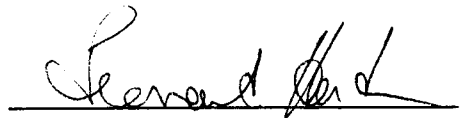


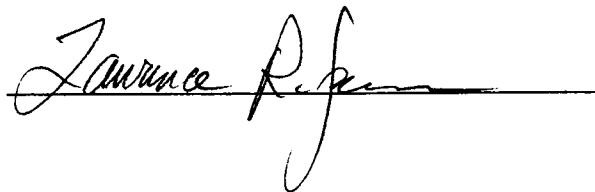
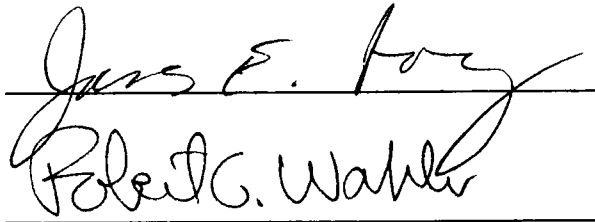
To the Graduate Council:

I am submitting herewith a dissertation written by Mark J. Hilsenroth entitled "A Multidimensional Assessment of Narcissistic Personality Disorder." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Psychology.



Leonard Handler, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Associate Vice Chancellor and
Dean of the Graduate School

A Multidimensional Assessment of Narcissistic Personality Disorder

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Mark J. Hilsenroth

May 1996

DEDICATION

This dissertation is dedicated to my wife, Jessica. Her love, support, and encouragement have helped me to reach this moment and shall sustain me beyond it

ACKNOWLEDGEMENTS

I would like to extend my deepest appreciation to a number of people who have joined me on this journey. First and foremost, I would like to thank the patients I have had the honor to work with at the U.T. Psychological Clinic and Lakeshore Mental Health Institute. Their courage in times of extreme pain have taught me, more than any other experience, how to be a psychotherapist. As a group, I would like to thank my Dissertation Committee, Len Handler, Bob Wahler, Charlie Cohen, Jim Gorney and Larry James for being a wealth of knowledge and wisdom long before this project began. Individually, I would like to thank "The Big H" for more things than I could possibly enumerate here, but all could be summed up in two words "good-enough"; Bob Wahler for making Austin Peay a kinder place than it was when I first arrived; Jim Gorney and Charlie Cohen for teaching me what psychotherapy can be; and Larry James for making statistics pragmatic, and at times even fun.

Two people who have shared the greatest amount of time on this trip with me have been my roommates and brothers, Chris Fowler and Brandon Dixon. The best of friends during the best of times. Also, I would like to recognize the input of Chris Fowler throughout this work from its' conceptualization to the scoring of data.

My deepest thanks to Dr. Kathryn White for helping me to see clearly, understand and grow.

There are a number of people whose assistance on this project I would like to recognize. First, this study could not have been completed without the aid of two very dear friends, Randy Padawer and Frank Castlebury, who have both given an immense amount of time to this project. Also, I would like to thank Susan Church, Myra Christensen, Karen Toman and Greta Smith for their various contributions to this study.

Finally, I owe a large debt to the coaching staff and members of the University of Tennessee Rugby Football Club 1990-1995 who have provided me a number of sublimated channels in which to express a wide range of libidinal and aggressive impulses as well as an abundance of camaraderie. U.T.R.F.C. "A Band of Brothers."

ABSTRACT

This study examines the clinical, theoretical and research literature in regard to the assessment of narcissistic personality disorder (NPD). A review of NPD allowed for the generation of some hypotheses regarding a number of characteristics which may be useful in the differentiation of NPD. The present study will compare the indices/scores, from various modes of assessment, of NPD patients with related and unrelated groups of outpatient personality disorders as well as a non-clinical group. These five dimensions- aggression, defensive organization, dependency/orality themes, quality of object relations, and self-absorption-have lent themselves to testable questions concerning the differences between NPD and other personality disorders.

This study will be the first to assess the test characteristics of NPD patients diagnosed according to DSM-IV criteria. It will then be possible to investigate the relationship, if any, between the various test indices which are identified as being useful in the discrimination of NPD with DSM-IV criteria through a series of correlational analyses. This study will also be the first to assess the clinical efficacy of the MMPI-2 and Rorschach in the correct classification of those individuals with NPD. Diagnostic efficiency statistics will be calculated under four different conditions in a *clinically relevant* manner.

The results of this study support the hypotheses that variables of the MMPI-2 and Rorschach can be used to differentiate NPD patients from a non-clinical sample, as well as from cluster A and cluster C personality disorders. Also, the findings presented here show that variables from these two measures can be used to identify NPD patients in relation to other personality disorders from within the B cluster. Both measures were found to be empirically related to DSM-IV diagnostic criteria for NPD. However, variables from the

Rorschach, but not the MMPI-2, could also be employed for classification purposes in ways which were clinically meaningful in the diagnosis of NPD.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION AND LITERATURE REVIEW	1
An Examination of Two Psychoanalytic Theories of Narcissism	4
Assessment of Narcissistic Personality Disorder:	
A Multimethod Review	10
Semistructured Interviews	10
Structured Interview for DSM Personality Disorders (SIDP) ...	10
Personality Disorder Examination (PDE)	13
Structured Clinical Interview for DSM-III-R: Axis II (SCID-II) .	16
Clinical Diagnosis utilizing DSM/DSM-III-R Criteria	17
Retrospective DSM-III/DSM-III-R Diagnosis	
Utilizing Chart Information	18
Diagnostic Interview for Narcissism (DIN)	19
Self-Report Measures	20
Personality Diagnostic Questionnaire (PDQ/PDQ-R)	20
Minnesota Multiphasic Personality Inventory - 2	
Personality Disorder Scales (MMPI-NPD)	23
Millon Clinical Multiaxial Inventory (MCMI/MCMI-II)	27
Projective Techniques	33
Rorschach	33
Thematic Apperception Test (TAT)	35
Conclusions	36
Synthesis of Theory and Testing	42

Objectives of Study	47
II. METHODOLOGY	50
Sample	50
Instruments	52
MMPI - 2	52
Rorschach	53
Procedure	56
Data Analysis	57
III. RESULTS	58
Hypothesis 1	58
Hypothesis 2	60
Hypotheses 3, 4, 5, 6, & 7	60
Hypothesis 8	61
Hypothesis 9	63
IV. DISCUSSION	66
MMPI - 2	66
Rorschach	71
Theoretical Integration of Findings	77
REFERENCES	81
APPENDICES	97
Appendix A. Tables	98
Table A-1: Kappa Estimates of Interrater Agreement for each DSM-IV	
Cluster B Personality Disorder	100
Table A-2: Clinical Group Comparisons of DSM-IV Cluster B	
Personality Disorder Criteria	101
Table A-3: Clinical and Non-Clinical Group Comparisons of the	

MMPI-2 Validity and Clinical Scales	101
Table A-4: Clinical and Non-Clinical Group Comparisons of the MMPI-2 Supplementary and Content Scales	102
Table A-5: Cluster B Comparisons of the MMPI-2 Supplementary and Content Scales	103
Table A-6: Clinical and Non-Clinical Group Comparisons of the MMPI-2 NPD Scales	104
Table A-7: Cluster B Comparisons of the MMPI-2 NPD Scales	105
Table A-8: Clinical and Non-Clinical Group Comparisons of Rorschach Scores	106
Table A-9: Cluster B Comparisons of Rorschach Scores	108
Table A-10: Correlations of the MMPI-2 overlapping and non-overlapping NPD Scales with DSM-IV Cluster B Criteria	110
Table A-11: Correlations of the MMPI-2 overlapping and non-overlapping NPD Scales with the Individual DSM-IV NPD Criteria	111
Table A-12: Correlations of Selected Rorschach Scores with DSM-IV Cluster B Criteria	112
Table A-13: Correlations of Selected Rorschach Scores with the Individual DSM-IV NPD Criteria	113
Table A-14: Diagnostic Efficiency Statistics for the MMPI-2 NPD Scales	114
Table A-15: Diagnostic Efficiency Statistics for Selected Rorschach Scores	115
Appendix B. Rorschach Scoring Criteria	116
B-1. Holt Primary-Secondary Process Analysis Scores	117
B-2. Lerner Defense Scales	120
B-3. Rorschach Oral Dependency Scale	129
B-4. Mutuality of Autonomy Scale	131

VITA	134
------------	-----

CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

Narcissistic personality disorder (NPD) was included as a diagnostic category in the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed. [DSM-III]; American Psychiatric Association, 1980) in large part due to widespread interest in the theoretical and clinical concept of narcissism by psychotherapists (Kernberg, 1970, 1975; Kohut, 1971, 1977; Pulver, 1970; Stolorow, 1975; Teicholz, 1978). However, the justification for regarding NPD as an independent diagnostic entity having distinguishable features from other personality disorders has been the matter of some controversy (Loranger, Oldham & Tulis, 1982; Pope, Jonas, Hudson, Cohen, & Gunderson, 1983; Siever & Klar, 1986; Vaillant & Perry, 1985). In fact, almost no empirical work focusing exclusively on NPD had been conducted until the late 1980's. In their review of data concerning DSM-III-R (American Psychiatric Association, 1987) descriptors of NPD Gunderson, Ronningstam and Smith (1991) stated "it [NPD] remains a disorder about which there has been little empirical evidence and around which basic questions of description, clinical utility and validity still remain" (p. 167).

However, many recent efforts have begun to systematize and describe the characteristic features of NPD. In this effort to illuminate the various questions surrounding the nosological aspects of NPD several investigators have attempted to develop specific criteria on a number of assessment measures which may aid in the differentiation of NPD from other personality disorders. In particular, a number of phenomenological studies by Gunderson and Ronningstam (Gunderson, Ronningstam & Bodkin, 1990; Ronningstam, 1988; Ronningstam & Gunderson, 1988; Ronningstam &

Gunderson, 1990; Ronningstam & Gunderson, 1991) have focused on identifying different characteristics of NPD patients and has led to the development of the Diagnostic Interview for Narcissism (DIN). Also, objective measures have been shown to be useful in the diagnosis of personality disorders in general and special scales specifically designed to assess NPD have received extensive use (Chatham, Tibbals & Harrington, 1993; Colligan, Morey & Offord, 1994; Millon, 1987; Morey, Waugh & Blashfield, 1985; Wink & Gough, 1990). In addition to current work utilizing interview and self-report inventories, a number of studies using projective methods of assessment have shown promise in the differential diagnosis of NPD (Berg, 1990; Berg, Packer & Nunno, 1993; Farris, 1988; Gacono, Meloy & Heaven, 1990; Gacono, Meloy & Berg, 1992; Hilsenroth, Hibbard, Nash & Handler, 1993).

Several authors have called for research concerning the differential diagnosis and treatment of individuals suffering from character pathology (Berg, 1983; Blatt & Lerner, 1983; Kernberg, 1975). All have stressed the importance of careful diagnostic assessment of these individuals, especially utilizing psychological testing, for treatment planning and the management of transference and countertransference issues. The ability to distinguish narcissistic pathology specifically, and the assessment of personality disorders in general, would enable practicing clinicians to make more thorough and judicious decisions in choosing treatment strategies for such persons.

Identification of variables related to pathological expressions of narcissism is only a starting point. A further step will be the identification of those features of NPD that are the most outstanding and important in differential diagnosis (Davis, Blashfield & McElroy, 1993). The fact that narcissistic traits commonly occur in other, non-narcissistic personality disorders has led to a variety of opinions regarding the clinical features and theoretical aspects of NPD (Pulver, 1970; Teicholz, 1978; Chessick, 1987; Kernberg, 1984; Millon 1981). Therefore it is imperative that indices of narcissism be identified

which can separate NPDs from related "dramatic" Cluster B personality disorder patients [Antisocial (ANPD), Borderline (BPD) and Histrionic (HPD)] who may also exhibit narcissistic features as well as the differentiation of unrelated (Cluster A and Cluster C) personality disorders.

Often assessment occurs along one modality which limits the application of results and restricts the extent to which data can be generalized to both clinical and research applications. Psychological assessment of pathological narcissism needs to allow for problems of disorder differentiation, comorbidity, sampling from a range of different severity, symptom overlap and complexity. The need for a multimodal assessment of pathology is not a new concept but has been proposed previously by Leary (1957) as well as Rapaport, Gill, and Schafer (1968). This study will attempt to develop a more coherent diagnostic understanding of NPD through the use of the multimethod approach which utilize a clinical interview, and both objective, and projective data. The goal of this approach to the diagnosis of NPD is to connect both the surface (readily apparent in behaviors) and deeper (intrapsychic) manifestations of this disorder in a conceptual manner, in order to generate clinical and dynamic signs of NPD which may be used reliably for differential diagnosis.

I will first examine the two major theoretical conceptualizations concerning the etiology and diagnostic features of narcissistic pathology. Having exposed the reader to the usefulness of these viewpoints, I will then review the available empirical data regarding the diagnosis of NPD. Then I shall provide both the clinician and researcher with valuable diagnostic information concerning the assessment NPD in a concise manner. Because of the wide range of assessment methods the different types of measures will be covered in three sections: 1) semi-structured interviews, which will include, information on descriptive/phenomenological studies; 2) self-report inventories; and 3) projective techniques. Issues of reliability, validity and clinical utility will be examined for each

instrument (or scale). An overview of the relative advantages, disadvantages and empirical support for each method of assessment in the diagnosis of NPD will be presented in a discussion after the review of the salient literature. After these reviews of the extant theoretical and diagnostic literature I will attempt to integrate these two domains in the development of a number of hypotheses in which to investigate the classification, identification of defining features, etiology and treatment of NPD from a psychoanalytic-experiential approach. Also, I will examine how the results of this study support or fail to support the current theories about pathological expressions of narcissism.

AN EXAMINATION OF TWO PSYCHOANALYTIC THEORIES OF NARCISSISM

A number of authors within the psychoanalytic community have written extensively about narcissism and disorders of the self (Jacobson, 1964; Kernberg, 1970, 1975; Kohut, 1971, 1977; Pulver, 1970; Stolorow, 1975; Teicholz, 1978). In particular the work of Otto Kernberg and Heinz Kohut have occupied the attention of the psychoanalytic community. These authors have developed a theoretical substrate of narcissism which includes the structural organization of the self, damaged self esteem, primitive affects, object representations and grandiosity.

Extending the work of Jacobson (1964) and Mahler, Pine and Bergman (1975), Kernberg has emphasized the role of intrapsychic conflict in pathological narcissism. However, Kernberg (1975) has sought to expand the essential validity of the conflict model and its focus by incorporating the infant's experience of the external objects as a basis for elaborating the drives and defenses that shape the child's internal reality. Initially these drives are a collection of associated affects and cognitions which are embedded within a framework of object relations. As the child matures these affects and cognitions separate into libidinal and aggressive, positive and negative, components in part as a function of the experiences of gratification and frustration with the object world. These components

develop into mental representations that reflect the infant's experience of interactions with their environment. These self and object representations, now infused with affective meaning, separate along the dimension of actual and idealized representations, which ultimately find expression as contents in the ego and superego, respectively. Kernberg theorized that if this normal process of differentiation breaks down or collapses, the result would be a pathological refusion of actual and idealized self and object representations.

This structural breakdown is the result of unmanageable aggression which overwhelms the developing ego as it struggles to integrate the increasing differentiation of its representational contents. When confronted by painful interactions with its caretakers, the infant tries to reclaim his or her libidinal investment in them. In addition the infant's unmet dependency needs require him or her to protect those object representations from the primitive aggressive impulses. In order to accomplish this task the infant erects two principal defenses, projection and excessive splitting, in order to mitigate the anxiety this conflict generates. The intense aggression is in part projected out of the internal world onto the external one. This projection of aggressive components further exacerbate the infant's experience of crippling anxiety as he or she struggles to avoid the "bad external objects". In order to preserve the weakened remnants of the "good objects" as defensive bulwarks against the "bad objects" splitting intensifies, with good and bad, self and object representations existing in relatively isolated states. This lack of integration manifests itself in a compromised self-concept, which operates in conjunction with an equally impaired concept of others. Not only is the structural integrity of the self weakened, but its predominantly negative affect adversely affects the capacity for positive self-regard. Subsequently, these enfeebled actual and ideal self-representations utilize increasingly more primitive manifestations of grandiosity to shield the ego from the painful experiences and rageful reactions to an unrewarding object world. For Kernberg these intrapsychic

manifestations lead to the use of grandiosity, a major part of the constellation of defenses against aggression that characterize pathological narcissism.

Kohut (1971, 1977) ultimately abandoned intrapsychic conflict as etiologically central in favor of experiential deficit as pivotal in narcissistic pathology. For Kohut narcissistic pathology is viewed as the final end product of the parents' unsuccessful attempts to support the infant's grandiose and idealizing needs. In order to relieve feelings of helplessness, the infant requires the parent to serve as an object that can perform psychological tasks such as tension management and self esteem regulation (a self-object), which the infant is unable to accomplish for him/herself.

In the course of normal development the parent reinforces the infant's immersion in its imagined omnipotence by empathically "mirroring" the infant's grandiosity. In addition, the parent must also effectively serve as a container for the infant's primitive idealizations of the parent. This idealization allows the infant to fuse with the omnipotent self-object and thereby ward off the threat of disorganization and feelings of helplessness. Thus, the parents' capacity to serve as effective self-objects provides an environment which allows the infant to gradually internalize the functions that the parents have performed. These conditions, which include empathic responsiveness tempered by optimal frustration, permit the infant sufficient time and resources to develop a cohesive sense of self that is capable of mastering individuation. However, should the interpersonal environment become unresponsive to the infant's needs, pathological self-development will ensue.

In the instance of empathic failure, the infant's normal grandiosity remains arrested at an infantile stage. This failure to empathically echo the infant's omnipotence and grandiosity undermines the sense of efficacy upon which the cohesive self and a positive self regard rest. As the infant matures these unmet primitive demands are split off from the developing ego. This split-off archaic grandiosity remains and is not integrated into actual or idealized representations, but continues to demand narcissistic recognition throughout

adulthood. A second type of environmental failure occurs if the self-object is too disillusioning to provide a powerful idealizable self-object with which the infant can then fuse. Painful disillusionment with the parental self-objects will be expressed as an inner emptiness, accompanied by deflated self-esteem. In these circumstances the child will continue to seek idealized parental surrogates into adulthood, desiring fusion in order to enhance the fragile self. In either one of these instances, the development of a cohesive sense of the self is thwarted, and consequently it remains structurally unintegrated and affectively impoverished.

The theoretical differences between these two authors are focused on the search for the postulated explanatory mechanisms of the structural impairment. The conflict model attributes this severely compromised self-development to frustrating, painful experiences with the object world (Kernberg 1975, 1982, 1984). As a consequence, the child pathologically develops excessive, unmanageable aggression, which limits his or her capacity to integrate self and object representations in a normal way. By contrast, the deficit model links pathological self-representations to early traumatic failure in normal development, where primitive and grandiose self-representations remain arrested at an earlier stage of self development (Kohut, 1971, 1977).

Central to the disagreement between the theoretical viewpoints of Kernberg and Kohut is the primacy of aggression in the etiology of pathological narcissism. For Kernberg, intense aggression is one of the fundamental determinants of pathological self-development. Whereas Kohut views parental failures of empathy and idealization as the primary etiological agents in the deficit or arrest of the emerging self. Kohut also recognizes "narcissistic rage" as a feature of this clinical syndrome, but he regards its presence as secondary to primary failures in empathy and idealization. However, these aggressive components are primary for Kernberg and in his view the disappointments of which Kohut speaks are defensive reactions by which the patient can rationalize his/her

seething rage. Moreover, Kernberg considers the idealizing needs of which Kohut writes as primitive defenses against the imagined destructive power of this rage (Kernberg, 1975, 1982).

Both Kernberg and Kohut emphasized the centrality of splitting as a defensive operation on the intrapsychic processes underlying narcissistic pathology. In each theory splitting is viewed as a normal process in development which becomes pathological when it is extensively used to generate negative, self and other, from positive representations. However each theory emphasizes a different function which the splitting serves. For Kernberg, the child uses splitting *to protect significant others* from unmanageable aggression in reaction to frustrations with those significant others. However, Kohut (1971) understands splitting as a defensive function *to protect the child* from frustrated needs for parental empathy and recognition.

While the proponents of these two models of pathological self-development disagree on the etiological mechanisms that account for these maladaptive internal structures they do agree that there is a structural relationship between compromised self (and object) representations and impairment in the regulation of self-esteem. Kohut (1971, 1977) and Kernberg (1975) agree that problems with respect to regulating self-esteem are primary in narcissistic pathology and that structural aspects of the self are causally implicated in these difficulties. Note the similar emphasis in the following quotes:

The principal source of discomfort is thus the result of the psyche's inability to regulate self-esteem and to maintain it at normal levels; and the specific (pathogenic) experiences of the personality which are correlated to this central psychological defect lie within the narcissistic realm (Kohut, 1971, p. 20)

There does exist a group of patients in whom the main problem appears to be a disturbance in their self-regard in connection with specific disturbances in their object relationships, and whom we might consider almost a pure culture of pathological development of narcissism. (Kernberg, 1975, p. 227)

In addition to agreement on the problem, there is also further agreement on the direct relationship between the self or self-representation and self-esteem:

Jacobson has pointed out that this self-feeling derived from the individual's awareness of an integrated self has to be distinguished from "self-esteem" or "self-regard" which depends upon the libidinal investment of such an integrated self. (Kernberg, 1975, p. 213)

Narcissism embodies those mental operations whose function is to regulate self-esteem (the affective coloring of the self representation) and to maintain the cohesion and stability of self-representation (the structural foundation upon which self-esteem rests). (Stolorow & Lachman, 1980, p. 21)

Finally, both authors recognize the dynamics underlying the grandiose facade and an entitled sense of self-importance, characteristic of many narcissistic personalities, mask or defend the patient against unconscious feelings of inferiority, vulnerability, helplessness, and an impoverished self-esteem.

Over the last 20 years a number of authors within the psychoanalytic community have comparatively evaluated the deficit and conflict model perspectives as relatively independent of one another. However, in reviewing these two models it is clear that to do so would undoubtedly be an error. A few very comprehensive and thorough reviews of these theoretical perspectives have shown that in fact a great deal of overlap exists between them; they have many of the same constructs, structures and defining characteristics in common (Eagle, 1984; Wallerstien, 1983). A recent empirical evaluation has also shown that these explanatory models are not orthogonal but exhibit a moderate association ($r = .44$) between the deficit and conflict latent constructs (Glassman, 1988). This finding supports the notion that both of these theories will provide valuable diagnostic information to clinicians attempting to diagnose severe character pathology. Later I shall return again to a discussion of how constructs from both of these models may be pragmatically useful in the development of hypotheses designed to enhance the classification of NPD.

ASSESSMENT OF NARCISSISTIC PERSONALITY DISORDER: A MULTIMETHOD REVIEW

Semistructured Interviews

Structured Interview for the DSM Personality Disorders (SIDP)

The SIDP was developed by Pfohl, Stangl, and Zimmerman (1983) and was designed to diagnose DSM-III personality disorders. It is composed of 160 questions grouped into 16 areas of functioning. Questions are organized in this manner to decrease the redundancy of a grouping based on specific personality disorders and to provide for a smoother flowing interview. All questions are directed at specific Axis II criteria and a list of relevant personality disorder criteria at three levels of severity are listed at the end of each section. Early work on the SIDP (Pfohl, Stangl & Zimmerman, 1983) has demonstrated criterion-based reliability and validity with the DSM-III Axis II disorders and moderate levels of interrater reliability in determining the presence or absence of a personality disorder diagnosis (Dubro, Wetzler, & Kahn, 1988; Stangl, Pfohl, Zimmerman, Bowers, & Corenthal, 1985). However, in both of these studies NPD occurred in a small number of diagnosed cases in this sample (3 and 5, respectively).

