Emotionality variable.

The second regression equation contained the predictor variables used in the first equation but the dependent variable was Negative Emotionality. The sole variable found to be significant in predicting Negative Emotionality was the Implicit Benevolent predictor variable. It accounted for 4.6% of the variance in the Negative Emotionality factor. In the third and fourth regression equations the R corrected versions of the four Rorschach variables were used to predict Positive and Negative Emotionality respectively. The R corrected Explicit Benevolent variable was the only significant predictor for Positive Emotionality, and it accounted for 5.8% of the variance. This is, of course, consistent with

the results of the first regression equation. Whether corrected for R or not, the Explicit Benevolent Rorschach variable is found to be the only predictor variable that reaches significance in its relationship with Positive Emotionality.

The R corrected Explicit Malevolent variable is found to be the only significant predictor of Negative Emotionality. One recalls that without the R correction, the Implicit Benevolent variable was the best (only significant) predictor of Negative Emotionality. In this case, correcting for R makes a substantial difference in the predictive power of the Explicit Malevolent variable. This variable accounts for 6.8% of the variance in the Negative Emotionality factor.

5. EARLY MEMORY AND RORSCHACH VARIABLES

The ratings from the early memory data were compared to the Rorschach data via one-tailed Spearman correlations. The EM ratings were made only on the second group of 50 subjects. One of the EM variables used involves a dichotomous rating concerning whether or not a caretaking figure is depicted in the memory. Of the fifty EMs evaluated 32 contain caretakers. A point-biserial correlation procedure reveals no significant correlations between presence or absence of a caretaker and the Rorschach variables. The three remaining EM variables are Rater Affect (N=50), Caregiver Interaction Outcome (N=32), and Perception of the Environment (N=50). The correlations between these EM

variables and the Rorschach Motivational Valuation variables are presented in Table 10.

Rater affect in the EMs, contrary to one of the hypotheses of this study, was not found to be significantly correlated with the Rorschach measures. The only significant relationship found is that between the Explicit Malevolent variable and Caregiver Interaction Outcome in the EM. This relationship is notable because of the relatively small number of subjects ($N=32$). The negative correlation indicates that as the Caregiver Interaction Outcome becomes more positive the incidence of Explicit Malevolent percepts in the Rorschach goes down. This relationship is obviously in the expected direction. The Rorschach variables corrected for R were then compared to the EM data to assess whether correcting for R changes the measured relationships between the EM and Rorschach data. Table 11 contains the correlations between these variables.

As was true with the uncorrected Rorschach variables, the R corrected variables correlated significantly with only one of the EM ratings, that of, again, Caregiver Interaction Outcome. The Explicit Malevolent score is, as was predicted, negatively correlated with Caregiver Interaction Outcome. There is a surprising finding, however, with the Implicit Malevolent R corrected score. Instead of being negatively related to Caregiver Interaction Outcome as expected, it is positively related to it. It is noteworthy that this Implicit Malevolent variable is, by far, the weakest of the Rorschach variables in

Table 10

**Spearman Correlations: Early Memory
Ratings and Rorschach Motivational Valuation**

Variables	Rater Affect (N = 50)	Caregiver Interaction Outcome (N = 32)	Perception of Environment (N = 50)
Explicit Benevolent	-.0255 (p = .430)	-.0944 (p = .304)	-.0467 (p = .374)
Implicit Benevolent	-.0084 (p = .477)	.1870 (p = .153)	.0986 (p = .248)
Explicit Malevolent	-.1369 (p = .172)	-.3238* (p = .035)	-.1049 (p = .234)
Implicit Malevolent	-.1261 (p = .191)	.0855 (p = .321)	.0136 (p = .463)
Explicit and Implicit Benevolent	-.0655 (p = .326)	.0460 (p = .401)	.0029 (p = .492)
Explicit and Implicit Malevolent	-.1473 (p = .154)	-.1410 (p = .221)	.0031 (p = .492)

* significant $\leq .05$
one-tailed test

Table 11

**Spearman Correlations: Early Memory
Ratings and R-corrected Rorschach Motivational Valuation**

Variables	Rater Affect (N = 50)	Caregiver Interaction Outcome (N = 32)	Perception of Environment (N = 50)
Explicit Benevolent ^a	.1246 (p = .194)	-.0183 (p = .460)	.0337 (p = .408)
Implicit Benevolent ^a	.0417 (p = .387)	.2660 (p = .071)	.0740 (p = .305)
Explicit Malevolent ^a	-.0838 (p = .281)	-.3522* (p = .024)	-.0860 (p = .276)
Implicit Malevolent ^a	-.0472 (p = .372)	.3361* (p = .030)	-.0014 (p = .496)
Explicit and Implicit Benevolent ^a	-.0430 (p = .384)	.1548 (p = .199)	.0202 (p = .445)
Explicit and Implicit Malevolent ^a	-.0853 (p = .278)	-.0980 (p = .297)	-.0650 (p = .327)

* significant $\leq .05$

one-tailed test

^a R corrected

predicting Emotionality ratings on the MPQ. While it manifests some predictive power here it is not in the expected direction and raises questions about the validity of the Implicit Malevolent rating.