With regard to rating the presence of the DSM-III criteria for NPD, Pfohl, Coryell, Zimmerman, and Stangl (1986) found the prevalence of NPD based on the SIDP to be 16% in a sample made up predominantly of inpatients, whereas Reich and Troughton (1988) found the prevalence to be much smaller in a group of outpatients (1.2%). In the Pfohl et al., 1986 sample the median sensitivity (SN; the ability of the test to correctly identify individuals with the disorder), specificity (SP; the ability of the test to correctly identify non-personality disordered individuals as non-personality disordered), positive predictive power (PPP), and negative predictive power (NPP; the probability that an individual has or does not have a personality disorder when the test identifies him or her as having or not having a personality disorder) for NPD were .70, .86, .20 and .99,

respectively. Overall reliability in the diagnosis of NPD was moderate ($K = .52$), with individual high criteria found to be "grandiose uniqueness" ($K = .71$) and "interpersonal exploitativeness" ($K = .67$) while the two least reliably rated criteria were "response to criticism" ($K = .20$) and "lack of empathy" ($K = .00$). In addition, the DSM-III monothetic criteria were found to have much higher intrater agreement ($K = .73$) than polythetic criteria ($K = .47$).

The ability of the SIDP in the identification of personality disorders was again estimated statistically using 122 psychiatric patients (Miller, Streiner & Parkinson, 1992). For this sample 12 patients scored positive for NPD on the SIDP. Diagnostic efficiency statistics for this measure in the assessment of NPD were: SN=24, SP=88, PPP=29, NPP=100, with much improved results for the identification of cluster B personality disorders: SIDP SN=100, SP=85, PPP=71, NPP=100. This suggests that the SIDP is better suited for identifying those who do not have NPD, than in the identification of those who do have this disorder. However, the results of this study also indicate that the SIDP can accurately identify patients diagnosed within the set of cluster B personality disorders (antisocial, borderline, histrionic, narcissistic).

Two recent studies have examined the use of the SIDP in the dual diagnosis of psychiatric inpatients. Hogg, Jackson, Rudd, and Edwards (1990) determined the prevalence of personality disorders and personality disorder traits in 40 recent onset schizophrenic patients. The SIDP proved effective in determining the presence or absence of personality disorders ($K = .59$). Interrater reliabilities for the SIDP narcissism trait ratings were significant and the mean SIDP narcissism trait rating for this sample was .32. Turley, Bates, Edwards, and Jackson (1992) also used the SIDP in assessing 21 recent onset Bipolar disorder patients for personality disorders. Again, interrater agreement between two raters on the SIDP for personality disorder diagnosis was high ($K = .91$). These studies suggest that the SIDP can be used to accurately assess narcissistic traits

within groups of psychiatric inpatients with dual diagnoses. However, NPD was only diagnosed for one patient in the Hogg et al. (1990) study and for two patients in the Turley et al, (1992) study.

After the SIDP was revised in 1989, Blashfield, Blum, and Pfohl (1992) conducted a study to assess the changes in diagnostic criteria from the DSM-III to the DSM-III-R using the SIDP and SIDP-R (Pfohl, Blum, Zimmerman, & Stangl, 1989). In an evaluation of DSM-III and DSM-III-R a relatively good Kappa was obtained for the agreement of NPD criteria ($k = .571$), the highest of the personality disorders in this study. Although NPD was diagnosed infrequently, 6% to 8%, respectively in this sample, the concordance of the DSM-III and DSM-III-R was relatively high. Changing from a partial monothetic definition in the DSM-III to a Polythetic definition in the DSM-III-R apparently led to relatively little change in the application of this diagnosis. Likewise, Trull and Goodwin (1993) found that the mean intraclass correlation coefficients comparing independent raters for the 11 personality disorder criteria sets, as measured by the SIDP-R, was .76, indicating very high agreement among the interviewers concerning the number of DSM-III-R personality disorder criteria each patient met. Intraclass correlation coefficients of SIDP-R scores for NPD were relatively stable over a 6-month period. The SIDP-R identified 41% of an adult outpatient sample as meeting DSM-III-R criteria for at least one personality disorder and 18% as meeting criteria for two or more personality disorders. However, within this group the number of patients with a diagnosis of NPD was again quite low (4 cases).

Examination of Axis II personality disorders, using the five factor model of personality, as measured by the neuroticism (N), extraversion (E), and openness (O), personality inventory (NEO-PI) have revealed some discrepant relationships. The DSM-III criteria for NPD, as measured by the SIDP, were found to have a significant relationship with both of the NEO-PI scales for openness and agreeableness (Yeung,

Lyons, Waternaux, Faraone, & Tsuang, 1993). Trull (1992) also assessed the relationship between the five factor model of personality with NPD symptoms. In this study the NEO-PI was again used to measure the five factor model and the SIDP-R was employed to assess NPD personality disorder criteria in a sample of 54 outpatients. He found that NPD symptoms correlated significantly and positively with neuroticism and negatively with agreeableness, in direct contrast with the previous study.

In relation to objective measures of Axis II disorders, the SIDP has been found to identify patients as having NPD less frequently than the Personality Diagnostic Questionnaire (PDQ) would likewise indicate (Zimmerman & Coryell, 1990), but more frequently than the Millon Clinical Multiaxial Inventory (MCMI) and Minnesota Multiphasic Personality Inventory-Personality Disorder Scales (MMPI-PD) in a sample of inpatients (Miller, Streiner & Parkinson, 1992). However, the SIDP has also been found to diagnose NPD less frequently than the MCMI in a sample of outpatients (Torgersen & Alnaes, 1990). Also, the SIDP diagnosed NPD less frequently than the MCMI-II in determining the presence of personality disorders with recent onset bipolar disorder patients (Turley, Bates, Edwards, & Jackson, 1992). The dimensional scores of the SIDP for the NPD trait have been found to be significantly correlated with the narcissistic personality disorder scale of the PDQ (PDQ-NPD; Zimmerman & Coryell, 1990), the PDQ-R-NPD scale (Yeung, Lyons, Waternaux, Faraone, & Tsuang, 1993) and with the narcissistic personality disorder scale of the MCMI (MCMI-N) base rates (Hogg, Jackson, Rudd, & Edwards, 1990; Torgersen & Alnaes, 1990). It appears that the SIDP/SIDP-R will diagnose NPD less frequently than objective measures across many different settings. However, it does appear that the dimensional scores for narcissism on a number of different objective measures are significantly related to SIDP/SIDP-R criteria for NPD.

Personality Disorder Examination (PDE)

The Personality Disorder Examination (Loranger, 1988) is a structured interview developed for the assessment of Axis II disorders. The PDE arranges 328 items designed to assess DSM-III-R criteria in six content areas (Affect, Impulse Control, Interpersonal relations, Reality Testing, Self and Work). The PDE is structured in this manner to facilitate the flow of a regular clinical interview. All items are rated on a three point scale (absent or normal = 0, exaggerated or accentuated = 1, meets criteria for pathological level = 2) and they are tabulated to determine the number of criteria which are met, a dimensional score (representing the amount of the personality trait that is present) and categorical diagnosis. Also, provision is made for assigning a diagnosis as probable (clinical subthreshold) in addition to a definite DSM-III-R diagnosis.

Loranger, et al., (1991) found the PDE to be useful in the examination of longitudinal effects of personality disorder criteria. No statistics are given for NPD specifically, but intraclass correlation coefficients of interrater reliability measuring individual personality disorder criteria at initial interview was .93, while interrater reliability at the follow-up interview was .94. The stability of the personality disorder criteria ratings assigned to the patients had a median correlation of .72. The interrater reliabilities of the dimensional scores for NPD on the PDE were very high ($r = .94$), as was the agreement for the presence or absence of NPD (97%), using DSM-III criteria. However, only 3 cases of NPD were present in this preliminary study (Loranger, Susman, & Russakoff, 1987).

A number of studies have investigated the diagnostic agreement of DSM-III-R personality disorders of the PDE with other structured interviews and objective measures. Specifically concerning NPD, one study (Hyler, Skodol, Kellman, Oldham, & Rosnick, 1990) found moderate agreement between the PDE diagnosis of NPD with that of the Structured Clinical Interview for the DSM-III-R Axis II (SCID-II) and PDQ-R. While the SCID-II and PDE exhibited similar prevalence (15 and 19, respectively), the PDQ-R diagnosed more cases (30) of NPD compared with the two structured interviews. A

subsequent study again found that the NPD diagnoses utilizing the SCID-II and PDE were highly similar for 100 consecutively admitted inpatients (17% and 20%, respectively; Oldham, Skodol, Kellman, Hyler, Rosnick, & Davies, 1992). However, Pilkonis, Heape, Ruddy, & Serrao (1991) found that the clinical validity of the PDE was poor when determined by examining the agreement between this measure and consensual diagnoses formulated using the LEAD (Longitudinal, Expert, All Data) standard proposed by Spitzer (1983).

The agreement between the PDE and the revision of the PDQ (PDQ-R) is poor for NPD. Hunt and Andrews (1992) found that overall the PDE indicated that only three patients met the criteria for DSM-III-R Axis II diagnosis, whereas 27 of the 40 patients in the sample met diagnostic criteria as measured by the PDQ-R. The PDE did not identify any of 40 patients as having NPD, while the PDQ-R diagnosed 10 patients with NPD.

Soldz, Budman, Dembry, and Merry, 1993 compared the concurrent validity of the MCMI-II and the PDE, using a sample of 97 outpatients sixty-six were assigned personality disorders by the MCMI-II, which was closer to the number of patients assigned a probable and definite diagnosis (75) by the PDE, rather than the number given to those patients with just a definite diagnoses alone (43) by the PDE. The MCMI-II diagnosed 11 patients with a definite diagnosis of NPD, whereas the PDE diagnosed only 2 patients as NPD. Overall diagnostic agreement between the MCMI-II and PDE concerning the presence or absence of any personality disorder was significant, as was the relationship between the two instruments in the assessment of cluster B personality disorders. However, the agreement between these two instruments in the diagnosis of NPD was very low and not significant. The agreement between the PDE and MCMI-II dimensional scores for NPD was also explored and a significant relationship was found. However, while the dimensional scores for the NPD scale on each measure were significantly related to one another, the MCMI-II schizoid, histrionic, passive-aggressive, paranoid, antisocial,

and borderline scales were also significantly related to the dimensional PDE NPD score, with the latter three scales having higher correlations than the NPD scale of the MCMI-II.

An examination of the relationship between the PDE and measures assessing the interpersonal circumplex and five factor model of personality (as measured by the 50-Bipolar Self-Rating Scales; 50-BSRS), for 102 consecutive referrals for group therapy for personality disorders was conducted by Soldz, Budman, Demby, & Merry (1993b). The mean PDE NPD score was 1.32 and when plotted the PDE NPD scores were found to reside in the BC (arrogant-calculating) octant of the interpersonal circumplex and reached slightly less than the 50% percentile mark on the affiliation axis. The PDE-N was also significantly related to the two Big Five factor scores of emotional stability and openness.

Structured Clinical Interview for DSM-III-R Axis II (SCID-II)

The Structured Clinical Interview for DSM-III-R Axis II personality disorders (SCID-II) developed by Spitzer, Williams and Gibbon (1987), assesses each DSM-III-R personality disorder in succession. One or two questions are provided that directly assess each personality disorder symptom/criterion. Use of the SCID-II to diagnose NPD was found to have the lowest overall diagnostic power (.45), compared with its use for the other 10 personality disorders when this diagnosis was evaluated with a LEAD approach to diagnosis (Skodol, Rosnick, Kellman, Oldham, & Hyler, 1988). In comparison with other assessment instruments the prevalence of NPD utilizing the SCID-II and PDE were highly similar for 100 consecutively admitted inpatients (17% and 20%, respectively; Oldham, et al., 1992). In a comparison of the SCID-II with the PDQ-R and the PDE in the diagnosis of DSM-III-R personality disorders in 87 patients, the SCID-II yielded more diagnoses, on average, than the PDE, but less than the PDQ-R. Specifically concerning NPD the PDQ-R diagnosed 30 patients, while the SCID-II identified 15 and the PDE 19. Agreement between the PDQ-R and the SCID-II in the diagnosis of NPD was significant as was the relationship between the SCID-II and PDE (Hyler, et al., 1990).

Renneberg, Chambless, Dowdall, Fauerbach & Gracely (1992) examined the concurrent validity of personality disorder diagnosis of the SCID-II and MCMI-II. The interrater reliability coefficients for presence or absence of any personality disorder with the SCID-II was .75 (kappa). For the individual personality disorder categories reliability coefficients ranged from .61 to .81 (median $K = .67$); the reliability obtained for cluster B personality disorders was $K = .53$. Kappa coefficients were not computed for NPD, since this disorder was not diagnosed 3 or more times in this sample. The Kappa coefficient for agreement of the MCMI-II ($BR > 84$) and SCID-II personality disorder diagnoses of 54 agoraphobic outpatients for cluster B personality disorders was .24 ($p < .05$).

Despite satisfactory reliability for the MCMI-II and the SCID-II, the present data show very limited support for the concurrent validity of these two measures of personality disorders. Although the Kappa coefficients between the measures were generally positive and significant, they were quite low for validity coefficients, with few exceptions. However, it should be noted that employing a BR of > 84 as the MCMI-II criterion leads to overall prevalence rates similar to that of the SCID-II (56% and 57%, respectively), but with no better agreement concerning which patients have a specific personality disorder.

Clinical Diagnosis utilizing DSM-III/DSM-III-R criteria

Some investigators have successfully assessed DSM diagnostic criteria during a clinical interview. Widiger, Trull, Hurt, Clarkin, & Frances (1987) utilized a semistructured interview based on the diagnostic criteria for the 11 DSM-III personality disorders. Interrater reliability for interviewers' ratings of NPD was very high ($K = .77$). Interrater reliability for number of symptoms recorded for NPD patients was .82. Vaillant & Drake (1985) also employed this method to assess patients for the presence or absence of a personality disorder, with significant results as well ($K = .77$). This would suggest that integrating a number of criteria for a specific or selected number of personality disorders into a clinical interview can yield diagnoses in a highly reliable manner.

Retrospective DSM-III/DSM-III-R diagnosis utilizing chart information

A number of studies have utilized chart information to retrospectively rate DSM-III/DSM-III-R diagnostic criteria for NPD. The presence or absence of symptoms is determined in a retrospective review of patient records by raters who are blind to patient diagnosis. Each rater then identifies the presence or absence of each DSM-III symptom for a specific personality disorder. Employing this method Morey (1985), using a point-biserial correlation which was corrected for the number of symptoms, found a moderate reliability coefficient of .58 across each personality disorder. However, the diagnostic criteria for NPD appeared to have a much higher internal consistency than the average reliability across all the personality disorders. All of the NPD symptoms had highly significant associations with the NPD total scale score, and only one symptom, idealized/devalued relationships, was correlated significantly with the BPD (.33) and manic (.35) total scale scores. Also, the BPD symptoms of unstable and intense relationships, as well as affective instability, were significantly related to the NPD total scale score (both at .40). Finally, schizophrenic/schizotypal criteria and symptoms were found to be negatively associated with NPD.

Plakun (1987) also utilized retrospective DSM-III diagnoses based on portions of case records, made blind to patient identity and diagnosis. Interrater reliability of independent ratings of 25 randomly selected charts of hospitalized patients indicated complete rater agreement on the presence or absence of NPD. Interrater agreement for the presence or absence of individual NPD criteria ranged between 75% for "preoccupation with fantasies of success" and 90% for "cool indifference toward others".

Other authors have also successfully used this method in research with Axis II disorders (Stone, 1989). Using an independent retrospective DSM-III diagnosis by two raters who were blind to chart diagnosis, Plakun (1989) found high reliability coefficients for the presence or absence of Axis II personality disorders. Clinical chart abstracts have

also been used to rate BPD patients on the presence or absence of DSM-III-R criteria for NPD. In this study interrater reliabilities for DSM-III BPD criteria were high. However, Kappa was not calculated for NPD ratings (McGlashan & Heinssen, 1989).

Diagnostic Interview for Narcissism (DIN)

The DIN is the first instrument that has been developed from and applied to clinically diagnosed narcissistic patients. The DIN (Gunderson & Ronningstam, 1987) was developed from a review of salient clinical literature (Ronningstam, 1988), clinical experience, and a systematic examination of NPD patients (Ronningstam & Gunderson, 1988). These authors developed a semi-structured interview consisting of 33 statements in five sections : grandiosity (I), interpersonal relations (II), reactivity (III), affect and mood states (IV), and social and moral adaptation (V). Interrater reliability coefficients for each section and the total interview score were very high. For a sample of 82 patients (24 with NPD, 54 non-NPD) a correlation of the 33 statements with the total score revealed good internal consistency (.81). The correlation of the statements with their corresponding section scores also revealed good consistency as well for sections I (.76), II (.60), and IV (.65). Lower correlations were found for sections III (.44), and V (.49). Individual correlation coefficients for each of the sections with the total interview score revealed high consistency (.66). Using a total scaled score of 9 as a cutoff point, the DIN separated the NPD from non-NPD patients with a high degree of accuracy (SN =.63, SP =.88, PPP =.68, and NPP =.85) (Gunderson et al., 1990).

Further evaluation of the DIN mean scores of patients with or without NPD showed significant differences on 7 of the 8 statements in section I, 3 of the 9 statements in section II, 1 of the 5 statements in section III, and 3 of the 6 statements in section V. None of the mean scores for the 5 statements in section IV exhibited significant differences between the two groups (Ronningstam & Gunderson, 1990). In addition these authors further examined whether the DIN would be able to differentiate NPD from the related BPD

(Ronnigstam & Gunderson, 1991). Using the DIN in the differential diagnosis of NPD and BPD patients, a similar pattern of results was obtained with those of the previous study and show the mean scores on a number of the 33 statements comprising the DIN to be significantly different between the two groups, with Section I (grandiosity) proving to be the most robust in discriminating between NPD and BPD.

Self-Report Measures

Personality Diagnostic Questionnaire (PDQ/PDQ-R)

The PDQ, developed by Hyler, Rieder, Spitzer, and Williams (1982), is a 163 item true-false inventory which typically takes less than one hour to complete. The items of the PDQ are specifically designed to assess the diagnostic criteria for DSM-III personality disorders. Each of the diagnostic criteria for personality disorders has one or more items on the PDQ. The PDQ provides a score for each of the DSM-III personality disorders, representing the number of criteria met for each disorder and a total PDQ summation score of all pathological responses to PDQ items, representing a measure of overall personality disturbance.

The total PDQ score may be useful as an indicator of personality disturbance and may be used to differentiate patients with a high likelihood for personality disturbance (Hyler et al., 1988). The total PDQ score can be used as an indicator of overall personality disturbance, although its ability to distinguish among specific personality disorders may be less effective. In one sample of 552 patients the relationship between clinicians' diagnoses of personality disorder and the PDQ showed a general lack of agreement between clinical and PDQ diagnoses of DSM-III personality disorders. It was observed that the PDQ generated far more diagnoses than were based on clinical judgment. Clinicians made 0.7 personality diagnoses per patient and the PDQ generated 2.4 diagnoses per patient for the entire 552 patient sample. Clinicians reported 12% of the sample was found to have personality disorders and for this group the clinicians made 1.2 diagnoses per patient. In

regard to this same 12% of patients the PDQ made an average of 3.0 personality diagnoses. NPD was the only diagnosis made more frequently by clinicians than by the PDQ, with the clinicians indicating the diagnosis three times more frequently than the PDQ (33 and 11, respectively). Internal consistency of the NPD scale on the PDQ was .57 and interrater agreement between these two methods concerning the diagnosis of NPD was low ($K = .10$). However, the correlation between the clinicians' scaled ratings of NPD criteria and the PDQ dimensional scores for narcissism were significantly related ($r = .31, p < .001$) (Hyler et al., 1989).

Zimmerman and Coryell (1990) examined the comparability of the PDQ and SIDP with a sample of 697 relatives of psychiatric patients and healthy controls. Significantly more individuals had a personality disorder according to the SIDP than the PDQ (94 versus 72, $p < .05$). However, multiple personality disorders were more frequently diagnosed on the PDQ (55 versus 29, $p < .001$). Within this sample the PDQ diagnosed 3 cases of NPD while the SIDP identified none of the cases as having this disorder. While the average dimensional scores on the two measures for each corresponding personality disorder were generally high, the correlation of dimensional scores for NPD were the second lowest, but were still significant and the PDQ dimensional score was more than three times higher than the SIDP score (.5 versus 1.6). However, the concordance for categorical diagnoses was poor since the SIDP failed to diagnose any cases of NPD.

A second study also evaluated the diagnostic efficiency of the PDQ in relation to SIDP diagnosis when used as screening instruments to identify the presence or absence of a personality disorder. In this role the PDQ had excellent sensitivity, although it tended to overdiagnose the presence of personality disorders. The PDQ diagnosis correctly predicted the criterion diagnosis 63% of the time and correctly predicted the absence of a personality disorder with 93% accuracy (cluster B diagnoses $SP = .68$, $SN = .87$, $PPP = .49$, and $NPP = .92$). With the exception of specificity, the diagnostic efficiency statistics were not

calculated for NPD because there was a small number of diagnosed cases in this sample ($n=3$). Specificity rate was calculated for NPD and this was found to be high (.78). The findings for this study seemed to suggest that as a screening instrument for the detection of a personality disorder the PDQ is an effective measure (Dubro et al., 1988).

The items of the PDQ were revised to better assess DSM-III-R criteria (Hyler & Rieder, 1987). The agreement between the PDE and its' more recent revision, the PDQ-R, has been shown to be poor for NPD. One study found that overall the PDE indicated that only three patients met the criteria for DSM-III-R Axis II diagnosis, whereas 27 of the 40 patients in the sample met diagnostic criteria as measured by the PDQ-R. The PDE did not identify any of the 40 patients as having NPD, while the PDQ-R diagnosed 10 patients with NPD (Hunt & Andrews, 1992). A second study utilized the PDQ-R with 60 psychiatric patients and an informant, who was usually a spouse or first-degree relative. Pearson correlation coefficients between the number of positive DSM-III-R criteria for NPD from self-report and ratings of informants on the PDQ-R was .42. Agreement of patient and informant ratings of the 9 individual criteria for NPD produced three criteria with significant Kappas. These were criterion 1 (reacts to criticism with feelings of rage, shame or humiliation), criterion 6 (has a sense of entitlement), and criterion 7 (requires constant attention and admiration). Of these three criteria a sense of entitlement appears to be the aspect of narcissism that can be most reliable in an evaluation by the questionnaire method. The identification of a sense of entitlement by the patient may be a relatively reliable and valid indicator of narcissism. However, on patient self report, NPD criteria were significantly associated with histrionic (.39), borderline (.33), and passive-aggressive (.28) personality disorders. Also, a Diagnosis of NPD from informant scores was significantly correlated (.52), with a comorbid diagnosis of HPD as well (Dowson, 1992).

Test-retest reliability of the PDQ-R was evaluated with 51 adult psychiatric outpatients. The test-retest coefficient for the PDQ-R-N was .66 and evaluations of

internal consistency were moderate and quite similar at both the index (.49) and at three month follow-up (.50) evaluations (Trull, 1993). Intraclass correlation coefficients representing stability of the narcissism subscale over a 6 month period was also high (Trull & Goodwin, 1993).

In a comparison of the PDQ-R with the SCID-II and PDE in the diagnosis of DSM-III-R personality disorders in 87 patients, the PDQ-R diagnosed more patients as having each of the personality disorders than did either of the structured interviews. Specifically concerning NPD, the PDQ-R diagnosed 30 patients with NPD, the SCID-II identified 15 and the PDE identified 19. Agreement between the PDQ-R and the SCID-II in the diagnosis of NPD and between the PDQ-R and PDE were all significant. The Kappa, SP, SN, PPP, and NPP of the PDQ-R and the diagnosis of NPD were computed under two different conditions. The first condition is when a patient was diagnosed according to both the SCID-II and the PDE as having NPD (labeled by the authors as definite NPD); the second condition is when a patient was diagnosed with NPD according to either the SCID-II or the PDE as having NPD (labeled by the authors as probable NPD). In the definite NPD condition 9 patients were identified and the ensuing reliabilities were as follows: $K = .30$, $SN = .89$, $SP = .71$, $PPP = .27$, and $NPP = .98$. In the probable NPD condition there were 25 patients and the results were: $K = .44$, $SN = .68$, $SP = .79$, $PPP = .57$, $NPP = .86$ (Hyler et al., 1990).

Minnesota Multiphasic Personality Inventory-Personality Disorder Scales (MMPI-PD)

The MMPI-PD scales were developed through a combination of rational and empirical strategies from the original MMPI item pool (Morey, Waugh & Blashfield, 1985). Internal consistency values were found to be acceptably high ($NPD = .77$). All 11 DSM-III personality disorders have both overlapping scales (O; where items are shared with other personality disorder scales) and nonoverlapping scales (NO; where items are only

found on an individual scale). Recently contemporary norms for adults and adolescents have been reported for both MMPI-PD-O and MMPI-PD-NO scales, in addition to a list of item numbers for the MMPI and MMPI-2 (Colligan, Morey, & Offord, 1994).

One of the first studies to assess the diagnostic efficiency of the MMPI-PD scales was conducted in relation to SIDP diagnosis. Similar to the findings with the PDQ-R, it was found that the MMPI-PD scales can also be a useful screening instrument to identify the presence or absence of a personality disorder. The MMPI-PD scales demonstrated high specificity; the predictive accuracy of the presence or absence of a personality disorder was 90%, although the scales overdiagnosed personality disorders. For cluster B diagnoses the ability for the MMPI-PD scales to correctly identify non-personality disordered individuals as not having a personality disorder was fair, but the ability of these scales to correctly identify individuals with personality disorders was low. Diagnostic efficiency statistics, with the exception of specificity, were not calculated for NPD due to a small number of diagnosed cases in this sample ($n=3$). However, the specificity rates were calculated for NPD and this statistic was high (Dubro et al., 1988). A second study by these authors examined the diagnostic efficiency of the MMPI-PD scales evaluated in relation to SIDP diagnosis and MCMI scores. Mean MMPI-NPD scores of personality disordered patients and non-personality disordered patients were not significantly different between the two groups. In addition, a comparison of MMPI-NPD scores between cluster B personality disorders compared with other personality disorders not in this cluster were not significantly different. However, the correlation between the MMPI-NPD and MCMI scale 5 (Narcissism) was significant ($r=.55$; Dubro & Wetzler, 1989). Also, the ability of the MMPI-PD scales in the identification of personality disorders was estimated statistically using 122 psychiatric patients. A personality disorder was considered present if a patient's score was equal to or exceeded a T-score of 70 on the MMPI-PD scales. Only one patient scored positive for NPD on the MMPI-NPD scale. Diagnostic efficiency statistics for the

MMPI-NPD scales in the assessment of NPD were: SN=33, SP=99, PPP=87, NPP=94 and somewhat better for the identification of cluster B personality disorders: SN=56, SP=95, PPP=80, NPP=86 (Miller et al., 1992).

Chatham and colleagues (1993) compared both narcissistic and nonnarcissistic groups of psychiatric patients, formed on the basis of criteria comprised of clinical judgment and scores on the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979) on the MMPI and MCMI. Significant profile differences between the two groups were found to exist. Narcissistic patients had significantly higher mean scores on the NPD scales of both these measures. The MMPI-NPD scale was found to be the most robust of five MMPI subscales designed to assess narcissism. The narcissistic group also produced significantly higher scores on the *Pd* and *Ma* MMPI scales, as well as significantly lower scores on the *Si* scale. The MMPI-NPD scale was significantly correlated with both the NPI and MCMI-N.

A number of studies have also examined the convergent validity of the MMPI-NPD and MCMI-N scales. All have found a high level of convergent validity and significant correlation coefficients (Morey & Le Vine, 1988; Streiner & Miller, 1988). Also, scores from both the overlapping and nonoverlapping MMPI-NPD scales have also been compared with the MCMI-N. The correlation between MMPI-NPD-O and MMPI-NPD-NO with MCMI-N base rate scores were very high ($r = .78$ and $r = .64$, respectively; McCann, 1989). A second study also found that both the overlapping and non-overlapping MMPI-NPD scales were highly correlated with MCMI-N ($r = .73$, and $r = .61$, respectively). In addition, this study found that the MMPI-PD-O scales were the most accurate in predicting membership in the Cluster B group of personality disorders (Schuler, Snibbe & Buckwalter, 1994). This relationship has also been found to exist between the overlapping and nonoverlapping scales of the MMPI-NPD and the MCMI-II-N items which overlap with other personality scales (MCMI-II-N-O) and those which have no

overlap on other scales (MCMI-II-N-NO). The correlations between both the overlapping scales of the MMPI-NPD and the MCMI-II-N were higher than the correlation between the non-overlapping scales of the MMPI-NPD with MCMI-II-N, which were moderate ($r = .65$ and $r = .50$, respectively). These results suggest that both sets of MMPI-NPD scales possess similar levels of convergent validity with the respective MCMI-II scale and that the overlapping scales from both measures are related to a higher degree than the nonoverlapping scales from the same measures (McCann, 1991).

The test-retest reliability and convergent validity of the MMPI-PD scales were evaluated with a sample of 51 adult psychiatric outpatients (Trull, 1993). Internal reliability coefficients for the MMPI-PD subscales exceeded those of the PDQ-R in almost every case at an index evaluation and again after a three month follow-up, indicating a greater homogeneity for these scales. In most cases the MMPI-PD test-retest coefficients were also higher than those of the PDQ-R. The replication of the Hurt, Clarkin & Morey (1990) reliability values for the MMPI-PD scales are encouraging, especially considering that the intervening time period in that study was 3 weeks. In regard to the MMPI-NPD scale the reliability coefficients at index evaluation were .70, and .63 after a three month follow-up. Test-retest correlation of this measure was .74. An extremely low and non significant relationship between the MMPI-NPD scale and the PDQ-R-N scale was also noted. Lack of convergence between the MMPI-NPD scale and the PDQ-R-N may be due to the latter being scored directly according to DSM-III-R criteria, whereas the MMPI-NPD scale was derived from items based upon the DSM-III. In a further study, with 44 outpatients, concerning the stability of the MMPI-NPD scale over six months, an intraclass correlation coefficient of .71 was obtained, representing the stability of the narcissism subscale (Trull & Goodwin, 1993).

The MMPI-NPD scales displayed a good ability in identifying who did not have a personality disorder. However, these scales overdiagnosed NPD. The results of these

scales in the discrimination of different patient populations are equivocal. The MMPI-NPD scales were unable to differentiate personality disordered patients from non-personality disordered patients, but were able to discriminate narcissistic patients from those found to be suffering from non-narcissistic psychopathology. A number of studies have found the convergent validity of the MMPI-NPD and MCMI-N scales to be significantly related. However, the relationship between the MMPI-NPD scale and PDQ-R-N scale was not found to be significant.

Millon Clinical Multiaxial Inventory (MCMI/MCMI-II)

The MCMI is a 175 item, true-false inventory of psychopathology (Millon, 1983). This self-report measure is designed to assess both Axis I (nine clinical syndrome scales) and Axis II (eleven personality disorder scales) disorders. A positive diagnosis is made when a patient has a Base Rate (BR) adjusted scale score of ≥ 85 on a given index. BR scores are calculated to reflect the ability of a scale to differentiate between a criterion clinical group and all other patients. Piersma (1986) investigated the stability of the personality and symptom scales of the MCMI for a sample of psychiatric inpatients (N=151). Patients were administered the MCMI shortly following admission and shortly preceding discharge ($X = 30.4$ days). Results indicated that stability estimates were greater for the personality scales than for the symptom scales. Test-retest stability coefficient of the MCMI-N was .61 for this sample.

Chick, Sheaffer, Goggin, & Sison (1993) examined the relationship between elevations on the personality scales of the MCMI and clinician generated DSM-III-R diagnoses for 101 psychiatric patients. Personality disorder diagnoses were made by employing a personality symptom checklist that consisted of all the verbatim criteria for personality disorders contained in the DSM-III-R. Clinicians who completed the checklists were required to have had at least 5 hours of direct contact with the patients who completed the MCMI. Seventy-three patients met the criterion for a personality disorder on the MCMI

(base rate > 84), while only 46 met the criteria for a personality disorder, as defined by the symptom checklist based exclusively on DSM-III-R criteria. The sample had a mean base rate score of 59.2 on MCMI-N and 21 subjects exhibited a base rate of greater than 84. However, only 2 of these patients met NPD criteria on the clinician-generated symptom checklist. An examination of the diagnostic efficiency statistics for each of the MCMI personality disorder scales revealed overall low sensitivity, specificity, positive predictive power and low negative predictive power, which suggests that the MCMI may have only limited utility in identifying specific personality disorders. Diagnostic efficiency statistics at the base rate of 84 for MCMI-N were: SN .50, SP=.80, PPP=.05, NPP=.99. A Spearman correlation coefficient between MCMI-N scores and checklist ratings for NPD criteria was .09. These figures suggest that the MCMI tends to overdiagnose narcissistic personality disorder. Furthermore the authors of this study interpret these results as suggesting that the MCMI personality disorder scales are generally poor in identifying patients who meet DSM-III-R criteria for corresponding disorders. Wetzler and Dubro (1990) also examined the diagnostic efficiency of the MCMI with regard to the diagnosis of DSM-III axis II personality disorders in comparison with criterion diagnosis by attending psychiatrists. However this study found the diagnostic efficiency statistics of the MCMI for the presence or absence of any personality disorder (SN=.73, SP=.23, PPP.49, NPP=.45) and for the diagnosis by axis II cluster (SN=.63, SP=.66, PPP.22, NPP=.92) to be somewhat higher than the assessment of each individual personality disorder in the previous study.

Diagnostic efficiency of the MCMI has been evaluated in relation to SIDP diagnosis and the results suggest that the MCMI exhibited excellent sensitivity when used as a screening instrument to identify the presence or absence of a personality disorder. For the identification of cluster B diagnoses the specificity and sensitivity rates for the MCMI were fair. Diagnostic efficiency statistics, with the exception of SP, were not calculated for

NPD because there were a small number of diagnosed cases in this sample ($n=3$). Specificity rates were calculated for NPD and were found to be high (Dubro et al., 1988). A second study comparing MCMI diagnosis with that of the SIDP for 272 psychiatric outpatients, 81% of whom met criteria for a personality disorder, showed mixed results. Diagnostic efficiency statistics based on SIDP-N for the MCMI-N were $SN=.15$, $SP=.97$, $PPP=.22$, $NPP=.96$, using a base rate of .85 for the MCMI-N. These results do not indicate a strong agreement between the SIDP and the MCMI-N for the categorical diagnosis of NPD. However the mean MCMI-N score was significantly correlated with SIDP-N ($r=.18$, $p<.001$, Torgersen & Alnaes, 1990). Hogg and colleagues (1990) studied the prevalence of personality disorders and personality disorder traits in 40 recent onset schizophrenic patients, to establish the degree of concordance between the SIDP and MCMI. As in the previous study, these authors also found the correlation between the NPD trait ratings of the SIDP and MCMI-N base rate scores to be significant ($r=.34$, $p<.02$). However, they also found that the MCMI diagnosed more of the sample as having a personality disorder compared with the SIDP. Miller and colleagues (1992) also assessed the ability of the MCMI to identify personality disorders, using 122 psychiatric patients and found the number of patients scoring positive for personality disorders on the MCMI for NPD was 10. Diagnostic efficiency statistics for the MCMI for the identification of cluster B personality disorders using the MCMI was: $SN=.71$, $SP=.93$, $PPP=.79$, $NPP=.90$.

Significant profile differences between a group of narcissistic and nonnarcissistic psychiatric patients ($n=35$ in each group) were formed on the basis of criteria comprised of clinical judgment and scores on the NPI (>25 or <17). Comparison of the narcissistic and nonnarcissistic groups on the MCMI revealed a number of significant differences. First, the narcissistic group mean on scale 5 (narcissism) was significantly greater than that of the nonnarcissistic group. However, the narcissistic group scored significantly higher on scales 4 (Histrionic), 6 (Antisocial), P (Paranoid), N (Hypomanic), and T (Drug Abuse),

as well as scoring significantly lower on scales 1 (Schizoid), 2 (Avoidant), 3 (Dependent), and S (Schizotypal). The MCMI-N scores were also significantly correlated with both the NPI and MMPI-NPD (Chatham et al., 1993).

As reported earlier, a number of studies which assessed the correlation between the MMPI-NPD scales and MCMI-N found these two scales to be highly correlated ($r = .55$, $p < .001$, Dubro & Wetzler, 1989; $r = .68$ Morey & Le Vine, 1988; $r = .66$, Streiner & Miller, 1988). Scores from both the overlapping and nonoverlapping MMPI-NPD scales have also been compared with the MCMI-N. The correlations between the overlapping and non-overlapping MMPI-NPD scales with MCMI-N base rate scores were also found to be very high ($r = .78$ and $r = .64$, respectively; McCann, 1989; $r = .73$, and $r = .61$, respectively; both $p < .01$, Schuler et al., 1994). Finally, much like the MCMI, the correlations between the overlapping and non-overlapping versions of both the MMPI-NPD scales with MCMI-II-N base rate score were high ($r = .65$ and $r = .50$, respectively; McCann, 1991). In addition to the MMPI-NPD, the MCMI-N has also been found to be significantly related to the NPI ($r = .66$, $p < .001$, Prifitera & Ryan, 1984).

The MCMI-II (Millon, 1987) represents an attempt to address the psychometric shortcomings of the original measure and to make the inventory more comparable to DSM-III-R diagnoses. Recently a number of studies have utilized the revision of the MCMI, the MCMI-II. McCann (1990) was one of the first researchers to estimate the diagnostic efficiency of the personality disorder scales of the MCMI-II. MCMI-II scale elevations were compared against clinical diagnoses of DSM-III-R personality disorders based on clinicians' primary and secondary Axis II diagnoses as a criterion. Utilizing both of these possible criteria in the diagnosis of NPD, the MCMI-II classification rate had a sensitivity of .74 and a specificity of .94. Compared against primary clinician diagnosis of NPD the MCMI-II-N scale had a sensitivity of .59 and a specificity of .96, which means that this

scale was more successful in detecting who did not have NPD than detecting who did have this disorder.

Turley and colleagues (1992) also investigated the diagnostic concordance between the MCMI-II and the SIDP for 21 recent onset Bipolar disorder patients. The diagnostic frequency between the two measures was poor indicating a lack of agreement between the two measures concerning who has a personality disorder and who does not. The MCMI-II diagnosed 9 NPD cases, the SIDP diagnosed 2, and only one of these cases was diagnosed as NPD by both measures. The rate of personality disorder diagnoses was almost one-third higher for the MCMI-II when compared with the SIDP. The level of agreement between the MCMI-II and the SIDP on overall presence or absence of personality disorders was also poor. Comparisons for each personality disorder showed that the most dramatic diagnostic discrepancies between the two instruments were the high comparative frequencies of the narcissistic and antisocial personality disorder scales reported by the MCMI-II.

In a comparison of the concurrent validity of the MCMI-II and the PDE with a sample of 97 outpatients the number of patients (66) assigned personality disorders by the MCMI-II was closer to the number of patients assigned PDE probable and definite diagnoses (75) than the number given to the definite diagnoses alone (43). The MCMI-II diagnosed 11 patients with a definite diagnosis of NPD whereas the PDE diagnosed only 2 patients as NPD. The overall diagnostic agreement between the MCMI-II and PDE on the presence or absence of any personality disorder was significantly related, as was the relationship between the two instruments in the assessment of cluster B personality disorders. However, the agreement between these two instruments in the diagnosis of NPD was very low ($r = .08$ for definite and probable diagnosis of NPD). Diagnostic efficiency statistics were equally as poor for the MCMI-II when based upon PDE diagnoses for NPD. However, these classification rates improved in the diagnosis of cluster B

personality disorders and for the presence or absence of any personality disorder. The agreement between the PDE and MCMI-II dimensional scores for NPD was also explored, and the scores were found to be significantly related ($r = .41$, $p < .01$). However, the MCMI-II schizoid, histrionic, passive-aggressive, paranoid, antisocial, and borderline scales were also significantly related to the dimensional PDE-NPD score, with the latter three scales having higher correlations than the NPD scale of the MCMI-II. It appears that the MCMI-II has high specificity and negative predictive power for all diagnoses, suggesting that the MCMI-II scales tend to agree on who does not have a personality disorder diagnosis. However, the low sensitivity and positive predictive power suggest that these two assessment measures will frequently disagree on who does have certain diagnosis (Soldz et al., 1993).

Renneberg and colleagues (1992) examined the concurrent validity of personality disorder diagnosis of the SCID-II and MCMI-II. However, Kappa coefficients were not computed for NPD, since this disorder was not diagnosed 3 or more times in this sample. Instead, the Kappa coefficient for agreement of the MCMI-II (BR > 84) and SCID-II personality disorder diagnoses of 54 agoraphobic outpatients for cluster B personality disorders was calculated and found to be significant.

Soldz and colleagues (1993) explored the relationship between DSM-III-R personality disorders, the interpersonal circle, and the big five model of personality traits as measured by the 50-Bipolar Self-Rating Scales (50-BSRS) with the MCMI-II for 102 consecutive referrals for group therapy. The MCMI-II NPD scores were placed in the PA (assured-dominant) octant slightly greater than the 50% percentile mark on the affiliation axis. In addition the MCMI-II-N score was significantly related to the extroversion and the openness scores of the 50-BSRS.

The MCMI performed adequately when used as a screening instrument to identify the presence or absence of a personality disorder and for the diagnosis by axis II cluster.

However, the MCMI may have only limited utility in identifying specific personality disorders. The MCMI personality disorder scales are generally poor in identifying patients who meet DSM-III-R criteria for corresponding disorders. Specifically, in assessing the comparison between the MCMI-II and structured interviews (PDE and SIDP), the MCMI tends to overdiagnose narcissistic personality disorder. This poor relationship in the diagnosis of NPD can also be seen in the relationship between MCMI-N scores and checklist ratings for NPD criteria. Despite this poor performance in categorical agreement, the dimensional relationship the MCMI-N scale score was significantly correlated with SIDP-N. Also, the correlation between the MMPI-NPD scales and the NPI were found to be highly correlated with the MCMI-N. Finally, the comparison of the narcissistic and nonnarcissistic patients on the MCMI revealed that scale 5 (narcissism) was significantly greater than that of the nonnarcissistic group.

Projective Techniques

Rorschach

A number of recent studies have utilized the Rorschach in differential diagnostic research concerning NPD. The first study to do so was done by Farris (1988) who found that compared to BPD patients, NPD patients showed significantly higher levels of object representation, and cognitive-perceptual functioning, as well as more responses indicative of body narcissism and phallic-oedipal issues. The BPD patients produced significantly more splitting, projective identification, and extreme levels of devaluation (scale score 5) responses on the Lerner Defense Scales (Lerner & Lerner, 1980). Berg (1990) similarly investigated the difference between NPD and BPD, and found that the BPD group demonstrated significantly more splitting responses, as defined by the Rorschach Defense Scales (Cooper and Arnow, 1986), and less grandiosity, compared with a NPD group. Hilsenroth et al., (1993) further investigated differences in BPD and NPD with a clinical control group of cluster C personality disorders, by examining Rorschach content variables

designed to assess defensive structures, aspects of aggression, and egocentricity. BPDs were found to employ primitive defensive structures to a greater degree and severity, were found to show more intense and overall amounts of aggression, and to have higher levels of grandiosity. NPDs evinced significantly higher levels of egocentricity than borderlines and higher levels of idealization than the cluster C group.

Gacono et al, (1992) noted that psychopathic antisocial patients and NPDs produced a similar number of reflection responses, which occurred with more frequency in these two groups compared with non-psychopathic antisocial patients, BPDs and Exner's nonpatient males (1990). The egocentricity ratio also yielded significant between-group and main effects. These authors also note the high numbers of personalized (PER) responses in both the psychopathic antisocial and narcissistic patients (3.32 and 2.00, respectively). In addition, the borderline and psychopathic antisocial groups produced significantly more primitive object relations responses to the blots than the narcissistic patients, as well as a great deal of violent symbiotic separation and reunion themes in their content. Gacono et al. (1992) found that the narcissistic group produced a large number of idealization response (56%), a finding similar to that of Hilsenroth et al, (1993). The narcissistic patients produced significantly more primitive idealization responses than the borderline patients, as well as both the psychopathic and nonpsychopathic antisocial groups.

Berg et al., (1993) found that borderline and narcissistic patients produced a significantly greater number of object relational scores representing figures in need of some external source of support than did the scores of a schizophrenic group. For these responses the object is found to exist only insofar as it is an extension or reflection of another object. In comparison with NPDs, borderline patients produced significantly more object relational themes of severely imbalanced, malevolent and engulfing relationships. The Rorschach protocols of the narcissistic group reflected a difficulty in relating to others

on a mutually autonomous basis, thereby relying solely on need satisfying relationships. These findings appear to highlight prior theoretical work concerning the character structure of those patients with disorders of the self, as noted by Kohut (1971).

It appears from past research that the Rorschach may be helpful in identifying NPD patients from different clinical groups. In relation to BPDs narcissistic patients will develop higher levels of object representations, will employ less primitive and severe defenses (i.e. splitting and projective identification) and aggressive imagery. NPDs will also tend to develop more reflection and personalized responses than BPD patients or a majority of ANPDs (non-psychopathic) and more primitive idealized responses than this same group of ANPDs and cluster C personality disorders.

Thematic Apperception Test (TAT)

A few studies have sought to assess the ability of the thematic apperception test (TAT) in the assessment of a narcissistic character style. The first of these was the work of Leary (1954) who utilized TAT stories to aid in the determination of an interpersonal style. Leary (1954) categorized the narratives from these stories using 16 codes, two of which he labeled as *Narcissistic* and *Exploitive*. Stories met these criteria if the interaction could be labeled as one of independence, struggle over power, selfishness, seduction, etc. While Leary (1954) does present data for different clinical groups, his work pre-dated the current diagnostic taxonomic systems represented in the DSM-III/DSM-III-R/DSM-IV. Similarly, Harder (1979) has presented a scale designed to assess an ambitious-narcissistic character style on the TAT. In regard to scoring this scale, the interrater agreement and reliability coefficients were high. Also, TAT scores were found to be significantly related to similar scales on a set of early memories and the Rorschach. In addition, TAT scale ratings were found to significantly differentiate subjects rated as ambitious from those rated as non-ambitious. While this scale has shown reliability and validity in assessing an ambitious-narcissistic character style, this study utilized "40 relatively well-functioning" male college

students, which may limit the generalizability of these findings to a pathological group comprised of NPDs. This same criticism, the exclusive use of undergraduates for subjects, may also be applied to the Narcissism-Projective which asks subjects to describe two TAT cards and two early childhood memories (Shulman & McCarthy, 1986). Responses to these stimuli are scored employing criteria based upon the DSM-III for NPD. Scores on this measure have been found to have high interrater reliability coefficients and to be significantly related to interview ratings of behavior, as well as an objective measure of narcissism, the NPI (Shulman, McCarthy, Ferguson, 1988; Shulman & Ferguson, 1988). While both of these TAT scales have shown utility in the assessment of a narcissistic construct, further research must be conducted to explore what contribution they may make to differential diagnosis and diagnostic efficiency. To date the TAT has been primarily used at an ideographic level to understand individual NPD patients. Nomothetic data utilizing this test in differential diagnosis may prove useful as well. Further research might begin to attempt to provide some large sample norms in the differential diagnosis of Axis II disorders.