All in all, the EM variables are not as closely related to the Rorschach Motivational Valuation scores as was anticipated. The only significant relationships found are between Explicit Malevolent and Caregiver Interaction Outcome. It is important to remember that, overall, the Benevolent Rorschach variables were more consistent in predicting the MPQ variables than were the Malevolent variables. With the early memories the opposite pattern is seen with the Malevolent variables, specifically the Explicit ones, being much better predictors.

6. EARLY MEMORY AND MPQ VARIABLES

As a final step the Early Memory data was compared to the MPQ data. None of the EM variables are found to be significantly related to Positive or Negative Emotionality. However, Caregiver Interaction Outcome is found to be significantly correlated with Constraint, the third higher-order personality factor or trait described by Tellegen. Although this higher-order factor of Constraint is not being investigated in this dissertation it is mentioned here because it may shed some light on why the correlations between the EM variables and the Rorschach variables are generally weak. This issue will be discussed in more detail in the following chapter.

7. TELLEGEN'S PRIMARY PERSONALITY DIMENSIONS AND THE RORSCHACH

Tellegen (1982) describes his higher order traits of Positive and Negative Emotionality in terms of the primary personality dimensions with which they are associated. Positive Emotionality is associated with the primary dimensions of Wellbeing, Social Potency, Achievement and Social Closeness. Negative Emotionality on the other hand, is mainly associated with Stress Reaction, Alienation and Aggression. In Table 12 the primary dimensions that load on Positive Emotionality are compared to the Rorschach variables. Table 13 contains the correlations between the same PEM primary dimensions and the R corrected Rorschach variables.

The Rorschach variables are found to share no significant correlations with the primary dimension of Achievement and only one significant relationship with Social Potency. Both Explicit and Implicit Benevolent variables, as well as the Explicit Malevolent variable, are significantly related to Wellbeing. Explicit Benevolent and Explicit Malevolent are also found to be significantly related to Social Closeness in the predicted directions. In general, the Rorschach variables are related to Wellbeing and Social Closeness rather than with the Social Potency and Achievement dimensions of Positive Emotionality.

Table 12

**Spearman Correlations: Rorschach Motivational
Valuation and the Primary Dimensions of
Positive Emotionality**

Variables	Wellbeing	Social Potency	Achievement	Social Closeness
Explicit Benevolent	.1909* (p = .029)	.1649* (p = .051)	-.0267 (p = .396)	.1774* (p = .039)
Implicit Benevolent	.2355** (p = .009)	.0020 (p = .492)	.0564 (p = .289)	.1443 (p = .076)
Explicit Malevolent	-.1988* (p = .024)	.0544 (p = .296)	.0458 (p = .325)	-.1726* (p = .043)
Implicit Malevolent	.0027 (p = .489)	.1250 (p = .108)	-.1008 (p = .159)	.0410 (p = .343)
Explicit and Implicit Benevolent	.2583** (p = .005)	.1102 (p = .138)	.0088 (p = .466)	.1982* (p = .024)
Explicit and Implicit Malevolent	-.1111 (p = .136)	.1198 (p = .118)	-.1109 (p = .136)	-.0312 (p = .379)

* significant $\leq .05$

** significant $\leq .01$
one-tailed test

Table 13

**Spearman Correlations: R corrected Rorschach Motivational
Valuation and the Primary Dimensions of Positive Emotionality**

Variables	Wellbeing	Social Potency	Achievement	Social Closeness
Explicit Benevolent ^a	.2154* (p = .016)	.1212 (p = .115)	.0013 (p = .495)	.1455 (p = .074)
Implicit Benevolent ^a	.2474** (p = .007)	-.0597 (p = .278)	.1601 (p = .056)	.1012 (p = .158)
Explicit Malevolent ^a	-.2108* (p = .018)	-.0506 (p = .309)	.0158 (p = .438)	-.2271** (p = .012)
Implicit Malevolent ^a	.0239 (p = .409)	.1189 (p = .119)	-.0210 (p = .418)	-.0280 (p = .391)
Explicit and Implicit Benevolent ^a	.2990** (p = .001)	.0571 (p = .286)	.1279 (p = .102)	.1558 (p = .061)
Explicit and Implicit Malevolent ^a	-.1246 (p = .108)	.0102 (p = .460)	.0068 (p = .473)	-.1624* (p = .053)