While a number of psychiatric conditions have been extensively studied using the TAT, few of these studies have examined the test characteristics of character pathology (Bellak, 1986). Over the last decade there has been some investigation of thematic test analysis of narcissistic personality disorders, but most have been case studies (Abrams, 1993) and many of these appear in the international literature (Brelet, 1981, 1983, 1986, 1987; Shentoub et al., 1990; Seifert, 1984). Recently, Brelet (1994) has presented a multidimensional interpretative model for narcissistic narratives in the TAT for clinical patients, but this work has yet to receive any empirical support.

Conclusions

This review may be helpful to both clinicians and researchers alike who are attempting to select or evaluate different methods for the assessment of pathological

narcissism. In general, semi-structured interviews have proven to be a fairly reliable and valid method of diagnosis for Axis II disorders, but for the most part these studies have used woefully small samples of NPDs. The exception to this was the development of the DIN, which is primarily focused on the assessment of a wide range of criteria making up narcissistic pathology. In this respect if a researcher is interested in the investigation of the various symptomatic criteria of NPD, this specialized assessment tool may be optimal. Also, data gleaned from a systematic review of chart materials has proven to be an efficient and reliable method of evaluating DSM criteria in a number of different studies. However, in clinical settings therapists may want to evaluate information from a multidagnostic interview schedule (i.e. SIDP, SCID-II, and PDE) by which they may obtain information concerning the extent to which a patient demonstrates a variety of Axis II symptomatology other than just narcissistic issues.

In general, the objective instruments were best at screening for the presence or absence of personality disorder in general, identifying members of personality disorder clusters, and identifying negative instances of specific personality disorders or clusters. In this regard, using a structured interview to exclude individuals from diagnostic classes is very time consuming and the objective measures can accomplish this more efficiently. The generally high specificity and negative predictive power of these instruments indicates that the probabilities of identifying true negatives for NPD are good (Dubro et al., 1988; Miller et al., 1992). Results of these studies indicate that the objective tests may be useful in screening for NPD and other personality disorders in psychiatric settings where Axis II disorders are expected to be common.

Despite satisfactory reliability for the objective inventories and the structured interviews, the present review reveals very limited support for the concurrent validity of these two methods of assessment in the diagnosis of a specific personality disorder, NPD. This relationship between an Axis II diagnosis derived from an interview versus an

objective inventory has been historically poor (Hurt et al., 1984; Edell, 1984), with past results indicating poor to moderate agreement in assigning diagnoses to patients (Perry, 1991). In general, previous studies have found the tendency for objective measures to diagnose personality disorders at much higher frequencies than do clinicians. Moreover, the objective measures frequently attributed two or more personality disorders to a particular individual. This has continued to be the case in more recent research as well and the current review has shown that these concerns are quite relevant to NPD diagnosis. It appears that the objective inventories were far more likely to diagnose NPD and to report the presence of one or more personality disorders, along with the presence of NPD, compared with the structured interviews. In addition, few of the objective measures showed consistent categorical agreement, either with each other across the 11 personality disorders, including NPD, or in identifying the presence of individual disorders. While overall agreement between the two forms of assessment on categorical diagnoses was poor when trait ratings were considered, there was a moderate degree of correlation on the dimensional aspects of narcissistic criteria (Hogg et al., 1990).

The structured interviews identified NPD as much less prevalent than did the objective inventories. Disagreement may be due to the high levels of overlap of the HPD, ANPD, and BPD with the NPD scales on the self-report measures (Turley et al., 1992). This finding may also reflect an exaggeration of symptom severity in the use of objective measures. Pertaining to the diagnosis of Axis II disorders overall and in regard to NPD, the objective inventories generated many false positive diagnoses, but very few false negatives. Several difficulties can be noted with this practice of utilizing single-scale elevations on objective inventories to diagnose personality disorders. A multiscale instrument such as the MCMI, MMPI-PD or the PDQ, will most likely yield elevations on several scales (McCann, 1990).

It would appear that utilizing the objective inventories as the sole criterion for making DSM-III-R/IV diagnoses of NPD is inadvisable. We must conclude that at all levels, the objective inventories and the structured interviews are often in disagreement concerning the presence of specific personality pathology. Therefore, these measures cannot be used interchangeably and attention should be paid in literature reviews of personality disorders to the examination of the effects that may be due to the diagnostic method that is employed. However, it should be noted that employing the more conservative base rate $> .84$ as is done with the MCMI-II, leads to an overall prevalence rate which is more similar to that of structured interviews (Renneberg et al., 1992).

Concerning the penchant for objective measures to overdiagnose rather than underdiagnose personality disorders, it appears that self-report inventories are more likely to give an overabundance of false positive diagnoses compared with ratings by clinicians in a structured interview. Thus, self-report instruments provide a broad band of personality disorder data and are well-suited to preliminary exploration of the clinical picture. Clinical interviews appear to be better suited to consideration of contextual and case history material at the point of diagnosis. To their credit Hyler et al. (1999) suggest that the PDQ-R should be used to screen individuals to be studied further for specific personality disorders; they recommended that positive diagnoses according to the PDQ-R be verified for clinical significance by clinician-administered interviews.

The Chatham, Tibbals, & Harrington (1993) study has been the only attempt to specifically assess the construct validity of the MMPI-NPD scale and the MCMI-N in the assessment of pathological narcissism. It would appear that these two measures do have utility in the differentiation of those patients with narcissistic pathology from those without such pathology. However, the ability of these scales to evaluate questions concerning the differential diagnosis of NPD from related subgroups remains unanswered. While both measures performed very well, the narcissistic group's high scores on scale 4 and 6 of the

MCMI again raise the specter of poor differential and multiple diagnosis of related personality disorders when the MCMI is used in isolation. In addition it would have been useful if the authors had presented values for the MMPI BPD, HPD and ANPD scales on both groups to evaluate the same aspects of the MMPI-PD scales. Finally, given the difference between statistical and clinical significance, a comprehensive examination of the clinical applicability of the two scales could have been evaluated had the authors presented various cutoff scores for these measures with diagnostic efficiency statistics (i.e. SN, SP, PPP, NPP). Also, results suggest that both the overlapping and nonoverlapping versions of the MMPI-NPD scales possess similar levels of convergent validity with the MCMI-II-N scale (McCann, 1991). In order to maintain the highest possible level of concordance, overlapping scales should be considered when these measures are used in the assessment of NPD.

It appears that interviews may allow for greater flexibility in the assessment of NPD since clinical judgment may be necessary to determine or clarify whether the diagnostic aspects of a patient's behavior are present (e.g., DSM-IV criterion 9: Arrogant and haughty behaviors). In addition, observation of pathological behavior may be more useful to a clinician than the sole reliance on self-report. Past authors have criticized objective inventories concerning the assessment of NPD because these instruments tend to be more direct in identifying narcissistic traits and therefore are more likely to evoke defensive responses (Gunderson et al., 1990). Moreover, these authors also state that NPD patients are particularly unable to view themselves in a realistic manner. While interviews allow for the clinical observation of behavior, one has to wonder if this same criticism might also apply, at least in part, to the semi-structured interviews. Additionally, interviews have limitations that clinicians should be aware of as well. Past research has also indicated that clinicians may underestimate or minimize co-existing syndromes once the presence of one or two Axis II disorders have been recognized (Widiger & Frances,

1987). Unlike objective inventories, which may include indices that might detect intentional response dissimulation (faking), exaggeration of symptoms, random responding, acquiescence or denial, clinical interviewers may be susceptible to active attempts at malingering. Assessment of personality disorder criteria may be difficult through direct inquiry and it is questionable whether NPD patients would admit that they are egocentric, self-indulgent, inconsiderate or interpersonally exploitive. Also, with the advent of the DSM-IV it will be necessary for at least some limited revision to be undertaken for a number of these interview and self-report inventories in order to remain consistent with standardized psychiatric classification.

Given the concerns which have been presented concerning the possible limitations of NPD patients reporting diagnostic criteria, either on objective measures or semi-structured interviews, it is surprising that projective techniques have been underutilized. Furthermore, research over the last decade has shown this mode of assessment to be useful in the differential diagnosis of NPD from both related and unrelated personality disorders. However, no research to date has yet to report information concerning reliability of the NPD diagnosis, to assess the relationship between DSM criteria and projective test variables or to calculate the diagnostic efficiency statistics to determine the efficacy of projective variables with regard to correct classification. Future research with projective test variables should address these issues by employing more stringent methodological standards to ascertain the contribution to the diagnosis of NPD in comparison to and in conjunction with what the semi-structured interview and objective inventory methods have to offer.

A number of authors have stressed the importance of a multiaxial-multimethod approach to assessment (Rappaport, Gill and Schafer, 1945; Leary, 1954; Campbell & Fiske, 1959; Jackson, 1971). The implications of this approach are that individuals are seen as more than uni-dimensional beings and are considered to be varied not only from

one another but also in the way: a) others view them (social perception), b) they view themselves (self perception), and c) underlying dynamics will influence their behavior (intentionally/fantasy/ideals). This approach presents clinicians and researchers with the responsibility to sample each domain of functioning. This form of assessment may aid clinicians in the comprehensive understanding of an individual rather than focusing on just one facet of behavior. Also, the concept of narcissism has frequently been viewed as multidimensional, and therefore, a single score on one measure may be far less optimal than an assessment technique which provides information concerning the various aspects of narcissistic pathology (i.e. grandiosity, need for mirroring/admiration, narcissistic rage, entitlement, ...etc).

In conclusion, it would seem prudent that the clinician and researcher alike should employ multiple methods of measurement and utilize information in a systematic and theoretical fashion. Understanding the variety of options available for the measurement of narcissistic pathology is useful in order to compare and select among the various methods and techniques. Future research should attempt to compare the diagnostic efficiency of these three methods to determine the ability of each method alone and in conjunction with the other methods to assess whether each provides any unique information to an accurate classification. It may be that these three approaches in combination are more effective than each considered separately, or conversely, that there may be relative advantages of each method that are unique to an assessment of NPD. Since the recent introduction of the DSM-IV a continued evaluation of the convergent and discriminant validity of these three approaches to assessment of NPD will be needed.

SYNTHESIS OF THEORY AND TESTING

In the present study an attempt will be made to demonstrate, via the use of several scoring indices used in a multimethod assessment (Leary, 1957; Rapaport, Gill, and Schafer, 1968), that NPD may indeed differ from both related and unrelated groups of

disorders. An attempt will also be made to address some of the uncertainty and confusion about NPD in the literature by integrating the current descriptive nosology with the psychoanalytic literature on pathological narcissism. Specifically, the areas of aggression, defensive operations, dependency/orality issues, and object relations will be addressed in terms of how they may aid in the differential diagnosis of NPD from related and unrelated personality disorders.

Constructs from both the deficit and the conflict perspective models are useful in the investigation of underlying aspects of narcissism embedded in the theoretical writings of Kohut and Kernberg. Before detailing a number of variables that define the structural composition of these theories of pathological self-development I will first briefly review their major explanatory concepts and diagnostic features.

As discussed earlier Kohut regards the primary factors of narcissistic pathology as failures in one or both of two areas of self-development. The first is an inadequate recognition or admiration of the child by his parents. The second area concerns the traumatic disappointments in the child's idealized versions of the parents as conduits of narcissistic pathology. The first type of failure eventuates in an impoverished self-representation and will give rise to a damaged self esteem which, though split off, seeks the recognition of what was missing in childhood. A failure in the child's ability to idealize the parent will result in feelings of being "empty" and helpless. Subsequently, the patient will desperately seek, through merger and unresolved dependency longings, the "protection" of significant others. In either case, the unmet needs of the child may also find expression in "narcissistic rage" at the unresponsive parents or, in adulthood, at their surrogates.

Kernberg acknowledges many of the clinical manifestations of narcissism that Kohut addresses, but he views them as defenses against underlying primitive sexual and aggressive issues resulting from the unavailability of "good, internalized objects" upon which the child can depend. Severe, early frustrations (and possibly a genetic

predisposition) with these early caretakers are seen as related to the development of unmanageable levels of aggression in the child. Rather than risk being overwhelmed by rage at those upon whom the infant depends, s/he splits off this aggression and expels it from the internal world into the external one. As an adult this early process is visible in the use of devaluation, projection, displacement, some of the typical defensive derivatives of the early splitting processes that characterize narcissistic development. This splitting "good" and "bad" self and other representations also manifest themselves in a weakened self-representation, which is vulnerable to intense primitive affects. The child's enfeebled actual and ideal self representations struggle desperately to shield the developing ego from further frustrating experience and rageful reactions to an ungratifying external world. The defensive derivatives produced by this tenuous self-organization are omnipotence and grandiosity are a principle psychological configuration within Kernberg's pathological narcissistic character style.

Clearly, each model shares a number of common presenting features of narcissistic pathology, but they differ with regard to whether these features are primary or secondary to the basic dynamic issues. One of the tasks of this inquiry is to assess the most prominent features implied by both of these theoretical models in the differential diagnosis of character pathology. These constructs are considered to express the fundamental aspects of psychopathology in the narcissistic syndromes and may be operationalized in existing test scores. A number of psychoanalytic scales developed for use on the Rorschach responses are available to aid in the assessment of pathological narcissism

For example Kohut views inadequate recognition and mirroring of the child by the parents as well as traumatic disappointments in idealization to be central in narcissistic pathology. These constructs might be operationalized by the number of reflections and idealization scores developed on the Rorschach. As a consequence of these failures, the child will split off unmet grandiose and exhibitionistic wishes, but continue to demand

satisfaction of them, even into adulthood. Thus, one might also expect high levels of splitting, grandiosity, omnipotence, and exhibitionism produced on the Rorschach. Denied a sense of omnipotent well-being through mirroring in the imagined power of the parent, the frustrated child continues to seek merger experiences as an adult which express the vulnerable, undifferentiated state of the self. This personality configuration may be assessed by utilizing both object relational scores on the Rorschach as well as specialized scales on the MMPI-2 measuring ego strength and familial discord.

Demands for admiration and the inflated self-admiration also receive prominent attention in the conflict model (Kernberg, 1975). For Kernberg this need for admiration or the "inordinate need for tribute from others" (p.227), reflects unmet libidinal needs. However, within the conflict model the emphasis in narcissistic pathology is placed upon the centrality of the devaluation and envy of others, the dissociated and projected rage, and paranoia as a figural part of conflict derivatives. These structures can be assessed by devaluation, splitting, and projective identification variables on the Rorschach. For Kernberg, these aggressively laden derivatives reflect different aspects of conflicts over dependency, a primary etiological issue in his model of narcissism, which may be assessed using an orality score for the Rorschach. Finally, three indicators of the conflict derivatives, primitive splitting, sexual and aggressive impulses over and around dependency, are each fundamental components of Kernberg's conflict model of narcissism. This constructs may be assessed by utilizing both primary and secondary process scores on the Rorschach as well as a specialized scale on the MMPI-2 measuring anger.

Kernberg (1984) used the extent to which aggression has been integrated into the character structure as the most relevant diagnostic criterion in determining the type of treatment to be pursued with severe character pathologies. However, "rage", as a type of reactive feeling, has not been found to reliably differentiate narcissistic patients from other "dramatic" cluster (B) personality disorders (Gunderson et al., 1991). Therefore, an

assessment of both the quantity, intensity as well as the qualitative aspects of aggression may have salient use for clinicians, especially in diagnosis, treatment planning, and in the management of transference/countertransference issues.

Kernberg (1975) particularly emphasized the use of primitive dissociation or splitting, facilitated by a group of related defenses (denial, idealization, devaluation, and projective identification), as the principal defensive operation in borderline spectrum character disorders. In addition to Kernberg a number of other writers (Lerner, 1988; Masterson, 1981; Meissner, 1978) believe that BPDs, ANPDs and NPDs use the same constellation of defense, but this latter group of authors believes that the BPD may employ these defenses to a greater extent than do related subtypes.

McGlashan and Heinssen (1989) point out that while the Cluster B personality disorders interact very poorly with others, they are quite dependent on others to fulfill a myriad of different needs (i.e. admiration, attention, clinging and demanding wishes for nurturance). They also speculate that issues surrounding dependency are quite distinct when comparing the three DSM-III-R personality disorder clusters. Cluster A personality disorders are relatively uninvolved and withdrawn from others. Cluster B personality disorders "want" from others but are oblivious and/or nonresponsive to what others want of them. Cluster C patients are also involved with others, but in ways that avoid overt conflict. In addition, Kernberg (1970) has identified the denial of dependency on external objects as central to the psychopathology of NPD and he views the acknowledgment of dependency issues to be a crucial issue in the treatment of narcissistic personalities.

The issue of object relations in severe pathology (BPD, NPD, ANPD) is seen as figural in the nosology, phenomenology and treatment of these personality disorders. NPDs have object relations which are characterized by a grandiose self structure; an excessive amount of self-absorption; an overdependence on external admiration and acclaim; shallow, if any, investment in others; and little genuine empathy (Kernberg, 1975;

Kohut, 1971, 1977; Masterson, 1981; Meissner, 1978; Stolorow; 1975). BPDs have not effectively differentiated themselves from others and exhibit unstable and vascillating qualities to their relationships, in which an intense wish for fusion with an object is accompanied by the concomitant fears of engulfment. The fear of the dissolution of the self leads them to a distance-creating rage. Like the NPD, ANPDs have no great desire for interpersonal relatedness as well as demonstrating ruthless and exploitative behaviors (Gacono et al., 1992).

OBJECTIVES OF THE STUDY

In summary, a review of the clinical, theoretical and research literature on NPD has allowed for the generation of some preliminary hypotheses regarding the severity of NPD on a variety of parameters: the areas of aggression, defensive organization, dependency/orality themes, object relations, and self-absorbtion. The present study will compare the indices/scores, from various modes of assessment, of NPD patients with related and unrelated groups of outpatient personality disorders as well as a non-clinical group. These five dimensions-aggression, defensive organization, dependency/orality themes, quality of object relations, and self-absorbtion-lend themselves to testable questions concerning the differences between NPD and other personality disorders. Therefore, I hypothesized that:

1. NPD personality disorder will score significantly higher on the clinical scales as well as on specialized scales of the MMPI-2 measuring anger, antisocial practices, family problems, and lower ego strength compared with the non-clinical group.
2. NPDs will score significantly higher on a specific objective index, the NPD scale from the MMPI-2, compared with the Cluster C, Cluster A personality disorder or non-clinical groups.

3. NPDs will produce significantly more Rorschach responses reflective of primitive modes of defense, as defined by the Lerner Defense Scales (Lerner & Lerner, 1980), compared with Cluster C and Cluster A personality disorders or a non-clinical group.
4. NPDs will produce significantly more Rorschach responses reflective of primitive modes of aggression, as well as more overall aggression defined by the Holt primary-secondary process scores (Holt, 1977), compared with a non-clinical group.
5. NPDs will produce significantly more responses indicative of self-absorption as measured by the Rorschach structural score pairs, reflections and personalization (Exner, 1986) than any other group.
6. NPDs will produce significantly worse object relation scores, as measured by the Rorschach Mutuality of Autonomy Scale (Urist, 1977) than the Cluster C or a non-clinical groups.
7. NPDs will have significantly lower dependency/orality scores, as measured by the Rorschach Oral Dependency Scale (Masling, 1986), compared with the Cluster C and Cluster A personality disorder or non-clinical groups.
8. Those scores which best differentiate the NPDs from the other clinical and non-clinical groups will be highly related to the 9 DSM-IV criteria for NPD.
9. MMPI-2 and Rorschach scores will successfully aid in the correct classification of those individuals with NPD.

This design can highlight a number of characteristics which may be useful in the differentiation of NPD.

This study is distinctive because it will be the first to assess the test characteristics of NPD patients diagnosed according to DSM-IV criteria. It will then be possible to investigate the relationship, if any, between the various test indices which are identified as

being useful in the discrimination of NPD with DSM-IV criteria through a series of correlational analyses. This study will also be the first to assess the clinical efficacy of the MMPI-2 and Rorschach in the correct classification of those individuals with NPD. Diagnostic efficiency statistics will be calculated under four different conditions in a *clinically relevant* manner. These comparisons will follow the rational progression of determining the ability of given variables to differentiate NPD from a non-clinical sample, a group of unrelated personality disorders from cluster A and C, a group of related, cluster B, personality disorders and finally the entire clinical and non clinical sample. The six different statistics calculated will be sensitivity (SN; the ability of the test to correctly identify individuals with the disorder), specificity (SP; the ability of the test to correctly identify non-personality disordered individuals as non-personality disordered), positive predictive power (PPP), negative predictive power (NPP; the probability that an individual has or does not have a personality disorder when the test identifies him or her as having or not having a personality disorder), overall correct classification rate (OCC; the overall "hit rate" of the proportion of NPD patients and non-NPD patients correctly classified by the test), and Kappa (agreement between the test and DSM-IV diagnosis of NPD, accounting for the chance agreement).

CHAPTER II

METHODOLOGY

SAMPLE

All subjects utilized in this study were drawn from an archival search of files at a university-based outpatient psychological clinic, accomplished by an exhaustive search of approximately 800 cases over a 7-year period. The selection of clinic cases proceeded in three phases. In the first phase, 217 cases were initially identified as having a personality disorder diagnosis given by a clinical team consisting of an advanced clinical Ph.D. student and a supervising clinical faculty member. All faculty were licensed clinical psychologists with several years of applied clinical experience. Original diagnosis was rendered after an intake evaluation process and based on the patient's history, analysis of test data, and clinical interview, as well as session notes from the intake/assessment procedure. Subjects used in this study had been administered the MMPI-2 and/or the Rorschach as part of an intake evaluation.

In the second phase of data collection these 217 cases were then rated for the presence or absence of DSM-IV diagnoses. The presence or absence of symptoms was determined in a retrospective review of patient records which included an evaluation report, session notes from the assessment procedure, as well as session notes for the first 12 weeks of therapy and three month treatment reviews when available. Information regarding patient identity, diagnosis, and test data were appropriately masked or made unavailable to the raters when reviewing the case record. Raters in this study were four advanced doctoral students in an APA approved clinical psychology program. Raters had received additional training in the diagnosis of DSM-IV personality disorder symptoms.

Interrater agreement was established by independent ratings of a randomly selected pool of 31 patients; a kappa coefficient of .90 regarding the presence or absence of a DSM-IV personality disorder was obtained. Of the 217 patients reviewed in this manner, 91 were found to meet DSM-IV criteria for an Axis II disorder with the following distribution: paranoid (PPD)= 4, schizoid (SDPD)= 1, schizotypal (STPD)= 5 [cluster A personality disorders (PPD, SDPD, STPD)=10]; antisocial (ANPD)= 20, borderline (BPD)= 25, histrionic (HPD)= 5, narcissistic (NPD)= 15 [cluster B personality disorders (ANPD, BPD, HPD, NPD)=65]; avoidant (AVPD)= 9, dependent (DPD)= 5, obsessive-compulsive (OCPD)= 2 (cluster C personality disorders (AVPD, DPD, OCPD)= 16].

The 91 patients identified through this retrospective analysis made up the sample. The sample consisted of 47 (52%) males and 44 (48%) females with a mean age of 28 years (S.D. = 8) at admission. The average number of years of education completed by the patients was 14 years (S.D. = 2) and the mean Wechsler Full Scale IQ was 106 (S.D. = 13); IQ's ranged from 84 to 136 (Wechsler, 1986). Fifty-one patients were single, 14 were married, 25 had been divorced and 1 had been widowed. In the third phase, the records of these 91 patients were again independently rated on all of the Cluster B personality disorder symptom criteria (ANPD, BPD, HPD, NPD) for the DSM-IV using the same case material and methodology described earlier. Again, interrater reliability was established by independent ratings of a randomly selected pool of 25 patients. Kappa estimates of interrater agreement regarding the presence or absence of individual DSM-IV symptom criteria for each Cluster B disorder are listed in Table A-1 (all Tables are located in Appendix A).

Non-Clinical comparison group - Subjects enrolled in undergraduate psychology classes at a large southeastern university served as subjects for the non-clinical (NC) control group. These subjects volunteered to take part in the study in exchange for extra course credit. A sample of 117 subjects were administered the Rorschach or the MMPI-2

by advanced graduate students in an APA approved clinical psychology Ph.D program. These graduate students had fully completed the testing curriculum in this program. Demographic characteristics of this non-clinical group included 58 males and 59 females, years of education ranged from 13 to 18 (mean = 14), with a mean of 20 years.

INSTRUMENTS

MMPI-2

Clinical / Content / Supplemental Scales of the MMPI-2 - Since the MMPI-2 is routinely used in clinical settings it seems necessary and timely to ascertain to determine whether the standard scales of this measure will show utility in examining and explaining the symptomatology of DSM-IV cluster B personality disorders, and specifically NPD. The ego strength supplementary scale (Es; Barron, 1953) was used to assess the extent of personality integration and psychological adjustment (Graham, 1990) as well as to tap adaptive functions of the individual and as a measure of coping resources and abilities in the sample. This study also investigated the clinical utility of three relatively new MMPI-2 content scales: Anger (ANG), Antisocial Practices (ASP), and Family Problems (FAM). These variables were employed in the study because the issues they represent are theoretically salient in determining the diagnostic features of severe character pathology. The ANG scale is designed to assesses the presence of anger control problems. Individuals with high scores on this scale may have impulse control deficits in managing anger. The ASP scale was developed to investigate the extent to which an individual reports taking part in problem behaviors during their school years and subsequent legal problems into adulthood. Patients scoring high on this scale are believed to have pronounced antisocial attitudes and/or behavior. Finally the FAM scale is designed to tap the amount of familial discord which is present within an individual's home environment. High scores on this scale are related to a family situation which is lacking in support and

love, and represent predominant themes of abusive, quarrelsome, and unhappy interactions.

Personality Disorder Scales of the MMPI-2 - Morey, Waugh, and Blashfield (1985) developed eleven personality disorder scales for the MMPI, as described in DSM-III, derived from the original MMPI item pool through a combination of rational and empirical strategies, developed from a large psychiatric population. Colligan et al. (1994) have recently presented the original MMPI and MMPI-2 items for each of the 11 personality disorder scales, as well as normative data for contemporary census-matched adults on both overlapping and non-overlapping scales. Fourteen of the items are unique to the NPD scale and the remaining 17 items (31 total) are duplicated in at least one other personality disorder scale. However, the median correlation between the complete NPD scale and the 14 non-overlapping items is reported as .95 and the entire scale has an internal consistency (KR-20) of .77 (Morey et al., 1985). Concurrent validity studies report correlations above .50 with several other measures of narcissism (Raskin & Novacek, 1989; Wink & Gough, 1990). In addition, this scale was found to be the most robust index of narcissism in the differentiation of narcissistic from non narcissistic outpatients (Chatham et al., 1993). Both the overlapping (NPD-O) and non-overlapping (NPD-NO) versions of the NPD scale will be used in this study.

Rorschach

Holt Primary-Secondary Process Analysis - Libidinal and aggressive ideation will be assessed with the content section of Holt's (1977) method for scoring primary process manifestations on the Rorschach (see Appendix B-1). Holt's system differentiates two levels of libidinal and aggressive content. Level 1 scores (L1) are related to primary process forms of primitive libidinal and aggressive themes, specifically measuring direct or crude psychosexual stage material and murderous or palpably sadomasochistic aggression. Level 2 libidinal and aggression scores (L2) are related to secondary process and specifically

measure indirect, controlled and socialized psychosexual content as well as non lethal forms of hostility or aggression expressed in a socially acceptable way. The Holt system has demonstrated high levels of test-retest (Gray, 1969) and interrater reliabilities (Lerner & Lewandowski, 1975), as well as significant validity in a number of studies (Blatt & Berman, 1984; Hilsenroth et al., 1993; Murray, 1985; Russ, 1988). Related to the Holt variables is the content score Morbid (MOR) which denotes themes of damage and victimization.

Lerner Defense Scales (LDS) - Subjects' defensive structure will be assessed by the LDS (Lerner & Lerner, 1980; see Appendix B-2). This scale is based on Kernberg's (1975) theoretical conceptualizations of primitive defenses and the clinical diagnostic work of Mayman (1967), Holt (1977), and Peebles (1975). The LDS is a Rorschach scoring system for the assessment of primitive defenses (splitting, idealization, devaluation, denial and projective identification) as seen in human responses (*H*), as well as in quasi-human (*(H)*) and human detail (*Hd*) responses in some circumstances. The LDS scale has shown good construct validity and high interrater reliability (Lerner, 1991). To use more stringent parametric statistics in the analysis of those defenses on the LDS that are ranked on a continuum from high to low order (devaluation 1-5, idealization 1-5, and denial 1-3), defenses were weighted according to rank, and then were collapsed into an overall derived score for that category (H. Lerner et al., 1987). For example, if there are three instances of idealization on a subject's protocol, one being at Level 1 and the other two instances at Level 3, the subject would receive a total idealization score of 7 ($1 + 3 + 3 = 7$).

Rorschach Oral Dependency (ROD) Scale - The assessment of dependency themes in Rorschach content will be assessed utilizing the ROD (Masling, 1986; see Appendix B-3). A response is defined as oral dependent if it falls into any of the following categories: food and drinks, food sources, food objects, food providers, passive food receivers, food organs, supplicants, nurturers, gifts and gift givers, good luck symbols, oral activity,

passivity and helplessness, pregnancy and reproductive anatomy, and negations of oral percepts (i.e. not pregnant; man with no mouth). The construct validity and interrater reliability regarding this measure has proven to be very good in a number of different studies utilizing various populations (Bornstein, Rossner & Hill, 1994).

Mutuality of Autonomy Scale (MOAS) - The MOAS (Urist, 1977) assesses the thematic content of relationships, stated or implied, between animal, inanimate and human object in Rorschach percepts (see Appendix B-4). The scale was developed to assess the degree of differentiation of object representations. This scale focuses primarily on the developmental progression of separation-individuation: from engulfing, fused relations, to object constancy and highly differentiated self-other representations. Scale points 1 and 2, the highest levels of object relatedness, reflect the depiction of autonomous figures that are either mutually interacting or in parallel activity (e.g. "two people talking about grocery prices, pushing shopping carts"). Scale points 3 and 4 reveal an emerging loss of autonomy in the between the figures (e.g. "Siamese twins connected at the butt, without any legs"). Scale points 5, 6, and 7 reflect not only the loss of the capacity for separateness but increasing malevolence of one figure toward another (e.g. "a fly being devoured by a Venus flytrap"). The MOAS has demonstrated a high degree of construct validity with behavioral ratings (Ryan, Avery & Grolnick, 1985; Ursit, 1977; Urist & Schill, 1982), assessment of change after psychotherapy (Blatt & Ford, 1994) and concurrent validity with other instruments designed to assess the construct of relatedness (Fowler, Hilsenroth & Handler, 1995). Three MOAS scores are routinely used in research (Ryan, Avery, & Grolnick, 1985; Tuber, 1983, 1992) and were employed in this study as well. These three MOAS scores are: the mean MOAS score (MOAS-M), single highest (least adaptive) score (MOAS-H), and the single lowest (most adaptive) score (MOAS-L).

Egocentricity - The Rorschach structural scores of pairs (2) and reflections (*Fr*, *rF*, *r* ; REF) have been combined effectively in the past (Exner, 1969, 1973, 1986a, 1993;

Greenwald, 1990) as indices of experienced self-esteem. Recently these variables have shown some utility in differentiating NPD from other Cluster B personality disorders (Gacono et al., 1992; Hilsenroth et al., 1993). In addition to these two variables, responses in which a patient refers to personal knowledge or experience as part of the basis for justifying a response (PER) have also been found to be related to NPD and extreme manifestations of ANPD (Gacono, 1990; Gacono et al., 1990; Gacono et al., 1992).

PROCEDURE

The administration and the original scoring of the Rorschach followed the procedures articulated by Exner (1986a, 1993). For all cases, coding of all projective variables used in this study were done blind to diagnosis by the writer, who has completed advanced training in personality assessment and has extensively used the measures proposed in this study. For the purpose of interrater reliability (Weiner, 1991), 20 Rorschach protocols were chosen at random and rescored independently, blind to first coders scores, by a second coder who was also blind to patient diagnosis. The level of education and training is similar between the two coders. The two sets of scored protocols were compared to one another, and percentages of agreement were calculated for all relevant scoring categories. The resulting interrater agreement data for all variables ranged from a low of 84% (MOAS) to a high of 100% (reflections), with an overall mean agreement of 88%. Rorschach protocols were scrutinized for validity and 6 of the patients were found to have less than 14 responses and a *Lambda* above 1.0 and were therefore omitted from the study. Two patients had not been administered the Rorschach. Also, in an effort to avoid redundancy in the analyses, four patients Rorschach protocols that had been used in a previous study (Hilsenroth et al., 1993) were excluded from this investigation. Ten patients had not been administered the MMPI-2 and 10 were found to have an *F* scale of greater than a *T* of 90 and were therefore omitted from the study.

This brought the number of patients with usable Rorschach and MMPI-2 data in the study to 79 and 71 patients, respectively.

DATA ANALYSIS

An analysis of variance (ANOVA) showed that the mean number of Rorschach responses (R) did not vary significantly ($p = .59$) across groups. However, using procedures recommended by Kalter and Marsden (1970), R was found to be significantly related ($p < .05$) to four of the variables used in this study (i.e. pairs, L2, A2, and ROD). R was covaried from the preplanned comparisons for these variables. In all other cases, analyses of variance (ANOVAs) were performed across and between all groups with the variables of interest. In order to eliminate the possibility of spurious results, statistically conservative Bonferroni adjustments were made in all multiple comparison procedures when evaluating each of the pairwise contrasts performed in the study.

CHAPTER III

RESULTS

It was necessary to ascertain the robustness of the DSM-IV criteria for the different diagnostic groups before any between-group comparisons were made. Table A-2 displays the mean number of cluster B criteria met for each of the six diagnostic groups, f , and p values along with the Bonferroni corrected individual group contrasts. This analysis shows very distinct differences between these clinical groups on the various criteria; each overall group and individual comparison obtained a degree of significance at or beyond the $p < .001$ level of significance. This finding indicates that the appropriate DSM-IV cluster B criteria are effective in delineating distinct diagnostic entities. In addition, it also appears that ANPD can additionally be differentiated from both BPD and cluster C personality disorders using the NPD DSM-IV criteria, as well as the criteria for ANPD.

HYPOTHESIS 1

The first research question to be evaluated was the ability of the standard MMPI-2 validity and clinical scales to differentiate NPD from a non-clinical sample, as well as two groups of personality disorders belonging to clusters [cluster A personality disorders (CAPD) and cluster C personality disorders (CCPD)]. These latter groups have been shown to be discrete from the dramatic, emotional, and erratic factor representing DSM-IV cluster B personality disorders (Hyler & Lyons, 1988; Kaas et al., 1985; Morey, 1988). Results of this analysis are reported in Table A-3. Significant differences were found across the four groups on nine of the twelve scales: F , D , Hy , Pd , Pa , Pt , Sc , Ma , Si . The three clinical groups (NPD, CAPD, CCPD) scored significantly higher ($p < .002$) than the non-clinical group on scales F , D , Hy , Pd , Pa , Pt , Sc indicating a generally greater

level of psychopathology in the clinical groups. The CAPD group scores were significantly greater than the NPD group scores in a comparison of scales *F* and *Sc*, suggesting a greater level of disordered thinking within the CAPD group. In addition, the CCPD group scores were significantly greater than those of the NPD group on the *D* scale, indicating an abundance of depressive affect in the CCPD patients. Given this finding, it was not surprising to find significant elevations in the *Ma* scale for the NPD patients compared with the CCPD group. Finally, both the CAPD and CCPD groups were found to have higher *Si* scores than the non-clinical group, and the CCPD group had scores which were higher on this scale compared with the NPD patients.

The NPD patients' scores on the supplementary scale *Es* and the content scales *ANG*, *ASP*, and *FAM* were also contrasted with analogous scores for the CAPD, CCPD and non-clinical groups. The results of these comparisons are presented in Table A-4. The non-clinical group exhibited higher scores on *Es* than the CAPD and CCPD groups, indicating a higher overall degree of psychological adjustment. Also, all three groups of clinical patients scored higher on *FAM* than the non-clinical control group, reporting greater degrees of familial discord within their households. *ANG* and *ASP* produced no significant differences among these four groups.

In a comparison of the four cluster B personality disorders on the standard MMPI-2 validity and clinical scales, only three of the twelve scales showed any significant differences among the groups. These differences occurred on the variables *F* ($p = .033$), *K* ($p = .017$), and *Si* ($p = .020$). Bonferroni corrected group comparisons showed differences for only the NPD and BPD contrasts for each variable, with NPDs producing significantly lower *F* ($p = .004$), higher *K* ($p = .003$), and lower *Si* ($p = .006$) than the BPD patients.

An investigation of differences among the cluster B personality disorders on the MMPI-2 supplementary and content scales revealed significant differences on three of the four scales. Table A-5 displays the results of these analyses, which shows *Es* ($p = .003$),

ANG ($p = .026$), and *ASP* ($p = .027$) to be significantly different across the four groups. Individual group comparisons revealed that NPDs had significantly lower scores on *ASP* than ANPD patients, as well as lower *ANG* scores and higher scores *Es* scores than BPD patients. The FAM scale exhibited no significant differences among the four groups. Hypothesis one has been supported as the NPD patients scored significantly higher on many of the clinical scales as well as on the content scale FAM of the MMPI-2, compared with the non-clinical group.

HYPOTHESIS 2

Table A-6 presents data comparing the overlapping and non overlapping versions of the NPD scale. Surprisingly, the non clinical group produced very elevated scores on these scales, which included the highest mean score of any group on the overlapping version of this measure. Both the NPD and non-clinical groups produced significantly higher elevations on both versions of the NPD scale in comparison with the scores of the CCPD group. In addition, the CAPD patients had significantly higher scores on the overlapping NPD scale, compared with patients in the CCPD group.

Both the overlapping and non overlapping versions of the NPD scale were found to produce significant differences across the four cluster B diagnoses. Table A-7 reports the mean score on each of these scales for each of the groups. Individual group comparisons revealed that both versions of this measure significantly differentiated the NPD and BPD patients. Also, as was the case for the DSM-IV criteria in Table A-2, the ANPD patients scored significantly higher on the Overlapping version of the NPD scale than did the BPD patients. Hypothesis 2 was not supported as both of the MMPI-NPD scales significantly differentiated the NPD patients from only the CCPD and BPD groups. These scales were ineffective in differentiating the NPD patients from the non-clinical, CAPD, ANPD and HPD groups.

HYPOTHESIS 3, 4, 5, 6, & 7

Table A-8 presents data concerning the ability of the hypothesized Rorschach scales to identify NPD, compared with personality disorders from unrelated DSM-IV clusters and a non-clinical group. Hypothesis three was partially supported as the NPD patients produced protocols with a significantly greater number of idealized responses, compared with cluster A, cluster C and non-clinical groups. In addition, the NPD patients had significantly more responses indicating a greater amount of denial and responses which imbued their reactions to the cards with idiosyncratic personalized experiences. Hypotheses four, six, and seven were not supported in that the NPD patients did not produce significantly more responses indicative of primary or secondary drive derivatives; significantly worse object-relations scores; or significantly lower dependency/orality scores, compared with the cluster A, cluster C or non-clinical groups.

An investigation of differences among the four cluster B personality disorders on the Rorschach are reported in Table A-9. Three variables were found to discriminate these four groups of patients from one another. NPD patients were found to have significantly more idealization responses than the ANPD group, more orality responses than the BPD group, and more reflection responses than both the ANPD and the BPD groups. Hypothesis five was supported as the NPD patients produced significantly more responses indicative of self-absorption compared with the cluster A, cluster C, ANPD, BPD, and non-clinical groups.

HYPOTHESIS 8

Table A-10 sheds some light on this relationship between the NPD scales and patients diagnosed as ANPD by DSM-IV criteria. Correlation coefficients are reported for both versions of the NPD scale scores with the total number of corresponding DSM-IV cluster B personality disorder criteria for the patients in this study. While it is evident that the scales have a significant dimensional agreement with DSM-IV criteria for NPD, both

scales are also moderately related to DSM-IV ANPD criteria as well. In addition, these scales are virtually unrelated to DSM-IV criteria for BPD.

Table A-11 presents correlation coefficients for both versions of the NPD scale with the nine DSM-IV criteria for NPD. Five of the nine criteria were significantly related to both the overlapping and non overlapping versions of the NPD scale. In order of relative magnitude these were: criterion 7, lacks empathy; criterion 9, arrogant and haughty behavior; criterion 6, interpersonally exploitative; criterion 4, requires excessive admiration; and criterion 1, grandiose sense of self importance. The four remaining criteria that were not significantly related to either one of the scales were: criterion 2, fantasies of unlimited success; criterion 3, belief that s/he is special or unique; criterion 5, sense of entitlement; and criterion 8, envious beliefs.

Table A-12 reports the correlation coefficients for the two Rorschach variables, reflections and idealization responses, that were successful in differentiating the NPD patients from the non-clinical group, as well as from both unrelated and related groups of personality disorders with the corresponding DSM-IV cluster B personality disorder criteria for the patients in the study with an Axis II diagnosis. The number of reflection responses that a patient produced in his or her Rorschach protocol was significantly and positively related to the total number of DSM-IV criteria for NPD which were met by that patient. The number of idealization responses showed a trend toward significance ($p = .09$), with the total number of DSM-IV criteria for NPD.

Table A-13 presents correlation coefficients for both the reflection and idealization variables with the nine DSM-IV criteria for NPD. Four of the criteria were significantly related to the number of reflection responses. In order of relative magnitude these criteria were: criterion 2, fantasies of unlimited success; criterion 5, sense of entitlement; criterion 1, grandiose sense of self importance and criterion 9, arrogant and haughty behavior. The number of idealization responses was also significantly and positively related to criterion

2, fantasies of unlimited success, as well. The five remaining criteria that were not significantly related to either one of the variables were: criterion 3, belief that s/he is special or unique; criterion 4, requires excessive admiration; criterion 6, interpersonally exploitative; criterion 7, lacks empathy; and criterion 8, envious beliefs. Hypothesis eight was primarily supported as variables from both measure were significantly related to DSM-IV NPD criteria.

HYPOTHESIS 9

To assess the clinical efficacy of the MMPI-2 NPD scales to classify those individuals with NPD, diagnostic efficiency statistics were calculated under four different conditions. Results of these analyses are presented in Table A-14. These comparisons follow the rational progression of determining the ability of these scales to differentiate NPD patients (A) from a non-clinical sample, (B) from a group of unrelated personality disorders from cluster A and C, (C) from a group of related, cluster B, personality disorders and (D) from the entire clinical and non clinical sample. The six different statistics presented in Table A-14 are sensitivity (SN; the ability of the test to correctly identify individuals with the disorder), specificity (SP; the ability of the test to correctly identify non-personality disordered individuals as non-personality disordered), positive predictive power (PPP), negative predictive power (NPP; the probability that an individual has or does not have a personality disorder when the test identifies him or her as having or not having a personality disorder), overall correct classification rate (OCC; the overall correct classification, or "hit rate", of the proportion of NPD patients and non-NPD patients correctly classified by the test), and Kappa (agreement between the test and DSM-IV diagnosis of NPD, accounting for the chance agreement).

Cut-off scores were determined after reviewing recently published MMPI-2 personality disorder scale scores of a contemporary normal sample of 640 adults whose distribution of age and sex in the U.S. population were matched to the results of the 1980

census (Colligan et al., 1994). Percentile ranks for raw scores on each of the 11 personality disorder scales are presented for both overlapping and non-overlapping items. Percentile ranks are defined as the percentage of persons in the sample who have a personality disorder scale score greater than the value which is indicated. A score of 19 on the NPD-O scale was found to be greater than 76% of those within this census matched normative sample and 85% of this sample earned a raw score of less than 9 on the NPD-NO.

Resulting diagnostic efficiency statistics revealed that both scales were very similar in their values across the different comparisons. Both scales performed best when classifying NPD in relation to personality disorders in clusters A and C. The abilities of these scales were fair in discriminating NPD from related cluster B personality disorders (ANPD, BPD, HPD). As previously reported in Table A-6, the non-clinical collegiate group actually produced the highest mean scores on the NPD scales. Therefore, the results of the NPD scales in the differentiation of a non-clinical, collegiate, population from NPD patients were very poor. When the results from both the clinical and non-clinical samples are combined, the resulting diagnostic efficiency statistics are poor in regard to the accurate identification of NPD, but appear to be fairly effective in determining those who do not have this disorder.

To assess the clinical efficacy of the Rorschach variables reflection and idealization to classify those individuals with NPD, diagnostic efficiency statistics were calculated under four different conditions. After a review of data from normative populations (Exner, 1986, 1993) and the extant research on NPD (Berg et al, 1993; Gacono & Meloy, 1994; Gacono et al., 1992; Hilsenroth et al., 1993) a cut-off score of one was chosen for the reflection response and a total score of five or more was chosen as the cut-off score for the idealization response. Results of this analysis are presented in Table A-15. These comparisons follow the same rational progression of determining the ability of the scores to

differentiate NPD patients from other clinical and non-clinical groups in the same fashion as the analyses in Table A-14. Also, the six different statistics presented in Table A-15, are the same as those presented in Table A-14.

An analysis of these criteria revealed some similarities and some differences between these two variables in making a diagnostic classification of NPD. First, both criteria performed very well in the classification of those patients with NPD in relation to the non-clinical sample and unrelated personality disorder clusters. In addition these criteria did a fair job of correctly classifying NPD from other cluster B disorders. Comparatively, the use of the reflection criterion had a lower sensitivity (the ability of the test to correctly identify individuals with NPD), but a higher specificity (the ability of the test to correctly identify non-NPD individuals as not being diagnosed with NPD) than the idealization criterion, which had a very high level of sensitivity, but a specificity slightly lower than the reflection criterion. This is because 11 of the 12 NPD patients had an idealization response of five or greater and very few non-NPD patients produced a reflection response. Overall, these criteria provided a good level of diagnostic efficiency in a comparison of the total sample with the NPD patients. In particular, the extremely high level of negative predictive power across all four comparisons suggests that these cut-off criteria provide a very good indication that those individuals who are identified as not having NP most likely do not have this personality disorder. Hypothesis nine was partially supported in that the Rorschach scores were useful in diagnostic classification across all four comparisons whereas the MMPI-NPD scales were effective in only one.

CHAPTER IV

DISCUSSION

The results of this study support the hypotheses that variables of the MMPI-2 and Rorschach can be used to differentiate NPD patients from a non-clinical sample, as well as from cluster A and cluster C personality disorders. Also, the findings presented here show that variables from these two measures can be used to identify NPD patients in relation to other personality disorders from within the B cluster. Both measures were found to be empirically related to DSM-IV diagnostic criteria for NPD. However, variables from the Rorschach, but not the MMPI-2, could also be employed for classification purposes in ways which were clinically meaningful in the diagnosis of NPD.