* significant < - .05

** significant < - .01

one-tailed test

^a R corrected

Table 14 displays the correlations found between the Rorschach variables and the primary dimensions which comprise the higher-order Negative Emotionality factor. The R corrected correlations for the NEM primary dimensions are presented in Table 15. The Explicit Benevolent variable is found to have no significant relationships with any of the Negative Emotionality primary dimensions. This finding holds regardless of whether the Rorschach variables have been R corrected or not. Implicit Benevolent is negatively correlated with Stress Reaction but has no significant relationship with the other two NEM primary dimensions. This is true with both the R corrected and uncorrected versions of IB. Explicit Malevolent is most highly related to the primary dimension of Aggression, with significant correlations in both the R corrected and uncorrected forms. The combined Benevolent scores are significantly correlated (-) with Stress Reaction and also with Aggression. The R corrected combined Malevolent variable shows some relationship to Aggression and also with Alienation. This is the only significant relationship found between Alienation and the Rorschach variables. Finally, as is generally true throughout the data, Implicit Malevolent is not found to be significantly correlated with the primary dimension MPQ variables.

Table 14

Spearman Correlations:
Rorschach Motivational Valuation and the
Primary Dimensions of Negative Emotionality

Variables	Stress Reaction	Alienation	Aggression
Explicit Benevolent	-.0751 (p = .229)	-.0642 (p = .263)	-.1388 (p = .084)
Implicit Benevolent	-.2754** (p = .003)	-.1241 (p = .109)	-.1247 (p = .108)
Explicit Malevolent	.1258 (p = .106)	.0825 (p = .207)	.1722* (p = .043)
Implicit Malevolent	-.0618 (p = .271)	-.0529 (p = .301)	-.0394 (p = .348)
Explicit and Implicit Benevolent	-.2648** (p = .004)	-.1390 (p = .084)	-.1633* (p = .052)
Explicit and Implicit Malevolent	.0250 (p = .402)	.0049 (p = .481)	.0890 (p = .189)

* significant $\leq .05$

** significant $\leq .01$
one-tailed test

Table 15

Spearman Correlations: R corrected
Rorschach Motivational Valuation and the
Primary Dimensions of Negative Emotionality

Variables	Stress Reaction	Alienation	Aggression
Explicit Benevolent ^a	-.0852 (p = .200)	.0026 (p = .490)	-.1216 (p = .114)
Implicit Benevolent ^a	-.2752** (p = .003)	-.0273 (p = .394)	-.1102 (p = .138)
Explicit Malevolent ^a	.1626* (p = .053)	.1597 (p = .056)	.1938* (p = .027)
Implicit Malevolent ^a	.0323 (p = .375)	.0819 (p = .209)	.0439 (p = .332)
Explicit and Implicit Benevolent ^a	-.2695** (p = .003)	-.0194 (p = .424)	-.1608 (p = .055)
Explicit and Implicit Malevolent ^a	.1543 (p = .063)	.1980* (p = .024)	.1668* (p = .049)

* significant $\leq .05$

** significant $\leq .01$

one-tailed test

^a R corrected

CHAPTER IV

DISCUSSION

1. INTRODUCTION

In introducing the discussion of the specific results of this study it is important to make a general statement about the overall findings. While a number of significant correlations are found in the data the magnitude of these correlations tends to be in the moderate to low range. The weakest significant correlation found in the data is .16 while the strongest is .40. This .40 correlation is found between the combined Explicit and Implicit Benevolent, R corrected variable and Positive Emotionality. Thus, the Rorschach variable accounts for approximately 16% of the variance in the MPQ factor. Before writing off these findings as virtually meaningless because of the magnitude of the correlations one must consider the sources of data from which the correlations are generated. The Rorschach and MPQ scores compared in this study are drawn from two very different kinds of personality instruments.

The Burstein-Loucks Rorschach scoring system was developed on the basis of clearly stated theoretical beliefs about personality. That is, the authors had a priori beliefs about how particular personality characteristics would find expression in Rorschach productions. For example, one a priori belief was that pessimistic subjects, those who tend to see the glass as half empty rather than half full, would tend to see malevolently toned percepts on the Rorschach.

The Multidimensional Personality Questionnaire, in striking contrast to the Burstein-Loucks scoring system, was developed via a series of factor analytic studies in which no a priori assumptions were held. Tellegen and his colleagues took numerous personality descriptors and used factor analysis to weed out redundant descriptors and to see how the personality descriptors clustered together. Once the clusters were consistently found Tellegen studied and attributed an interpretation to each. In other words, Tellegen was not attempting to create a personality instrument that would measure a particular construct. Rather, the constructs were developed on the basis of the factor analytic findings.

Although the correlations found between the Rorschach and MPQ variables are moderate in magnitude they become more impressive when one considers the striking differences between the instruments employed. In essence, both the Rorschach and MPQ variables provide information that can be construed as telling us something about whether a person tends to view the glass as half empty or half full. In essence, then, one needs to take the context of the data into account before reaching the conclusion that the correlations are too small to be important.

2. REPLICATION OF PILOT DATA AND SUBSEQUENT COMBINATION OF GROUPS

Replication

The hypothesis that significant findings from the pilot study would be replicated in the second group was partially confirmed. In each of the groups Explicit Benevolent, whether R corrected or not, was found to be significantly correlated with Positive Emotionality. While these were the only replications involving a higher-order MPQ factor there were some replications between Rorschach variables and the MPQ primary personality dimensions. When Explicit and Implicit Benevolent were added together they were found to be significantly related to Stress Reaction (-) in both groups. After correcting for R Explicit and Implicit Benevolent were found to be significantly correlated with Wellbeing (+) and with Stress Reaction (-) in each group.

Although the replication aspect of the study confirmed the hypothesis that benevolently toned percepts (explicitly benevolent) on the Rorschach would be related to Positive Emotionality it failed to confirm the hypothesis that malevolently toned Rorschach percepts would be related to Negative Emotionality. Indeed, none of the malevolently toned percepts were found to be significantly related to the MPQ variables across both groups. Despite this failure to confirm the "Rorschach Malevolent with Negative Emotionality" hypothesis the data, upon further study, looked more promising.

First of all, the second group yielded a greater number of significant correlations than the pilot group. Secondly, there were a number of correlations in each of the groups that approached significance. By combining the two groups into one sample a better estimate of the relationship between the Rorschach Motivational Valuation variables and the MPQ Emotionality factors would be achieved. The hope was that this more precise estimate would reveal a greater number of significant correlations.

Combined Group of 100 Subjects

Combining the two groups into a single sample turned out to be productive and helped confirm the hypothesis regarding Negative Emotionality and malevolently toned percepts (at least explicit ones) being significantly related. In the combined group Explicit Malevolent is found, as was originally predicted, to be significantly correlated with Negative Emotionality. In fact, results of the multiple regression analysis indicate that Explicit Malevolent, when it is corrected for R, is the best of the Rorschach variables (only significant) in predicting Negative Emotionality.

Analysis of the combined sample data also reveals significant relationships involving the Implicit Benevolent variable that were not found in the replication phase of this study. Implicit Benevolent, or IB, is found to be negatively related to Negative Emotionality. Its correlation with Positive Emotionality approaches significance (.1591, $p=.057$). In addition, the multiple regression analysis revealed that Implicit Benevolent is the best and

only significant predictor of Negative Emotionality when the Rorschach variables are not corrected for response productivity.

The combined samples yielded significant correlations in the predicted direction, between three of the four Rorschach Motivational Valuation categories and the MPQ Emotionality factors. Explicit Benevolent, Implicit Benevolent and Explicit Malevolent all share significant correlations with either Positive or Negative Emotionality. The Implicit Malevolent is the only Rorschach variable that shares no significant correlations with PEM or NEM in the combined group. In fact, Implicit Malevolent was found to be significantly related to NEM only in the second sample of 50 subjects. This significant finding, nonetheless, was in the unexpected direction. That is, Implicit Malevolent and NEM were found to be negatively correlated, which means that as Implicit Malevolent percepts increase, Negative Emotionality decreases.

When compared to the Early Memory data, Implicit Malevolent (R corrected) was found to be positively correlated with Caregiver Interaction Outcome. In essence, the finding suggests that as the outcome of the interaction with the caregiver becomes more positive the incidence of Implicit Malevolent percepts increases. Both of these findings suggest that this Motivational Valuation category is not measuring what it purports to measure. One conclusion of this dissertation is that the Implicit Malevolent variable needs additional work and clarification.