MMPI-2

The NPD patients, as well as the CAPD and CCPD patients, had higher mean *T* scores on the standard clinical and validity scales of the MMPI-2 in comparison to the non-clinical group, indicating greater levels of distress and/or overall psychopathology. While this finding is not surprising in and of itself, there are individual comparisons on Table A-3 which are relevant in the understanding of pathological narcissism. In an evaluation of their scores on the standard MMPI-2 clinical and validity scales the NPD patients scored highest on scale 4 (*Pd* ; Psychopathic deviant) compared with all the other groups. In fact, this was the only scale in which the NPD mean score was above the clinical cut-off *T* score of 65. High scale 4 protocols are found to be produced by individuals who are egocentric, have superficial relationships, who are aggressive, and who have limited frustration tolerance, and lack empathy for others (Graham, 1990). These personality traits are very congruent with the extant theoretical formulations on narcissistic character

pathology emphasized by (Kernberg, 1970, 1975; Masterson, 1981; Meissner, 1978).

While the NPD patients had significantly higher elevations on the *F* and *Sc* scales compared with the non-clinical group, the CAPD group's scores were significantly greater than those of the NPD patients. These findings indicate that although the NPD group had more unconventional or unusual beliefs compared with the control sample, it appears that the narcissists are not experiencing the more extreme reality distortions characteristic of the odd, eccentric, schizotypic cluster (A). Also, a similar interpretation of these results can be made in the analysis of the *D* and *Si* scales, where the NPD group again scored significantly higher than the non-clinical sample, but significantly lower than the CCPD group. This pattern suggests that patients from the anxious, fearful cluster (C) have more extreme levels of withdrawal and isolation, compared with the NPD patients. This pattern makes both conceptual and theoretical sense, and helps to decipher the significantly lower score the CCPD patients produced in comparison with the NPD group.

In a comparison of the NPD patients with other cluster B personality disorders, there were only three variables on the standard MMPI-2 clinical and validity scales which showed significant differences among the groups, all of which involved comparisons between the NPD and BPD groups. The NPD patients scored significantly lower on the *F* and *Si* scales, compared with the BPD patients, suggesting that they experienced less global distress and, like the comparison with the CCPD group earlier, less impairment in reality testing. The NPD patients also scored significantly higher on the *K* scale, compared with the BPD group, suggesting that they have more resources available to cope with external pressures. This lack of adaptive resources in the BPD patients supports past research (Berg, 1990; Farris, 1988; Gacono et al., 1992; Plakun, 1987; Ronningstam & Gunderson, 1991; Stone, 1989; Westen, 1990) and has been discussed by a number of authors (Kernberg, 1970, 1975; Masterson, 1981; Meissner, 1978; Westen, 1990). The

current findings support these theoretical hypotheses and extend prior work on the MMPI to the MMPI-2.

Turning to the newly developed content scales on the MMPI-2, it was expected that given their relationship to important theoretical constructs regarding the cluster B personality disorders, these scales would prove helpful in the discrimination of these disorders. The NPD, CAPD and CCPD groups scored significantly higher on the *FAM* scale compared with the non-clinical control group. Conceptually it makes a great deal of sense that individuals who develop personality disorders would endorse more items indicating familial discord. This finding, in part, supports the construct validity of this scale and future research may seek to ascertain more specifically the ability of the *FAM* in the assessment of possible etiological aspects of personality disorders. In evaluating the utility of these scales in relation to other cluster B personality disorders, three scales produced significant differences between the NPD patients and other groups of patients within this cluster. While the NPD patients had a low mean score on the *Es* scale, it was still significantly greater than the mean *Es* score of the BPD group. This finding would suggest that while the adaptive resources of the NPD patients are somewhat limited, they appear to be greater than those coping resources that are available to borderline patients. As in the earlier discussion of *K*, this finding is predicted by a number of authors who postulate a deficit in ego functioning in BPD patients (Kernberg, 1970, 1975; Masterson, 1981; Meissner, 1978).

Conversely, the BPD patients produced the highest group mean on the *ANG* scale, significantly greater than the mean score of the NPD patients. This finding is theoretically salient in that Kernberg (1984) used the extent to which aggression has been integrated into the character structure as the most relevant diagnostic criterion in severe character pathology. Given this high level of anger and the impoverished level of ego strength and defenses, one might view these findings as not altogether unrelated. In fact,

the discussion of the adverse effect that intense levels of aggression may have on the psychological functioning of BPD patients, including ego functions and the employment of primitive defenses, is not a new concept in the psychodynamic literature. Both Kernberg (1975) and Westen (1990) have suggested that a relationship exists among defensive processes, affective valence and self-representations. Finally, the *ASP* scale displayed good construct validity; the ANPD group had the highest mean score of any group in the study and in comparison with the other cluster B personality disorders, had significantly greater scores compared with the NPD patients. As with the *FAM* scale, this study has been the first attempt to ascertain the utility of the *ASP* in studying a clinical sample. The scale appears to have merit in the use of identifying ANPD patients. These initial findings suggest that future researchers might continue to explore the utility of this measure in the differentiation of ANPD.

Both versions of the NPD scale did significantly differentiate the NPD patients from the CCPD and BPD groups. However, these scales failed to discriminate the NPD patients from the CAPD, ANPD, HPD and non-clinical groups. In fact, the non-clinical sample scored *higher* than the NPD patients on these scales! Also, the CAPD patients scored significantly higher than the CCPD group on the full version of this scale. Similarly, the ANPD group also scored significantly higher on the full version of the scale compared with the BPD patients. These findings call into question the diagnostic utility of these scales in the diagnosis of NPD. If a scale developed to measure pathological narcissism cannot differentiate NPD from normals or other groups of personality disorders than it can only be expected to have limited power in the correct classification of the disorder it was designed to measure. A brief perusal of Table A-10 will indeed verify the fair to poor diagnostic efficiency of these two NPD scales. While these scales are adequately effective in providing diagnostic information in the separation of patients with NPD from those with a diagnosis from cluster A or C, the use of a measure for this sole purpose is far from

efficient. Overall, in congruence with past research on a specific personality disorder scale (Miller et al., 1992), the NPD scales do an adequate job in accurately determining who *does not have* a personality disorder (NPP), in this case NPD, but are very poor in detecting who *does have* a personality disorder (PPP). The results of past research indicate that the use of these scales as a criteria for the diagnosis of NPD is ill-advised in most clinical settings. These current data indicate that the use of these two NPD scales would be a very poor procedure for determining who has NPD, at least in this type clinical setting.

However there are two points that must be discussed which temper, somewhat, the impeachment of these two NPD scales in the classification of pathological narcissism. The first is that the non-clinical sample was composed of college students, who as a group tend to score higher on measures of "narcissism" than a sample which is truly "normative" in its' distribution of the population that includes an appropriate number of individuals who have not sought higher education. A number of metapsychological constructs such as self-esteem, internal locus of control, need for achievement, competitiveness, and oppositionality may all be related sub-variants of the "narcissism" construct. However, recent research has reported that when compared with normative populations, college student will have elevated scores on self-report measures of "narcissism" (Wink & Gough, 1990). Therefore, the lack of discrimination these scales showed in the comparison of the NPD patients and the non-clinical group might not have occurred if the control sample had been representative of a true "normal" sample. In the census matched normative group cited by Colligan et al, (1994) where 76% of their sample scored below 19 on the full NPD scale whereas the control group in this study only had 37% score under this cut-off point.

A second aspect of these scales which must be considered when evaluating their utility is their relationship in a dimensional manner, rather than in the categorical agreement with diagnosis that has been discussed previously. Tables A-8 and A-9 show both

versions of these NPD scales to be highly correlated with the total number of DSM-IV NPD criteria assigned to a patient in the sample of personality disorders. This finding would indicate that these NPD scales are related to characterological traits associated with pathological narcissism. However, both scales are also related to DSM-IV ANPD criteria and this helps to explain the high scores produced by the ANPD patients reported in Table A-7. Therefore, clinicians must also be cognizant that high scores on the NPD scales may be related to concomitant traits of sociopathy as well as narcissism. The information presented in Table A-9 shows that both scales are related in a similar magnitude to 5 of the 9 DSM-IV NPD criteria. An examination of these 5 criteria show that these self-report scales are significantly related to those criteria associated with behavioral expressions of narcissism within an interpersonal context (i.e. lacks empathy; arrogant and haughty behavior; interpersonally exploitative; requires excessive admiration from others; and grandiose sense of self importance). However, these scales were not significantly related to the more intrapsychic or cognitive criteria of narcissistic pathology (i.e. fantasies of unlimited success; belief that s/he is special or unique; sense of entitlement; and envious beliefs).

RORSCHACH

The NPD patients produced Rorschach responses which were more likely to contain personalized references, scores related to psychological denial and percepts concerning oral dependency in various group comparisons. The narcissistic patients exhibited significantly higher scores on a number of Rorschach variables in comparison to both a non-clinical sample, as well as to both related and unrelated clusters of personality disorders. The NPD patients had a significantly higher number of personalized responses, compared with the non-clinical group, denoting a more egocentric orientation toward others and greater self-aggrandizement. Also, the NPD patients evinced a significantly greater number of denial responses, compared with the non-clinical sample as well. This increased

use of defensive denial might be expected in NPD patients, who must stave off any perceived awareness of failure, inadequacy or helplessness which may filter through their grandiose facade. In addition, Kernberg (1975) has hypothesized that the narcissist is likely to defend against depression with hypomanic denial.

The ROD scores for the NPD group were found to be significantly greater than the ROD scores of the BPD patients. However, upon closer examination of the oral dependency scores across the rest of the groups in the sample, it would appear that a more accurate description of this finding would be that the BPD patients scored significantly lower than the NPD group. This finding supports past theoretical and empirical work which highlights the problems that BPD patients have around the acceptance of nurturance issues (Kernberg, 1970, 1975; Masterson, 1981; Meissner, 1978; Westen, 1990).

The number of idealization responses was on the Rorschach once again found to be useful in differentiating NPD patients from other diagnostic groups (Gacono et al., 1992; Hilsenroth et al., 1993; H. Lerner, 1988). This finding supports the theoretical claims of Kohut (1971) who believed that the tendency to idealize others is central in the dynamics of NPD patients, who will continue to seek idealized parental surrogates into adulthood; who desire fusion, in order to enhance their fragile sense of self. This high frequency of idealization responses is consistent with the behavior of NPD patients, who will use idealization of those individuals who provide them with the admiration and ego-inflation they so desperately crave.

The current study also supports past research on NPD patients, where reflection responses have been found to occur in large amounts (Gacono et al., 1992; Hilsenroth et al., 1993). These consistent findings suggest a link between pathological narcissism and the reflection response. In regard to this link, the correlation between reflections and DSM-IV criteria for NPD are robust ($r = .36$, $p < .001$). However, this does not make other formulations or interpretations concerning the meaning of reflection responses, such as

self-esteem, self-focus (Exner, 1986; Greenwald, 1990; Sugarman, 1980) or a capacity for self-absorption (Viglione, 1990), incompatible with the present findings.

The most robust variables which were found to discriminate the NPD patients from all other groups were the number of reflection and idealization responses on the Rorschach. Both of these scores were found to be significantly greater in the NPD group when compared to the non-clinical, CAPD, and CCPD groups. Additionally, in contrast to the other cluster B personality disorders, the NPD patients had a significantly greater number of reflection responses than both the ANPD and BPD groups as well as a significantly greater incidence of idealization responses, compared with the ANPD patients. Given the importance of these two variables in regard to both their theoretical salience and their diagnostic utility, the implications of these two scores in relation to the diagnosis of NPD will be explored at some length.

The results of Table A-13 indicate that the number of reflection responses developed in outpatient protocols is significantly related to the total number of DSM-IV NPD criteria met by those patients. Also, reflection responses were not significantly related to other DSM-IV cluster B criteria. In an examination of the relationship between individual DSM-IV NPD criteria and the production of a reflection response was found to be associated with fantasies of unlimited success, sense of entitlement, a grandiose sense of self importance and arrogant/haughty behaviors. It is interesting to note that this variable derived from a projective test, was significantly related to DSM-IV NPD criteria associated, for the most part, with the intrapsychic or cognitive features pertaining to pathological narcissism rather than to behavioral expressions. This can be seen in Table 9, where the self-report measures of narcissism are compared to the same nine criteria. Although the idealization response score was not significantly related to the total number of DSM-IV NPD criteria, it was related to NPD criterion two, fantasies of unlimited success, in a significant manner. The relationship of these two scores to the more intrapsychic or

internal characteristics of NPD suggest that the Rorschach may prove to be very useful when employed in tandem with other methods of assessment which are designed to assess more overt/behaviorally expressed features of NPD. An assessment using measures which assess both the intrapsychic as well as the interpersonal/behavioral aspects of NPD would be very useful and would provide clinicians with a richer understanding of these patients.

An evaluation of the diagnostic efficiency statistics of the Rorschach variables, reflection and idealization, performed very well in the classification of NPD from the other groups in the study. A review of Tables A-10 and A-15 show that in an overall comparison the Rorschach performed better than the NPD scales from the MMPI-2 in the diagnostic classification of the NPD patients. In comparison of the NPD patients with the total sample an important finding was that almost no individual who was correctly identified as *not having* NPD had one or more reflections and/or a total idealization score of greater than or equal to 5. In addition, the overall correct classification rate using these two criteria ranged from a low of .63 to a high of .83, with a mean hit rate of .75 across the four different group comparisons. This high probability of correct classification of NPD patients and non-NPD patients, using the Rorschach criteria was superior to the average level of correct classification when utilizing the MMPI-2 NPD scales. It appears that an examination of the Rorschach variables, reflections and idealization, can be a useful tool in the diagnosis of NPD.

It is important to point out that while the reporting of diagnostic performance statistics may provide psychodiagnosticians with more *clinically relevant* information than a categorical analysis of group differences, this single sign approach is not truly *clinically representative* of actual diagnostic decision-making process. A responsible assessment process entails that a multimethod approach be used to evaluate various dimensions of functioning and that these test scores are used in conjunction with information gathered from a patient's history, behavioral observations and the interaction with the clinician

during the testing procedures (Benjamin, 1993; Handler, 1985; Leary, 1954; Phillips, 1992; Rappaport, Gill and Schafer, 1945; Schafer, 1957; Sugarman, 1981, 1991).

Therefore, it is not suggested that clinicians use the presence of one or more reflection responses on the Rorschach as an indication of NPD. To do so would be a very concrete interpretation of the data presented here and would be clinically unsophisticated. What these data do suggest is that the presence of one or more reflection responses will be typically developed in outpatient populations by individuals who meet some of the DSM-IV criteria for NPD, but possibly not five of the nine criteria necessary for a positive diagnosis of NPD. In addition, the presence of one or more reflection responses is more related to the subjects intrapsychic or cognitive characteristics rather than to their behavioral expressions of NPD. Subsequently, the presence or absence of one or more reflection responses can aid clinicians in diagnostic decision-making within a comprehensive assessment battery.

Recently, Gacono and Meloy (1994) have made two very salient points in regard to the interpretation of the reflection response which deserve to be highlighted given the current discussion. The first, is that a combined analysis of structure, sequence and content of a given reflection response can help to provide a clearer interpretation of meaning for a given individual (an ideographic approach), rather than perhaps having just one global hypothesis for the meaning of reflections (a nomothetic approach). Second, these authors keenly observe that one reflection, while unexpected in any protocol, should not lead to the immediate diagnosis of pathological narcissism. Instead, interpretive formulations of the reflection response, or any other pathognomic indicator, should be evaluated in the context of the entire protocol and should not be interpreted in isolation from other structural (i.e. location, determinant, form quality) and content data. The implications of both these suggestions will undoubtedly lead to greater information concerning self-esteem regulation, drive derivatives, object representations and the use of defensive structures for each

specific protocol examined rather than being limited by a single interpretative statement. One must remember that narcissism occurs in both benign and malignant forms (Weigert, 1970). Clinicians must assess the extent to which narcissistic traits are entrenched into an interpersonal style. This is figural in the determination whether or not narcissistic expressions are in fact pathological or prosocial and adaptive (Leary, 1957). However, this interpretive approach outlined here is antithetical to a cookbook approach and will necessitate more work, and training, on the part of the clinician.

Reflection responses on the Rorschach have often been interpreted as representing a developmental need for mirroring (Coonerty, 1986; Ipp, 1986; Kwawer, 1980; Lerner, 1988; Smith, 1980; Urist, 1977). The importance of mirroring during the late symbiotic phase, a time in which the infant begins to differentiate self and object representations, has been discussed earlier (Kohut, 1971; Mahler et al., 1975). Thus, it has been hypothesized that the development of boundaries continues unimpeded into the early phase of separation-individuation. Gradually the limitations in benevolence and omnipotence of the self- and parental objects are identified and introjected by the child (Kohut, 1971; 1977).

The predominance of reflection responses in the protocols of the NPD patients suggest a disruption in developmental mirroring, identity conflicts and presents a template for understanding disturbances in object relations. These boundary disturbances are displayed in the subjects perceptions of externalized object relations when reference is made to the reflection of the object rather than experiencing the object itself. This communicates a sense that the definition or stability of the object exists only so far as it is an extension of another. This interpersonal style is prominent in NPD patients whose interactions with the "other" exist solely to mirror themselves. It is my conclusion from the empirical findings and theoretical review of this study that the reflection response is associated with the presence of a range of possible characteristics (i.e. grandiosity, entitlement, self-absorption) all of which are related to the broader latent construct of

narcissism. Furthermore, at pathological extremes this configuration of features will indicate a defensive structure that shields an impairment in the regulation of self-esteem and deficits in object relations.

THEORETICAL INTEGRATION OF FINDINGS

I would like to turn now to the theoretical characteristics of pathological narcissism as described by Kernberg (1975) and by Kohut (1971, 1977) that were outlined in the hypothesis and were to be investigated in this study. Empirical estimates are but one way to evaluate the relative merits of these two models. Ideally, if these two competing perspectives were unrelated then a relatively pure test of the theories would be possible. In the present analysis this is not possible. However, an evaluation of those factors seen as *primary* in the etiology of pathological narcissism for each theorist will be investigated in relation to the findings of the present study. In fairness to Kernberg's model of pathological narcissism it must be stated that the formulations for his theory are based upon interactions with inpatients, whereas Kohut's model is based on his work with outpatients. Given that this sample consisted entirely of outpatients, it would stand to reason that Kohut's theoretical model would be supported to a greater extent than the formulations of Kernberg.

Overall, the results of this inquiry were somewhat inconsistent with Kernberg's conflict model of narcissistic pathology. First, an abundance of primary or secondary, libidinal and/or aggression derivatives were not found to be a primary characteristic in the NPD group. In an evaluation of levels of anger, utilizing the MMPI-2, NPD patients were in fact found to have significantly lower levels of anger than the BPD patients. On the Rorschach there were no significant differences found on either variables assessing primary or secondary process for the NPD group across any of the group contrasts. These findings suggest that intense libidinal and aggressive strivings may not be central to the characteristics of NPD patients. However, these libidinal and aggressive variables utilized

in this study did show significant elevation in the BPD group. Concerning issues of dependency the NPD patients had significantly higher ROD scores than the BPD and ANPD groups. However, in an evaluation of group means it might be more appropriate to say that ANPD and BPD patients had impoverished levels of oral dependency. It appears that these two groups had conflictual dependency issues which was hypothesized by Kernberg (1970) whereas the NPD patients exhibited dependency themes which approximated normal levels. Finally, the defensive structures of splitting, devaluation, and projective identification were also not found to significantly contribute to the differentiation of the NPD group and as with the other two fundamental components of Kernberg's conflict model these variables were produced extensively by the BPD patients.

In assessing the evidence provided by this inquiry, the data appear to be more consistent with the deficit model. Kohut views inadequate recognition and mirroring of the child by the parents as well as traumatic disappointments in idealization to be central in the etiology of narcissistic pathology, resulting in an impairment of self-esteem regulation and self-representations into adulthood. The most robust variables which were found to discriminate the NPD patients from all other groups were the number of reflection and idealization responses. Both of these scores were found to be significantly greater in the NPD group, compared with both non-clinical and other personality disorder groups. The need of NPD patients to seek well-being through mirroring into adulthood was strongly supported by the data. The defensive organization of NPD patients proved to be dominated by idealization. This significant elevation in the total number of idealization responses supports Kohut's conceptualization of the NPD patient as one who desperately seeks idealized parental surrogates into adulthood. However not all aspects of the Kohut's formulations proved to be significant in this investigation of NPD. In regard to one of the unsupported hypotheses, six, the NPD patient's scores on object representations were not found to be significantly different from those of the non-clinical or other patient groups.

Despite this lack of significance within the NPD group, the BPD patients did have a highly elevated mean score for their least adaptive MOAS score. Similar to Kernberg, Kohut's conceptualization of the defensive structure of splitting was not found to significantly contribute to the differentiation of the NPD group, but was produced largely by the BPD patients.

The combination of the reflection and idealization variables support the hypotheses of both Kernberg and Kohut that NPD patients erect a grandiose facade and an entitled sense of self-importance against feelings of inferiority and helplessness. Taken together these variables may represent an omnipotent-grandiose structure, postulated by both Kohut (1971, 1977) and Kernberg (1975), which is thought to shield the NPD patient from dysphoric affect and cognitions of self-worth. However, this compensatory facade may be adaptive in some respect for the narcissistic patient in defending against the recognition of bad (self and other) object representations which allow them not to be overwhelmed by malevolent and aggressive imagery, as well as the over employment of defensive devaluation which does effect BPD patients. Finally, the combination of these two variables also imply that in conjunction with others who are being idealized, a substantial feature to the intrapsychic world of the NPD patient is an idealization of the self.

These findings should be viewed as part of the journey and not an endpoint in the scientific inquiry into psychoanalytic theory. Perhaps more important than this particular set of findings is the effort to integrate psychoanalytic theory and assessment data from multiple sources beyond a simple evaluation of a set of test scores. This synthesis may offer a clinician a way in which to conceptualize diagnosis and the etiology of disorders in a manner which provides relevant clues to therapeutic material. The interplay between theory and testing can be used in a synergistic process whereby each has much to gain from the other. Multiple sources of assessment data provide an avenue to investigate diagnostic, etiological and therapeutic constructs of psychoanalytic theory. Conversely, there can also

be a significant contribution from the use of psychoanalytic constructs to aid clinicians to better understand their test results.

REFERENCES

REFERENCES

- Abrams, D. (1993). Pathological narcissism in an eight-year-old boy: An example of Bellak's TAT and CAT diagnostic system. *Psychoanalytic Psychology*, 10, 573-591.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.) Washington, D.C.: Author.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.) Washington, D.C.: Author.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.) Washington, D.C.: Author.
- Bellak, L. (1986). *The TAT, CAT, and SAT in clinical use* (4th ed., rev.). Orlando, FL: Grune & Stratton.
- Berg, J. (1990). Differentiating ego functions of borderline and narcissistic personalities. *Journal of Personality Assessment*, 55, 537-548.
- Berg, J., Packer, A., & Nunno, V. (1993). A Rorschach analysis: Parallel disturbance in thought and in self/object representation. *Journal of Personality Assessment*, 61, 311-323.
- Berg, M. (1983). Borderline psychopathology as displayed of psychological tests. *Journal of Personality Assessment*, 47, 120-133.
- Blatt, S., & Berman, W. (1984). A methodology for the use of the Rorschach in clinical research. *Journal of Personality Assessment*, 48, 226-239.
- Blatt, S., & Ford, R. (1994). *Therapeutic change: An object relations perspective*. New York: Plenum Press.
- Blatt, S., & Lerner, H. (1983). The psychological assessment of object representation. *Journal of Personality Assessment*, 47, 7-28.