Perhaps part of the reason for the marked failure of the Implicit Malevolent variable is a lack of specificity in regards to what it defines. It is noteworthy that of the four Rorschach variables studied, there were many more Implicit Malevolent ratings than the three other types. While the mean sums for Explicit Benevolent, Explicit Malevolent and Implicit Benevolent were 1.84, 2.92 and 3.26 respectively, the mean sum for the Implicit Malevolent variable was 7.33. In essence, it appears that the wide use of the Implicit Malevolent rating results in discriminatory failure in this particular set of data. It would be interesting to compare this set of data to other samples to determine if this group is unique in, perhaps, having fewer than average human percepts or higher than average malevolent attributions. The problem found with the Implicit Malevolent variable in this study is one of the issues that research currently in progress is attempting to correct.

3. INTERPRETATION OF EARLY MEMORY FINDINGS

The hypothesis that ratings of the affective quality of early memories would be correlated with the Rorschach variables was generally not confirmed. The Early Memory categories of Rater Affect and Perception of the Environment shared no significant correlations with any of the Rorschach Motivational Valuation variables. The Caregiver Interaction Outcome variable was found to be negatively related to Explicit Malevolent ratings (both R corrected and uncorrected) on the Rorschach. In essence, as the outcome with

the caregiver is depicted as being positive the incidence of malevolently toned, animate percepts goes down. This finding is, of course, in the predicted direction.

It was rather surprising that the Caregiver Interaction Outcome category produced some significant correlations while the Rater Affect category did not. Perhaps this finding can be better understood in terms of object relations theory which highlights the importance of the early relationship with a caregiving figure. What appears to be important here is the fact that the EM procedure calls for recollections from early in life when caregivers play such a key role, not only in the interpersonal development but in the intrapsychic development of the child. In regards to this sample, it doesn't appear to be important whether or not a caregiver is present in the memory. For instance, a number of EMs that do not depict caregivers center around themes of personal mastery and autonomy. However, if a caregiver is present, the outcome of the interaction with that caregiver has a significant relation to how many explicitly malevolent percepts will be seen on the Rorschach.

The Early Memory correlations were not anticipated but raise some interesting questions. As reported in Chapter III none of the EM variables were found to be correlated with Positive or Negative Emotionality. However, Caregiver Interaction Outcome was found to be significantly correlated (+) with the MPQ higher order factor of Constraint. Furthermore, the three EM variables of Rater Affect, Caregiver Interaction Outcome and Perception of

Environment each shared significant, positive correlations with the primary personality dimension of Control, which loads heavily on the Constraint factor.

Tellegen (1982) describes the higher order factor of Constraint by stating that it " may reflect variations in overall pleasure-pain regulatory style: self-restrictive and cautious among high Constraint persons, more self-indulgent and impulsive among lows" (p.3). The primary dimension of Control is characterized in similar fashion with high Control scorers described as reflective, cautious, rational people who like to plan their activities. Low scorers on Control are said to be more impulsive and spontaneous and, at times, reckless and careless, preferring to "play things by ear" (p.8).

Given the generally weak correlations in the EM data it is noteworthy that each of the EM categories, except presence or absence of a caregiver, is positively related to Control. This can be translated in the following way: As Rater Affect, Perception of the Environment and Caregiver Interaction Outcome become more pleasant, safe and positive, respectively, Control goes up. Thus it appears that the subjects who gave the more positively toned early memories were those who tend to be cautious, reflective, plan ahead kind of people.

This finding was rather surprising. In a positively toned early memory containing a caregiver one might speculate that the protagonist, the "I", in the memory would depend on the caregiver to provide structure, safety and predictability. In essence, that is part of what a good caregiver does for a

child. Because the caregiver provides the structure the child is allowed to be more spontaneous and free. He or she doesn't need to be reflective and rational because the caregiver provides this function for him or her.

If one accepts this premise it might lead to the hypothesis that positively toned early memories containing a caregiver would correlate negatively with Constraint and Control. However, the opposite is true in the current data. How can this be explained? Perhaps the psychoanalytic concept of identification can help make sense of this finding. It is possible that those subjects who are high on the MPQ variables of Control and Constraint, and also high or positive in their EM ratings, have identified with the caregiver. That is, they have, in a sense, taken the caregiver's function into themselves and have become their own caregiver. The caregiver they depicted in their memory was an object of identification for them.

The unexpected findings and the generally weak correlations found in the EM data indicate that further study is needed. One difficulty with the current study is that just one, rather than a sample of early memories, was generated by each subject. Bruhn (1992a, 1992b), one of the most prominent modern EM researchers, is currently using a procedure that calls for 21 memories; six generated spontaneously and 15 in response to specific thematic instructions. In the current study a larger sample of EMs from each subject may have revealed affective themes or patterns which are not readily accessible from one memory.

Although Caregiver Interaction Outcome was the only EM variable that correlated with the Rorschach data the intercorrelations between the EM variables were quite high. Further analysis employing techniques such as partial correlation might help clarify the relationship that exists between one particular EM variable and, for instance, a Rorschach variable, while controlling for the effects of the other EM variables. One also wonders whether the special characteristics of the sample studied, i.e. being young and scholastically gifted, has any bearing on the unexpected findings. Future research could address these questions.

4. THE RORSCHACH AND TELLEGEN'S PRIMARY PERSONALITY DIMENSIONS

Three of the four Rorschach variables (all except Implicit Malevolent) are significantly correlated with Positive and/or Negative Emotionality. In order to gain a more detailed understanding of these relationships it is necessary to examine the underlying personality dimensions which comprise Tellegen's system.

Tellegen and Waller (in press) found that the higher order factor of Positive Emotionality can be meaningfully bifurcated into two types of Positive Emotionality which they refer to as Agentic Positive Emotionality (PEM-A) and Communal Positive Emotionality (PEM-C). Both PEM-A and PEM-C have high loadings on the Wellbeing and Social Potency dimensions. They differ in that PEM-C has a very salient loading on Social Closeness with

almost no loading on Absorption or Achievement, while PEM-A has a very high loading on Achievement with a very small loading on Social Closeness.

In examining the correlational relationships found between the Rorschach and MPQ data one notes that there are a number of significant correlations between the Motivational valuation variables and Wellbeing. Since Wellbeing loads on both types of Positive Emotionality there is no evidence that the Rorschach is tapping into one type of Positive Emotionality over the other. However, additional examination reveals that there are no significant correlations between the Rorschach variables and Achievement. On the other hand, there are a number of significant correlations between the Rorschach variables and Social Closeness. It appears, therefore, that the Rorschach Motivational Valuation scores tend to tap into the Communal aspect of Positive Emotionality more than they tap into the Agentic aspect of PEM.

PEM-C has been described as that aspect of Positive Emotionality that involves interpersonal connectedness and positive feeling states. PEM-A seems to involve emotional responsiveness and feelings of being personally effective. The Burstein-Loucks Motivational Valuation category seems to be most strongly related to that aspect of PEM that involves relationships with other people rather than personal feelings of competence. Perhaps there are other Rorschach indices not examined in this study which may be more related to the personal competency aspect of PEM.

In examining the Negative Emotionality dimensions one notes that while there are a number of significant relationships between the Rorschach variables and Stress Reaction, and also a few between the Rorschach variables and Aggression, there is only one significant correlation with Alienation. It is somewhat ironic that Tellegen describes the Alienation dimension in terms of perceiving the social world as malevolent. (Tellegen & Waller, in press). This sounds very consistent with the meaning attributed to the Explicit Malevolent percepts on the Rorschach. In this study Explicit Malevolent (R corrected) does approach significance in its relationship with Alienation ($.1597, p=.056$). Also, when Explicit and Implicit Malevolent, R corrected scores are combined they share a significant relationship with Alienation. Overall however, the Alienation dimension shares fewer significant correlations with the Rorschach variables than do the other NEM dimensions.

Stress Reaction, the dimension that appears to be most clearly related to the Rorschach variables, is defined not as a motivational-behavioral trait, but more as a manifestation of individual differences in the intensity and frequency of negative emotional states. Feeling states such as anxiety, distress, guilt and even anger are supposedly indicated in a high Stress Reaction score. Tellegen emphasizes that this dimension tends to be high in people who have frequent negative responses and a proneness to anxiety under the normal, everyday conditions of life. Results from this study suggest that people high on the Stress Reaction dimension give fewer Benevolent, especially Implicit

Benevolent, responses and more Explicit Malevolent (R corrected) responses.

This is, of course, consistent with one of the original hypotheses.

Aggression is described as an interpersonal dimension in which high scorers tend to act as victimizers in relation to other people. Low scorers tend to take a much less antagonistic stance in their relationships and seldom take advantage of others. The Explicit Malevolent score is positively correlated with Aggression, and lends further confirmation to the hypotheses of this study.

5. RESPONSE PRODUCTIVITY ON THE RORSCHACH

Rorschach protocols can differ substantially in terms of number of responses. Given the unstructured nature of the task and the minimal instructions provided it is not surprising that there might be considerable variability in response productivity. Response productivity is corrected for in this study, and in many Rorschach studies, to make it easier to compare protocols that differ widely in terms of the number of responses they contain. In this study the number of responses in an individual protocol ranged from 9 total responses on the low end to 62 responses on the high end.

In this study correcting for R produced mixed results. At times, the R corrected variables did not differ from their uncorrected counterparts in terms of the correlations they generated. At other times however, R corrections resulted in a greater number of significant correlations, or in stronger

correlations, with the other data. However, there were some situations in which correcting for R weakened the correlations found while using the uncorrected data.