- Bornstein, R., Rossner, S., & Hill, E. (1994). Retest reliability of scores on objective and projective measures of dependency: Relationship to life events and interest interval. *Journal of Personality Assessment*, 62, 398-415.
- Blashfield, R., Blum, N., & Pfohl, B. (1992). The effects of changing axis II diagnostic criteria. *Comprehensive Psychiatry*, 33, 245-252.
- Brelet, F. (1981). On narcissism in the TAT. *Psychologie Francaise*, 26, 24-37.
- Brelet, F. (1983). The TAT and narcissism: Dynamic and economic perspectives. *Psychologie Francaise*, 28, 119-123.
- Brelet, F. (1986). *The TAT: Fantasy and the projective situation. Narcissism, borderline functioning, depression*. Paris: Dunod.
- Brelet, F. (1987). One seeks a director. *Psychologie Francaise*, 32, 137-140.
- Brelet, F. (1994). Expression of narcissistic fantasy in the TAT. *Rorschachiana*, 19, 97-111.
- Campbell, D., & Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
- Chatham, P., Tibbals, C., & Harrington, M. (1993). The MMPI and the MCMI in the evaluation of narcissism in a clinical sample. *Journal of Personality Assessment*, 60, 239-251.
- Chessick, R. (1987). *Narcissism and the sense of self*. New York, NY: Aronson
- Chick, D., Sheaffer, C., Goggin, W., & Sison, G. (1993). The relationship between MCMI personality scales and clinician generated DSM-III-R personality disorder diagnoses. *Journal of Personality Assessment*, 61, 264-276.
- Colligan, R., Morey, L., & Offord, K. (1994). The MMPI/MMPI-2 personality disorder scales: Contemporary norms for adults and adolescents. *Journal of Clinical Psychology*, 50, 168-200.

- Cooper, S., & Arnow, D. (1986). An object relations view of the borderline defenses: A review. In M. Kissen (Ed.), *Assessing object relations phenomena* (pp. 143-171). New York: International Universities Press.
- Davis, R., Blashfield, R., McElroy, R. (1993). Weighting criteria in the diagnosis of a personality disorder: A demonstration. *Journal of Abnormal Psychology*, 102, 319-322.
- Dowson, J. (1992). DSM-III-R narcissistic personality disorder evaluated by patient's and informants' self-report questionnaires: Relationship with other personality disorders and a sense of entitlement as an indicator of narcissism. *Comprehensive Psychiatry*, 33, 397-406.
- Dubro, A., & Wetzler, S. (1989). An external validity study of the MMPI personality disorder scales. *Journal of Clinical Psychology*, 45, 570-575.
- Dubro, A., Wetzler, S., & Kahn, M. (1988). A comparison of three self-report questionnaires for the diagnosis of DSM-III personality disorders. *Journal of Personality Disorders*, 2, 256-266.
- Eagle, M. (1984). *Recent developments in psychoanalysis: A critical evaluation*. New York: McGraw-Hill.
- Edelson, M. (1984). *Hypothesis and evidence in psychoanalysis*. Chicago: University of Chicago Press.
- Edell, W. (1984). The borderline syndrome index: Clinical validity and utility. *Journal of Nervous and Mental Disease*, 172, 254-263.
- Exner, J. (1969). Rorschach responses as an index of narcissism. *Journal of Personality Assessment*, 33, 324-330.
- Exner, J. (1973). The self-focus sentence completion: A study of egocentricity. *Journal of Personality Assessment*, 37, 437-455.

- Exner, J. (1986a). *The Rorschach: A comprehensive system: Vol. 1. Basic Foundations* (2nd ed.) New York: Wiley.
- Exner, J. (1986b). Some Rorschach data comparing schizophrenics with borderline and schizotypal personality disorders. *Journal of Personality Assessment*, 50, 455-471.
- Exner, J. (1993). *The Rorschach: A comprehensive system: Vol. 1. Basic Foundations* (3rd ed.) New York: Wiley.
- Farris, M. (1988). Differential diagnosis of borderline and narcissistic personality disorders. In H. Lerner & P. Lerner (Eds.), *Primitive mental states and the Rorschach* (pp. 299-338). New York: International Universities Press.
- Fowler, C., Hilsenroth, M., & Handler, L. (in press). Early memories: An exploration of theoretically derived queries and their clinical utility. *Bulletin of the Menninger Clinic*.
- Gacono, C. (1990). An empirical study of object relations and defensive operations in antisocial personality disorder. *Journal of Personality Assessment*, 54, 589-600.
- Gacono, C., Meloy, J., & Heaven, T. (1990). A Rorschach investigation of attachment and anxiety in antisocial personality disorder. *Journal of Personality Assessment*, 55, 270-279.
- Gacono, C., Meloy, J., & Berg, J. (1992). Object relations, defensive operations, and affective states in narcissistic, borderline and antisocial personality disorder. *Journal of Personality Assessment*, 59, 32-49.
- Glassman, M. (1988). Intrapsychic conflict versus developmental deficit: A causal modeling approach to examining psychoanalytic theories on narcissism. *Psychoanalytic Psychology*, 5, 23-46.
- Gray, J. (1969). The effect of productivity on primary process and creativity. *Journal of Projective Techniques and Personality Assessment*, 33, 213-218.
- Greenwald, D. (1990). An external construct validity study of Rorschach personality variables. *Journal of Personality Assessment*, 55, 768-780.

- Gunderson, J., & Ronningstam, E. (1987). *The Diagnostic interview for narcissistic patients*. Belmont, MA: McLean Hospital.
- Gunderson, J., Ronningstam, E., & Bodkin, A. (1990). The Diagnostic Interview for Narcissistic patients. *Archives of General Psychiatry*, 47, 676-680.
- Gunderson, J., Ronningstam, E., & Smith, L. (1991). Narcissistic personality disorder: A review of data on DSM-III-R descriptions. *Journal of Personality Disorders*, 5, 167-177.
- Harder, D. (1979). The assessment of ambitious-narcissistic character style with three projective tests: The early memories, TAT, and Rorschach. *Journal of Personality Assessment*, 43, 23-32.
- Hilsenroth, M., Hibbard, S., Nash, M., & Handler, L. (1993). A Rorschach study of narcissism, defense, and aggression in borderline, narcissistic and cluster c personality disorders. *Journal of Personality Assessment*, 60, 346-361.
- Hogg, B., Jackson, H., Rudd, R., & Edwards, J. (1990). Diagnosing personality disorders in recent-onset schizophrenia. *Journal of Nervous and Mental Disease*, 178, 194-199.
- Holt, R. (1977). A method for assessing primary process manifestations and their controls in Rorschach responses. In M. Rickers-Ovsiankina (Ed.), *Rorschach psychology* (2nd ed., pp. 375-420). Huntington, NY: Krieger.
- Hunt, C., & Andrews, G. (1992). Measuring personality disorder: The use of self report questionnaires. *Journal of Personality Disorders*, 6, 125-133.
- Hyder, S., & Lyons, M. (1988). Factor analysis of the DSM-III personality clusters: A replication. *Comprehensive Psychiatry*, 29, 304-308.
- Hyder, S., Rieder, R., Williams, J., Spitzer, R., Lyons, M., & Hendler, J. (1988). The Personality Diagnostic Questionnaire: Development and preliminary results. *Journal of Personality Disorders*, 2, 229-237.

- Hyler, S., Reider, R., Spitzer, R., & Williams, J. (1982). *The personality diagnostic questionnaire (PDQ)*. New York: New York State Psychiatric Institute.
- Hyler, S., Rieder, R., Williams, J., Spitzer, R., Lyons, M., & Hendler, J. (1989). A comparison of clinical and self-report diagnoses of DSM-III personality disorders in 552 patients. *Comprehensive Psychiatry*, 30, 170-178.
- Hyler, S., Skodol, A., Kellman, D., Oldham, J., & Rosnick, L. (1990). Validity of the Personality Disorder Questionnaire-Revised: Comparison with two structured interviews. *American Journal of Psychiatry*, 147, 1043-1048.
- Jacobson, E. (1964). *The self and the object world*. New York: International Universities Press.
- Jackson, D. (1971). The dynamics of structured personality tests. *Psychological Review*, 78, 229-248.
- Jackson, D., & Messick, S. (1962). Response styles and the assessment of psychopathology. In S. Messick & J. Ross (Eds.), *Measurement in personality and cognition*. New York: Holt, Rinehart, and Winston.
- Kaas, N., Skodol, A., Charles, E., Spitzer, R., & Williams, J. (1985). Scaled ratings of DSM-III personality disorders. *American Journal of Psychiatry*, 142, 627-630.
- Kalter, N., & Marsden, G. (1970). Response productivity in Rorschach research: A caution on method. *Journal of Projective Techniques and Personality Assessment*, 34, 10-15.
- Kernberg, O. (1970). Factors in the psychoanalytic treatment of narcissistic personalities. *Journal of the American Psychoanalytic Association*, 18, 51-85.
- Kernberg, O. (1975). *Borderline conditions and pathological narcissism*. New York: Aronson.
- Kernberg, O. (1984). *The treatment of severe character disorders*. New Haven: Yale University Press.

- Kohut, H. (1971). *The analysis of the self*. New York: International Universities Press.
- Kohut, H. (1977). *The restoration of the self*. New York: International Universities Press.
- Leary, T. (1957). *Interpersonal diagnosis of personality*. New York: Ronald.
- Lerner, H. (1988). The narcissistic personality as expressed through psychological tests. In H. Lerner & P. Lerner (Eds.), *Primitive mental states and the Rorschach* (pp. 257-298). New York: International Universities Press.
- Lerner, P. (1991). *Psychoanalytic theory and the Rorschach*. Hillsdale, NJ: The Analytic Press.
- Lerner, P. & Lerner, H. (1980). Rorschach assessment of primitive defenses in borderline personality structure. In J. Klawer, H. Lerner, P. Lerner, & A. Sugarman (Eds.), *Borderline phenomena and the Rorschach test* (pp. 257-274). New York: International Universities Press.
- Lerner, P., & Lewandowski, A. (1975). The measurement of primary process manifestations: A review. In P. Lerner (Ed.), *Handbook of Rorschach scales* (pp. 181-214). New York: International Universities Press.
- Lichtenberg, J., & Kaplan, S. (1983). *Reflections on self psychology*. Hillsdale, NJ: Lawrence Earlbaum.
- Loranger, A., Oldham, J., & Tulis, E. (1982). Familial transmission of DSM-III borderline personality disorder. *Archives of General Psychiatry*, 39, 795-799.
- Loranger, A. (1988). *Personality Disorder Examination (PDE) Manual*. Yonkers, NY: DV Communications.
- Loranger, A., Lenzweger, M., Gartner, A., Susman, V., Herzig, J., Zammit, G., Gartner, J., Abrams, R., & Young, R. (1991). Trait-state artifacts and the diagnosis of personality disorders. *Archives of General Psychiatry*, 48, 720-728.

- Loranger, A., Susman, V., & Russakoff, L. (1987). The personality disorder examination: A preliminary report. *Journal of Personality Disorders, 1*, 1-13.
- Mahler, M., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant*. New York: Basic Books.
- Masling, J. (1986). Orality, pathology, and interpersonal behavior. In J. Masling (Ed.), *Empirical studies of psychoanalytic theories* (pp. 73-106; Vol. 2). Hillsdale, NJ: Earlbaum.
- Masterson, J. (1981). *The narcissistic and borderline disorders*. New York: Brunner/Mazel.
- Mayman, M. (1967). Object representations and object relationships in Rorschach responses. *Journal of Projective Techniques and Personality Assessment, 31*, 17-24.
- Miller, H., Streiner, D., & Parkinson, A. (1992). Maximum likelihood estimates of the ability of the MMPI and MCMI personality disorder scales and the SIDP to identify personality disorders. *Journal of Personality Assessment, 6*, 1-13.
- McCann, J. (1990). Bias and MCMI-II diagnosis. *Journal of Psychopathology and Behavioral Assessment, 12*, 17-26.
- McCann, J. (1989). MMPI personality disorder scales and the MCMI: Concurrent validity. *Journal of Clinical Psychology, 45*, 365-369.
- McCann, J. (1991). Convergent and discriminant validity of the MCMI-II and the MMPI personality disorder scales. *Psychological Assessment, 3*, 9-18.
- McGlashan, T., & Heinssen, R. (1989). Narcissistic, antisocial, and noncomorbid subgroups of borderline disorder. *Psychiatric Clinics of North America, 12*, 653-670.
- Meissner, W. (1978). Narcissistic personalities and borderline conditions: A differential diagnosis. *Annual of Psychoanalysis, 7*, 171-201.
- Millon, T. (1981). *Disorders of Personality: DSM-III, Axis II*. New York: Wiley.

- Millon, T. (1983). *Millon clinical multiaxial inventory manual*. Minneapolis: National Computer Systems.
- Millon, T. (1987). *Millon Clinical Multiaxial Inventory manual* (2nd ed.). Minneapolis: National Computer Systems.
- Morey, L. (1985). A psychometric analysis of five DSM-III categories. *Personality and Individual Differences*, 6, 323-329.
- Morey, L. (1988). The categorical representation of personality disorder: A cluster analysis of DSM-III-R personality features. *Journal of Abnormal Psychology*, 97, 314-321.
- Morey, L., & Le Vine, D. (1988). A multitrait-multimethod examination of the MMPI and MCMI. *Journal of Psychopathology and Behavioral Assessment*, 10, 333-344.
- Morey, L., Waugh, M., & Blashfield, R. (1985). MMPI scales for DSM-III personality disorders: Their derivation and correlates. *Journal of Personality Assessment*, 49, 245-251.
- Murray, J. (1985). Borderline manifestations in the Rorschachs of male transsexuals. *Journal of Personality Assessment*, 49, 454-466.
- Oldham, J., Skodol, A., Kellman, D., Hyler, S., Rosnick, L., & Davies, M. (1992). Diagnosis of DSM-III-R personality disorders by two structured interviews: Patterns of comorbidity. *American Journal of Psychiatry*, 149, 213-220.
- Peebles, R. (1975). Rorschach as self-system in the telophasic theory of personality development. In P. Lerner (Ed.), *Handbook of Rorschach scales* (pp. 71-136). New York: International Universities Press.
- Pilkonis, P., Heape, C., Ruddy, J., & Serrao, P. (1991). Validity in the diagnosis of personality disorders: The use of the LEAD standard. *Psychological Assessment*, 3, 46-54.

- Pfohl, B., Blum, N., Zimmerman, M., & Stangl, D. (1989). *Structured Interview for DSM-III Personality Disorders (revised) (SIDP-R)*. University of Iowa, College of Medicine, Iowa City, Iowa 52240.
- Pfohl, B., Coryell, W., Zimmerman, M., & Stangl, D. (1986). DSM-III personality disorders: Diagnostic overlap and internal consistency of individual DSM-III criteria. *Comprehensive Psychiatry*, 27, 21-34.
- Pfohl, B., Stangl, D., & Zimmerman, M. (1983). *Structured Interview for DSM-III Personality Disorders (SIDP)* (2nd ed.). University of Iowa, College of Medicine, Iowa City, Iowa 52240.
- Piersma, H. (1986). The stability of the Millon Clinical Multiaxial Inventory for psychiatric inpatients. *Journal of Personality Assessment*, 50, 193-197.
- Plakun, E. (1987). Distinguishing narcissistic and borderline personality disorders using the DSM-III criteria. *Comprehensive Psychiatry*, 28, 437-443.
- Plakun, E. (1989). Narcissistic personality disorder: A validity study and comparison to borderline personality disorder. *Psychiatric Clinics of North America*, 12, 603-620.
- Pope, H., Jonas, J., Hudson, J., Cohen, B., & Gunderson, J. (1983). The validity of DSM-III borderline personality disorder. *Archives of General Psychiatry*, 40, 23-30.
- Prifitera, A., & Ryan, J. (1984). Validity of the Narcissistic Personality Inventory in a psychiatric sample. *Journal of Clinical Psychology*, 40, 140-142.
- Pulver, S. (1970). Narcissism: the term and the concept. *Journal of the American Psychoanalytic Association*, 18, 319-341.
- Rapaport, D., Gill, M., & Schafer, R. (1968). *Diagnostic psychological testing* (rev. ed; R. Holt Ed.). New York: International Universities Press.
- Raskin, R., & Hall, (1979). A narcissistic personality inventory. *Psychological Reports*, 45, 590.

- Raskin, R., & Novacek, J. (1989). An MMPI description of narcissistic personality. *Journal of Personality Assessment*, 53, 66-80.
- Reich, J., & Truoghton, E. (1988). Comparison of frequency of DSM-III personality disorders in panic outpatients and normal populations. *Psychiatric Research*, 26, 89-100.
- Renneberg, B., Chambless, D., Dowdall, D., Fauerbach, J., & Gracely, E. (1992). The Structured Clinical Interview for DSM-III-R, Axis II and the Millon Clinical Multiaxial Inventory: A concurrent validity study of personality disorders among anxious outpatients. *Journal of Personality Disorders*, 6, 117-124.
- Ronningstam, E. (1988). Comparing three systems for diagnosing narcissistic personality disorder. *Psychiatry*, 51, 300-311.
- Ronningstam, E. & Gunderson, J. (1988). Narcissistic traits in psychiatric patients. *Comprehensive Psychiatry*, 29, 545-549.
- Ronningstam, E. & Gunderson, J. (1990). Identifying criteria for narcissistic personality disorder. *American Journal of Psychiatry*, 147, 918-922.
- Ronningstam, E., & Gunderson, J. (1991). Differentiating borderline personality disorder from narcissistic personality disorder. *Journal of Personality Disorders*, 5, 225-232.
- Russ, S. (1988). Primary process thinking on the Rorschach, divergent thinking, and coping in children. *Journal of Personality Assessment*, 52, 539-548.
- Ryan, R., Avery, R., & Grolnick, W. (1985). A Rorschach assessment of children's mutuality of autonomy. *Journal of Personality Assessment*, 49, 6-12.
- Siever, L., & Klar, H. (1986). A review of DSM-III criteria for the personality disorders. In A. Frances and R. Hales (Eds.), *American Psychiatric Association Annual Review*, Vol 5 (pp. 299-301). Washington, D.C.: American Psychiatric Association.
- Schuler, C., Snibbe, J., & Buckwalter, J. (1994). Validity of the MMPI personality disorder Scales. *Journal of Clinical Psychology*, 50, 220-227.

- Shentoub, V., Azoulay, C., Bailly-Salin, M., Benfredj, K., Boekholt, M., Brelet, F., Chabert, C., Chretien, M., Emmanuelli, M., Martin, M., Monin, E., Peruchon, M., & Serviere, A. *Manual for the use of the TAT: Psychoanalytic approach*. Paris: Dunod.
- Shulman, D., & Ferguson, G. (1988). Two Methods of assessing narcissism: Comparison of the Narcissism-Projective (N-P) and the narcissistic personality inventory (NPI). *Journal of Clinical Psychology* , 44 , 857-866.
- Shulman, D., & McCarthy, E. (1986). *The projective assessment of narcissism: Manual for the N-P* . Unpublished Manuscript.
- Shulman, D., McCarthy, E., & Ferguson, G. (1988). The projective assessment of narcissism: Development, reliability, and of the N-P. *Psychoanalytic Psychology* , 5 , 285-297.
- Seifert, W. (1984). Character and its psychodiagnostic history with the TAT. Munich/Basel: Ernst Reinhardt Verlag.
- Skodol, A., Rosnick, L., Kellman, D., Oldham, J., & Hyler, S. (1988). Validating structured DSM-III-R personality disorder assessments with longitudinal data. *American Journal of Psychiatry*, 145, 1297-1299.
- Soldz, S., Budman, S., Demby, A., & Merry, J. (1993a). Diagnostic agreement between the Personality disorder examination and the MCMI-II. *Journal of Personality Assessment*, 60, 486-499.
- Soldz, S., Budman, S., Demby, A., & Merry, J. (1993b). Representation of personality disorders in circumplex and five-factor space: Explorations with a clinical sample. *Psychological Assessment*, 5, 41-52.
- Spitzer, R. (1983). Psychiatric diagnosis: Are clinicians still necessary? *Comprehensive Psychiatry* , 24 , 399-411.

- Spitzer, R., Williams, J., & Gibbon, M. (1987). *Instruction manual for the Structured Clinical Interview for DSM-III-R (SCID)*. New York: Biometrics Research Department, New York State Psychiatric Institute.
- Stangl, D., Pfohl, B., Zimmerman, M., Bowers, W., & Corenthal, C. (1985). A structured Interview for the DSM-III personality disorders: A preliminary report. *Archives of General Psychiatry*, 42, 591-596.
- Stone, M. (1989). Long-term follow-up of narcissistic/borderline patients. *Psychiatric Clinics of North America*, 12, 621-641.
- Stolorow, R. (1975). Toward a functional definition of narcissism. *International Journal of Psycho-Analysis*, 56, 179-185.
- Stolorow, R., & Lachman, F. (1980). *Psychoanalysis of developmental arrests-Theory and treatment*. New York: International Universities Press.
- Streiner, D., & Miller, H. (1988). Validity of MMPI scales for DSM-III personality disorders: What are they measuring? *Journal of Personality Disorders*, 2, 238-242.
- Teicholz, J. (1978). A selective review of the psychoanalytic literature on theoretical conceptualizations of narcissism. *Journal of American Psychoanalytic Association*, 26, 831-861.
- Torgersen, S., & Alnaes, R. (1990). The relationship between MCMI personality scales and the DSM-III, axis II. *Journal of Personality Assessment*, 55, 698-707.
- Trull, T. (1992). DSM-III-R Personality Disorders and the five-factor model of personality: An empirical comparison. *Journal of Abnormal Psychology*, 101, 553-560.
- Trull, T. (1993). Temporal stability and validity of two personality disorder inventories. *Psychological Assessment*, 5, 11-18.
- Trull, T., & Goodwin, A. (1993). Relationship between mood changes and the report of personality disorder symptoms. *Journal of Personality Assessment*, 61, 99-111.

- Turley, B., Bates, G., Edwards, J., & Jackson, H. (1992). MCMI-II personality disorders in recent onset bipolar disorders. *Journal of Clinical Psychology*, 48, 320-329.
- Urist, J. (1977). The Rorschach test and the assessment of object relations. *Journal of Personality Assessment*, 41, 3-9.
- Urist, J. & Schill, M. (1982). Validity of the Rorschach mutuality of autonomy scale: A replication using excerpted responses. *Journal of Personality Assessment*, 46, 450-454.
- Vaillant, G., & Drake, R. (1985). Maturity of ego defenses in relation to DSM-III axis II personality disorder. *Archives of General Psychiatry*, 42, 597-601.
- Vaillant, G., & Perry, J. (1985). Personality disorders. In H. Kaplan & B. Sadock (Eds.), *Comprehensive textbook of psychiatry, Vol 1 (4th ed)*. Baltimore: Williams & Wilkins.
- Wallerstein, R. (1983). Self psychology and "classical" psychoanalytic psychology-The nature of their relationship: A review and overview. In J. Lichtenberg & S. Kaplan (Eds.), *Reflection on self psychology* (pp. 313-337). Hillsdale, NJ: Lawrence Earlbaum.
- Wechsler, D. (1981). *Wechsler Adult Intelligence Scale-Revised*. New York: The Psychological Corporation.
- Weigert, E. (1970). *The courage to love*. New Haven: Yale University Press.
- Weiner, I. (1990). Editor's note: Interscorer agreement in Rorschach research. *Journal of Personality Assessment*, 56, 1.
- Wetzler, S., & Dubro, A. (1990). Diagnosis of personality disorders by the Millon Clinical Multiaxial Inventory. *Journal of Nervous and Mental Disease*, 178, 261-263.
- Westen, D. (1990). Towards a revised theory of borderline object relations: Contributions of empirical research. *International Journal of Psycho-Analysis*, 71, 661-693.