It is quite interesting, and rather puzzling that the R corrections failed to improve the correlations only when two particular variables were involved. The variables are the Negative Emotionality MPQ factor and Implicit Benevolent on the Rorschach. While uncorrected IB was found to be significantly correlated with both PEM(+) and NEM(-) correcting for R weakened the correlation with NEM(-) to the point where it only approached significance. All the uncorrected Benevolent ratings, implicit and explicit combined, were found to be significantly correlated (-) with NEM but, when corrected, no longer even approached a significant correlation with Negative Emotionality.

Although definitive explanations can not be provided one can speculate about some possible reasons for this finding. One recalls that the implicit Rorschach variables are thought to capture the quality of the non-interpersonal environment and reflect the less conscious fantasies held by the subject. In general, people do not tend to feel affect as strongly in conjunction with non-human or inanimate objects as they do with human objects. Therefore, with the implicit variables the affect is typically more modulated and, at times, more difficult to discern. While Implicit Benevolent (uncorrected) was found to be negatively related to NEM it only approached a significant relationship

with NEM when it was corrected for R. It appears that controlling for R blunts the effect and the relationship that was discernible in the uncorrected data does not hold up in the corrected version.

Overall, the implicit variables are not as powerful in predicting the Emotionality factors as are the explicit variables. People experienced at scoring Rorschach protocols on these indices would probably not be surprised by this finding. It is inherently more difficult to attribute emotional valence to inanimate objects. It is much more subjective an endeavor than trying to ascribe emotional or affective valence to human or human-like percepts. Recognizing this difficulty, research is currently being conducted to improve the implicit rating system.

6. IS THERE AN AFFECT FACTOR?

Psychoanalytic theory, as well as many trait and temperament theories, presuppose that people have characteristic, relatively enduring ways of viewing the world in terms of affective tone. Some people anticipate pleasure in their interactions and tend to view the world as basically safe and enriching. Others anticipate frustration and pain and hold the view that the world is typically hostile and malevolent. Whether these different approaches to the world are largely inherent and biologically determined, or develop as a result of environmental experience is open to question. This matter of etiology, however, is not of particular interest in the current study. Of primary interest

here is the determination of whether the present data supports the belief that such "dispositions," "schemas" or prototypic views actually exist.

The purpose of this study was to determine if affective quality as it is expressed in psychological test data would be found to be consistent across three different test measures. In comparing the Rorschach Motivational Valuation measures and the MPQ variables this study finds a good deal of consistency between these measures. More specifically, benevolently toned percepts on the Rorschach tend to be positively related to Positive Emotionality on the MPQ, while malevolently toned Rorschach percepts tend to be related to Negative Emotionality on the MPQ. As discussed previously, this finding is particularly salient when the Explicit Rorschach variables are involved.

While there are certainly difficulties that need to be addressed in the Motivational Valuation category of the Burstein Loucks scoring system this study lends support to the general construct validation of these Rorschach measures. One aspect of the Motivational Valuation scoring system that was not investigated here was that of the Explicit and Implicit Neutral ratings. When no clear affect can be ascertained in Rorschach percepts a Neutral rating is given. It is not surprising that neutral ratings are frequently given. For example, in one recent study (White, 1991) 40.5% of the Rorschach percepts were given neutral affective ratings while 35.7% were rated malevolently and 23.85% were rated benevolently.

Because this study was particularly concerned with positive and negative emotionality it was decided to focus only on the Benevolent and Malevolent ratings as opposed to the Neutral ratings. It is acknowledged, however, that by evaluating the Neutral ratings as well, some new facets of the Motivational Valuation ratings may have been revealed. Future research could certainly address this additional facet of the scoring system. The consistency found between the Rorschach and MPQ measures provides support, however, for the viability of affective factors or traits in personality.

Positive and Negative Affective Factors and the Construct of Splitting

The Motivational Valuations ratings and Tellegen's Positive and Negative Emotionality factors raise interesting possibilities in regards to the psychoanalytic construct of splitting. This construct is conceptualized as a primitive defense mechanism which is often seen in people with borderline level personality organization. Chatham (1985) provides the following definition of splitting: " The most common manifestation of splitting is the division of the self or others into 'all-good' or 'all-bad' representations. Splitting also may be revealed by rapid shifts from an all-good to an all-bad set of affective reactions" (p.76).

The Burstein Loucks Motivational Valuation category seems to have a great deal of promise in regards to identifying splitting via test data. Although it is not clear exactly how evidence of splitting might be detected in

psychological test data one could certainly generate some testable hypotheses. Perhaps splitting would be evident in Rorschach protocols where there are very few benevolently toned percepts but many that are malevolently toned (or vice versa). Perhaps it would be useful to evaluate the pattern of affectively toned percepts that are generated over the course of individual protocols. For instance, one could speculate that rapid fluctuations between benevolently and malevolently toned percepts might be a manifestation of splitting.

The narrative data generated by the Early Memories procedure also has the potential for revealing information about the defense mechanism of splitting. Although it is difficult to predict on the basis of just one early memory a collection of early memories might reflect predominant affective themes that are repeated throughout the entire assortment. A collection of early memories also seems to be fertile ground for detecting splitting because each memory, or many of the memories, may contain the same people. If a particular person is seen in repeated memories as all-good or all-bad, with no integration of the good and bad qualities that all humans possess, one might entertain the possibility that splitting is occurring. MPQ data may also provide clues regarding the use of splitting. Although the names Positive Emotionality and Negative Emotionality may suggest that these are opposite poles of the same dimension Tellegen and others (Watson, Clark & Carey, 1988) warn that they are two distinctive dimensions that are orthogonal or unrelated. Indeed, PEM and NEM were not found to be related in the sample used for this study.

What this means, in essence, is that a subject's ratings on PEM and NEM should not be viewed as an either/or situation. Rather, what is of interest is how high or how low the subject scores on each of these emotionality dimensions. Conceivably, splitting might be seen in a MPQ profile in which one of the emotionality scores is very low while the other is very high.

Emotionality and the Trait/State Debate

In the first chapter of this dissertation the state-trait or person-situation debate was briefly outlined. While Tellegen presents his emotionality factors as relatively enduring emotional traits others (Watson, Clark & Carey, 1988) say that the PEM and NEM variables can be measured in terms of traits, as "stable individual differences in general affective tone," or in terms of states, as "transient fluctuations in mood" (p.347). While it is beyond the scope of this dissertation to provide a detailed analysis of this distinction it is important to note that mood variables may certainly have an effect on how a subject scores on a particular trait measure on a particular day. This "mood" variable was not controlled for in the design of this study. However, it is probably advantageous that the Rorschach and MPQ were not administered to the subjects on the same day. While this is far from foolproof it does guard against the confounding factor of a particularly intense mood being experienced on a single day administration.

While the impact of situations can not be denied, the projective instruments seem to offer a reasonable way to rein in the situational effects. Because the projective test "situation" is highly ambiguous it is presumed that something about the individual personality, be it a trait or a schema, is being expressed. It is further presumed that issues central to one's personality will be expressed in the productions that are generated under conditions of low stimulus demand.

There are psychoanalytic constructs, some of which are very experience near for psychotherapists, that simply can not be explained in terms of situational variables. One such construct is that of repetition compulsion, or stated in more colloquial terms, the difficulty inherent in change. Therapists with any experience have most likely felt the frustration of seeing patients repeat unhealthy patterns despite the great pain it may cause them and despite the valiant efforts to change. While some situations may be especially powerful in influencing behaviors there are many behaviors that are rather impervious to the influence of situations. A person's affective temperament seems to be one of those things that is terribly difficult to change. As much as the pessimist may want to have a more optimistic outlook the pessimistic attitude is not easily relinquished.

7. CONCLUSION

This dissertation proposed four major hypotheses. The first hypothesis was basically confirmed in that benevolently toned Motivational Valuation variables on the Rorschach were found to be positively related to the Positive Emotionality factor in the MPQ. Likewise, the second hypothesis was confirmed. It stated that malevolently toned Rorschach variables and the MPQ Negative Emotionality factor would be positively and significantly related. The third hypothesis involving the replication of significant findings from the pilot study was partially confirmed. A significant relationship between Explicit Benevolent and Positive Emotionality was replicated in the second group. However, the relationship between Explicit Malevolent and Negative Emotionality was not seen consistently within each of the two groups. Nevertheless, the combination of the two groups into a single sample produced clear correlational relationships between Explicit Malevolent and Negative Emotionality.

The fourth and final major hypothesis of the study was not confirmed. Pleasantly toned early memories were not found to be related to benevolently toned Rorschach percepts or to the MPQ Positive Emotionality factor. In the same vein, early memories assessed to be negative or unpleasant in affective tone were not found to be related to malevolently toned Rorschach variables or to the Negative Emotionality factor on the MPQ. Rather than being related to the affective variables in both the Rorschach and the MPQ the Early Memory

ratings seemed to tap into a different phenomenon having to do with behavioral constraint and control.

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