- Widiger, T., & Frances, A. (1987). Interviews and inventories for the measurement of personality disorders. *Clinical Psychology Review*, 7, 49-75.
- Widiger, T., Trull, T., Hurt, S., Clarkin, J., & Frances, A. (1987). A multidimensional scaling of the DSM-III personality disorders. *Archives of General Psychiatry*, 44, 557-563.
- Wink, P., & Gough, H. (1990). New narcissism scales for the California Psychological Inventory and the MMPI. *Journal of Personality Assessment*, 54, 446-462.
- Yeung, A., Lyons, M., Waternaux, C., Faraone, S., & Tsuang, M. (1993). The relationship between personality disorders and the five-factor model of personality. *Comprehensive Psychiatry*, 34, 227-234.
- Yeung, A., Lyons, M., Waternaux, C., Faraone, S., & Tsuang, M. (1993). Empirical determination of thresholds for case identification: Validation of the PDQ-R. *Comprehensive Psychiatry*, 34, 384-391.
- Zimmerman, M., & Coryell, W. (1990). Diagnosing personality disorders in the community: A comparison of self-report and interview measures. *Archives of General Psychiatry*, 47, 527-531.

APPENDICES

APPENDIX A

TABLES

TABLE A-1
Kappa Estimates of Interrater Agreement for each
DSM-IV Cluster B Personality Disorder

<u>Cluster B personality disorder</u>	<u>DSM-IV</u>
ANPD	.86
BPD	.80
HPD	.90
NPD	.90

Table A-2
Clinical Group Comparisons of DSM-IV Cluster B Personality Disorder Criteria (N = 91)

DSM-IV Criteria	ANPD (n=20)	BPD (n=25)	HPD (n=5)	NPD (n=15)	Cluster A (n=10)	Cluster C (n=16)	f^2	p	Group Contrasts ⁺
Antisocial	3.9	.8	.4	1.0	1.2	.1	37.5	<.001	ANPD > All other at $p < .001$
Borderline	2.8	5.5	3.0	2.4	2.3	.9	29.3	<.001	BPD > All other at $p < .001$
Histrionic	.6	1.2	5.4	1.1	.2	.4	24.2	<.001	HPD > All other at $p < .001$
Narcissistic	2.9	1.6	1.8	6.0	1.7	.8	36.4	<.001	NPD > All other at $p < .001$
									ANPD > BPD, Cluster C

+ Bonferroni corrections were conducted on all between group contrasts

Table A-3
Clinical and Non-Clinical Group Comparisons of the MMPI-2 Validity and Clinical Scales (N = 100)

<u>MMPI-2 Scale</u>	<u>NPD</u> (n=13)	<u>Cluster A</u> (n=7)	<u>Cluster C</u> (n=13)	<u>Non-Clinical</u> (n=67)	<u>f</u>	<u>p</u>	<u>Group Contrasts+</u>
<i>L</i>	53.7	53.0	50.0	50.0	.7	.5	
<i>F</i>	57.3	73.3	64.2	48.6	32.6	<.001	NPD,CAPD,CCPD>NC**; CAPD>NPD**
<i>K</i>	51.7	54.3	47.7	52.5	1.8	.2	
<i>Hs</i>	52.8	60.2	54.5	52.3	1.3	.3	
<i>D</i>	62.3	71.3	78.2	48.1	36.8	<.001	NPD,CAPD,CCPD>NC**; CCPD>NPD**
<i>Hy</i>	60.2	65.0	57.8	48.8	11.5	<.001	NPD,CAPD,CCPD>NC**
<i>Pd</i>	67.4	72.3	64.3	50.2	25.4	<.001	NPD,CAPD,CCPD>NC**
<i>Pu</i>	62.7	64.2	62.2	49.0	13.6	<.001	NPD,CAPD,CCPD>NC**
<i>Pt</i>	63.8	70.8	74.1	53.4	20.4	<.001	NPD,CAPD,CCPD>NC**
<i>Sc</i>	63.2	79.0	67.0	51.9	18.0	<.001	NPD,CAPD,CCPD>NC**; CAPD>NPD*
<i>Ma</i>	59.2	54.8	48.3	55.0	3.0	.03	NPD>CCPD*
<i>Si</i>	49.5	59.2	70.2	45.7	26.4	<.001	CAPD,CCPD>NC**; CCPD>NPD**

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-4
Clinical and Non-Clinical Group Comparisons of the MMPI-2 Supplementary and Content Scales (N = 100)

MMPI-2 Scale	NPD (n= 13)	Cluster A (n= 7)	Cluster C (n=13)	Non-Clinical (n=67)	f	p	Group Contrasts ⁺
<i>Es</i>	47.9	42.5	39.4	52.0	10.4	<.001	NC>CAPD*; NC>CCPD**
<i>ANG</i>	49.9	49.8	54.5	48.0	1.3	.3	
<i>ASP</i>	49.0	54.0	47.4	51.7	1.2	.3	
<i>FAM</i>	55.4	59.4	59.3	46.2	9.4	<.001	NPD,CAPD,CCPD>NC*

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-5
Cluster B Comparisons of the MMPI-2 Supplementary and Content Scales (N = 52)

MMPI-2 Scale	ANPD (n=15)	BPD (n=19)	HPD (n=5)	NPD (n=13)	f	p	Group Contrasts+
<i>Es</i>	39.5	33.9	37.8	47.9	5.6	.003	NPD>BPD**
<i>ANG</i>	61.6	64.4	57.6	49.9	3.5	.026	BPD>NPD*
<i>ASP</i>	62.1	56.1	51.4	49.0	3.4	.027	ANPD>NPD*
<i>FAM</i>	62.6	68.3	66.6	55.4	2.0	.13	

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-6
Clinical and Non-Clinical Group Comparisons of the MMPI-2 NPD Scales (N = 100)

<u>MMPI-2 Scale</u>	<u>NPD</u> (n= 13)	<u>Cluster A</u> (n= 7)	<u>Cluster C</u> (n=13)	<u>Non-Clinical</u> (n=67)	<u>f</u>	<u>p</u>	<u>Group Contrasts+</u>
<i>NPD-O</i>	18.9	15.5	9.3	19.4	23.8	<.001	NPD ₁ NC>CCPD**; CAPD>CCPD*
<i>NPD-NO</i>	8.0	5.8	3.5	8.0	15.5	<.001	NPD ₁ NC>CCPD**

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-7
Cluster B Comparison of MMPI-2 NPD Scales (N = 52)

<u>MMPI-2 Scale</u>	<u>ANPD</u> (n=15)	<u>BPD</u> (n=19)	<u>HPD</u> (n=5)	<u>NPD</u> (n=13)	<u>f</u>	<u>p</u>	<u>Group Contrasts+</u>
<i>NPD-O</i>	17.1	13.2	16.0	18.9	5.9	.002	NPD>BPD**, ANPD>BPD*
<i>NPD-NO</i>	7.0	5.3	6.8	8.0	4.3	.009	NPD>BPD**

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-8
Clinical and Non-Clinical Group Comparisons of Rorschach Scores (N = 85)

<u>Rorschach Score</u>	<u>NPD</u> (n=12)	<u>Cluster A</u> (n=10)	<u>Cluster C</u> (n=13)	<u>Non-Clinical</u> (n=50)	<u>f</u>	<u>p</u>	<u>Group Contrasts +</u>
<i>PER</i>	1.1	1.8	.9	.3	8.5	<.001	NPD>NC*; CAPD>NC**
<i>Pairs</i>	4.4	6.8	9.0	4.5	7.3	<.001	CCPD>NPD,NC**
<i>REF</i>	2.3	.3	.3	.3	11.3	<.001	NPD>CAPD,CCPD,NC**
<i>MOR</i>	1.9	2.6	1.5	1.1	2.1	.11	
<i>L1</i>	.2	.3	.4	.1	1.5	.23	
<i>L2</i>	4.3	3.4	3.8	3.5	.9	.42	
<i>A1</i>	.3	1.1	.5	.1	5.9	.001	CAPD>NC*
<i>A2</i>	5.3	7.0	4.2	4.4	1.4	.25	
<i>ROD</i>	4.3	3.8	4.5	3.5	1.7	.17	

Table A-8 (Continued)

<i>SPLIT</i>	0.0	.1	0.0	0.0	-	-	
<i>DEVAL</i>	6.0	8.6	4.2	3.1	4.7	.005	CAPD>NC**
<i>IDEAL</i>	6.7	.9	2.5	1.9	10.9	<.001	NPD>CAPD,CCPD,NC**
<i>DEN</i>	.8	1.2	.3	.1	6.3	<.001	NPD>NC*; CAPD,NC**
<i>PI</i>	0.0	.1	0.0	0.0	-	-	
<i>MOAS-L</i>	1.5	1.8	1.4	1.5	.9	.47	
<i>MOAS-H</i>	4.8	5.2	4.4	4.5	.5	.67	
<i>MOAS-M</i>	2.8	3.7	2.6	2.5	5.3	.002	CAPD>CCPD*; CAPD,NC**

The effects of R were covaried out of analyses involving Pairs, L2, A2, and ROD

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-9
Cluster B Comparisons of Rorschach Scores (N = 56)

<u>Rorschach Score</u>	<u>ANPD</u> (n= 16)	<u>BPD</u> (n= 23)	<u>HPD</u> (n= 5)	<u>NPD</u> (n= 12)	<u>f</u>	<u>p</u>	<u>Group Contrasts+</u>
<i>PER</i>	3.1	2.3	2.4	1.1	1.5	.23	
<i>Pairs</i>	4.0	6.8	4.4	4.4	1.8	.14	
<i>REF</i>	.3	.6	.6	2.3	5.2	.003	NPD>ANPD,BPD**
<i>MOR</i>	1.8	2.5	1.8	1.9	.3	.79	
<i>L1</i>	.4	.9	.4	.2	.8	.49	
<i>L2</i>	2.3	2.9	4.6	4.3	2.7	.05	
<i>A1</i>	.5	.9	.6	.3	2.2	.09	
<i>A2</i>	5.1	5.4	5.4	5.3	.2	.89	
<i>ROD</i>	2.2	2.5	4.2	4.3	4.0	.01	NPD>BPD*

Table A-9 (Continued)

<i>SPLIT</i>	.1	.6	.8	0.0	2.0	.13
<i>DEVAL</i>	5.6	10.4	7.6	6.0	2.3	.09
<i>IDEAL</i>	1.8	4.3	4.2	6.7	4.8	.004
<i>DEN</i>	.4	1.3	2.4	.8	1.6	.19
<i>PI</i>	.1	.1	.2	0.0	.8	.48
<i>MOAS-L</i>	1.9	1.9	1.2	1.5	1.9	.13
<i>MOAS-H</i>	4.9	5.6	4.6	4.8	.7	.57
<i>MOAS-M</i>	3.4	3.4	2.6	2.8	2.6	.06

The effects of R were covaried out of analyses involving Pairs, L2, A2, and ROD

+ Bonferroni corrections were conducted on all between group comparisons

* $p < .008$, ** $p < .002$

Table A-10
Correlations of the MMPI-2 overlapping and non-overlapping NPD Scales with DSM-IV Cluster B Criteria (N= 72)

MMPI-2 Scale	Antisocial	Borderline	Histrionic	Narcissistic
<i>NPD-O</i>	.32**	-.03	.19	.55***
<i>NPD-NO</i>	.30*	-.01	.13	.47***

72 outpatients with a DSM-IV personality disorder

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A-11
Correlations of the MMPI-2 overlapping and non-overlapping NPD Scales with the Individual DSM-IV NPD Criteria (N= 72)

<u>MMPI-2 Scale</u>	<u>NPD-1</u>	<u>NPD-2</u>	<u>NPD-3</u>	<u>NPD-4</u>	<u>NPD-5</u>	<u>NPD-6</u>	<u>NPD-7</u>	<u>NPD-8</u>	<u>NPD-9</u>
<i>NPD-O</i>	.27*	.19	.02	.37**	.23	.45***	.51***	.19	.42***
<i>NPD-NO</i>	.25*	.23	.04	.30*	.15	.34**	.40***	.16	.40***

72 outpatients with a DSM-IV personality disorder

* $p < .05$, ** $p < .01$, *** $p < .001$

Table A-12
Correlations of Selected Rorschach Scores with DSM-IV Cluster B Criteria (N= 79)

<u>Rorschach Score</u>	<u>DSM-IV Criteria</u>			
	<u>Antisocial</u>	<u>Borderline</u>	<u>Histrionic</u>	<u>Narcissistic</u>
<i>REF</i>	-.09	.09	.05	.36*
<i>IDEAL</i>	-.19	.12	.19	.19

79 outpatients with a DSM-IV personality disorder

* $p < .001$

Table A-13
Correlations of Selected Rorschach Scores with the Individual DSM-IV NPD Criteria (N= 79)

<u>Rorschach Score</u>	<u>NPD-1</u>	<u>NPD-2</u>	<u>NPD-3</u>	<u>NPD-4</u>	<u>NPD-5</u>	<u>NPD-6</u>	<u>NPD-7</u>	<u>NPD-8</u>	<u>NPD-9</u>
<i>REF</i>	.28**	.32**	.08	.17	.30**	.04	.18	-.05	.24*
<i>IDEAL</i>	.03	.25*	.09	.16	.07	.02	.05	.12	.11

79 outpatients with a DSM-IV personality disorder

* $p < .05$, ** $p < .01$

TABLE A-14
Diagnostic Efficiency Statistics for the MMPI-2 NPD Scales

	<u>SN</u>	<u>SP</u>	<u>PPP</u>	<u>NPP</u>	<u>OCC</u>	<u>Kappa</u>
<u>NPD (n= 13) vs. Non-Clinical (n= 67)</u>						
NPD-O $\geq$ 19	.46	.37	.13	.78	.39	.08
NPD-NO $\geq$ 9	.39	.49	.13	.81	.48	.07
<u>NPD (n= 13) vs. Cluster A & C (n= 20)</u>						
NPD-O $\geq$ 19	.46	1.0	1.0	.72	.77	.50
NPD-NO $\geq$ 9	.39	1.0	1.0	.69	.74	.42
<u>NPD (n= 13) vs. Cluster B (n= 39)</u>						
NPD-O $\geq$ 19	.46	.80	.43	.82	.71	.25
NPD-NO $\geq$ 9	.39	.80	.39	.80	.69	.18
<u>NPD (n= 13) vs. Total (n= 124)</u>						
NPD-O $\geq$ 19	.46	.60	.11	.91	.58	.02
NPD-NO $\geq$ 9	.39	.66	.11	.91	.64	.02

SN (Sensitivity), SP (Specificity), PPP (Positive Predictive Power), NPP (Negative Predictive Power), OCC (Overall Correct Classification, hit rate).

TABLE A-15
Diagnostic Efficiency Statistics for Selected Rorschach Scores

	<u>SN</u>	<u>SP</u>	<u>PPP</u>	<u>NPP</u>	<u>OCC</u>	<u>Kappa</u>
<u>NPD (n= 12) vs. Non-Clinical (n= 50)</u>						
REF $\geq$ 1	.67	.80	.44	.91	.77	.39
IDEAL $\geq$ 5	.92	.76	.48	.97	.79	.50
<u>NPD (n= 12) vs. Cluster A & C (n= 23)</u>						
REF $\geq$ 1	.67	.83	.67	.83	.77	.49
IDEAL $\geq$ 5	.92	.78	.69	.95	.83	.65
<u>NPD (n= 12) vs. Cluster B (n= 44)</u>						
REF $\geq$ 1	.67	.73	.40	.89	.71	.32
IDEAL $\geq$ 5	.92	.55	.35	.96	.63	.29
<u>NPD (n= 12) vs. Total (n= 117)</u>						
REF $\geq$ 1	.67	.78	.24	.96	.77	.24
IDEAL $\geq$ 5	.92	.68	.23	.98	.71	.26

SN (Sensitivity), SP (Specificity), PPP (Positive Predictive Power), NPP (Negative Predictive Power), OCC (Overall Correct Classification, hit rate).

APPENDIX B

RORSCHACH SCORING CRITERIA

APPENDIX B-1

HOLT PRIMARY-SECONDARY PROCESS ANALYSIS SCORES

Libidinal Content

Level 1 (crude, direct, "primitive" content)

L 1 O. Oral receptive: Mouth, breasts—score when seen in isolation; sucking; famine; vomit.

L 1 O-Ag. Oral aggressive: Teeth, jaws—score when seen in isolation; cannibalism; castrative or sadistic biting; parasites.

L 1 A. Anal: Buttocks—score when seen in isolation or with other Level 1 content; feces or other excretory reference; hemorrhoids.

L 1 S. Sexual: Genitalia; indirect references to sexual organs are scored except for those of plants ("phallic symbol"); ejaculation; sexual acts; any reference to illegal or illicit intercourse.

L 1 E-V. Exhibitionistic-voyeuristic: Nudity; pornography; explicit voyeurism or exhibiting genitals.

L 1 H. Homosexual; Sexual ambiguity: Overt homosexual acts; less blatant homosexual acts ("two men kissing"); ambiguity of sex of genitalia; hermaphrodites.

L 1 M. Miscellaneous: Menstruation; birth process; contraceptives; urine.

Level 2 (indirect, controlled, "socialized" wishful content)

L 2 O. Oral receptive: Breasts; mouth—score when seen as part of person or animal and emphasized; stomach; kissing; any reference to use of alcohol or drugs ("drunks"; "joint of grass"); pigs; smoking; eating or drinking, active attempts to get food; cooking; food or drink; containers, utensils for food or drink; hunger; persons with oral identity or social role.

L 2 O-Ag. Oral aggressive: Poison; biting; teeth, jaws, beak—when seen as part of organism and emphasized; animals feared because of their biting; verbal aggression; spitting.

L 2 A. Anal: Buttocks or corresponding region—when seen as part of person or animal; intestines; toilet; tail of animal—when seen in isolation or emphasized; disgust; dirt; suppository.

L 2 S. Sexual: Breasts; kissing; socialized or aim-inhibited references to implicitly genital sexuality; virginity; symbols of romance; technical names for sexual organs of flowers; abstract reference to genitality; woman's legs (given by a man).

L 2 E-V. Exhibitionistic-voyeuristic: Underwear, partial nudity; peering, leering; looking emphasized; eyes in isolation or emphasized; unusual views; stage performing or performers; masks; concealment; blind person.

*Do not score: References to eyes as vehicle of hostility or disapproval (score Ag 2 A).

L 2 H. Sexual ambiguity; homosexual: Transvestism; latent or sublimated homosexual acts; uncertainty about sex; contradictory sexual descriptions.

L 2 M. Miscellaneous: Internal sexual anatomy; embryo; fetus; pregnancy; urinary anatomy; narcissism.

Aggressive Content

Level 1 (murderous or palpably sadomasochistic aggression)

Ag 1 A. Attack (Sadistic Aggression): Vivid sadistic fantasies; primitive annihilation of persons or animals; murder, even if not sadistically elaborated; torture.

Ag 1 V. Victim of Aggression (Masochistic): Castration or explicitly sexual masochism; extreme victimization; nightmarish helplessness; suicide.

Ag 1 R. Results of Aggression: Aftermath of sadistic, lethal action; decayed or putrefied flesh; mutilated persons or animals; mutilated object or plant when the response implies the effects of really ferocious action.

Level 2 (hostility or aggression of a socially tolerated kind—usually non-lethal)

Ag 2 A. Attack: Explosions, manifestations of violent symbolic anal expulsion; fire; fighting, physical conflict; hostile acts that are not reciprocated or where the victim is not specified; volcano; frightening creatures of childhood fairy tale and fantasy; skeletons in a threatening context; persons or animals about to attack; frightening or potentially dangerous people or animals ("a lion"); threatening or potentially dangerous parts of animals or people ("claws"); personifications of the punishing superego in religion and mythology ("the devil"); abstract dangers or concepts of violence ("the inferno;" "war signal"); weapons, other threatening or frightening objects; anger, hostile affects and facial expressions, crime and criminals.

Ag 2 V. Victim of Aggression (of the kind scored Level 2): People or animals in pain, suffering, illness; frightened or threatened persons or animals; figures or objects in states of precarious balance; defensive objects or activities.

Ag 2 R. Results of Aggression: Injured persons or animals; deformed persons or animals, monsters in the medical sense; persons or animals with parts missing; blood; death, dead persons or animals with no ill will involved; decayed or rotten plants or objects; aftermath of fires, explosions (including "destruction"); dead or injured plants or parts of plants; broken objects.

SOURCE: Holt, R. (1977). A method for assessing primary process manifestations and their controls in Rorschach responses. In M. Rickers-Ovsiankina (Ed.), *Rorschach psychology* (2nd ed., pp. 375-420). Huntington, NY: Krieger.

APPENDIX B-2

LERNER DEFENSE SCALES

General Scoring Considerations

1. In general, the basic unit to be scored is the response containing an entire human figure, either static or in movement (H response). There are two exceptions to this principle. Several of the indices for splitting involve two responses. In these instances, only one score is awarded. Also, one of the scores for projective identification involves the scoring of human detail responses.
2. Before applying the system, all responses should be scored for form level using a system devised by Mayman (1970).
3. The sections on devaluation, idealization, and denial call for an identification of these defenses, as well as a ranking of the defense on a continuum of high versus low order.
4. Any response may receive more than one score.
5. In assessing the human percept, attention should be paid to the following aspects of the response: the action ascribed to the figure, the way in which the figure is described, and the exact figure seen.

Specific Defenses and Their Scoring

Splitting

Splitting involves an admixture of separations of drives, affects, internal object representations, external object relations, and introjective mechanisms (Robbins, 1976).

With regard to object relations, it refers to what a person does to and with his inner and outer objects. More specifically, it involves a division of internal and external into (1) parts, as distinct from wholes, and (2) good and bad part-objects (Pruyser, 1975).

Behaviorally, splitting is manifest in a tendency to perceive and describe others in terms of

overruling polarities (Pruyser, 1975). While these polarities convey the division of good versus bad, they may take several forms, including frustrating versus satisfying, dangerous versus benign, and friendly versus hostile. The tendency to polarize affective descriptions of objects underlies the indices considered indicative of splitting. To denote splitting, use the letter (S).

Score splitting in the following cases:

- (A) In a sequence of responses, a human percept described in terms of a specific, nonambivalent, nonambiguous affective dimension is immediately followed by another human response in which the affective description is opposite that used to describe the preceding responses: for example, "looks like an ugly criminal with a gun" immediately followed by "couples sitting together cheek to cheek."
- (B) In the description of one total human figure a clear distinction of parts is made so that one part of the figure is seen as opposite another part: for example, "A giant. His lower part here conveys danger, but his top half looks benign."
- (C) Included in one response are two clearly distinguished figures, and these figures are described in opposite ways: for example, "Two figures, a man and a woman. He is mean and shouting at her. Being rather angelic, she's standing there and taking it."
- (D) An implicitly idealized figure is tarnished or spoiled by the addition of one or more features, or an implicitly devalued figure is enhanced by the addition of one or more features: for example, "a headless angel."

Devaluation

Devaluation refers to a tendency to depreciate, tarnish, and lessen the importance of one's inner and outer objects. It is considered a muted form of spoiling and, as such, is closely linked to envy. Specifically, it is conceptualized as an aim of envy as well as a defense

against it. Envy aims at being as good as the object; when this is felt as unattainable, however, it then seeks to spoil that goodness in the object and thus remove the source of the envious feelings (Segal, 1973). In addition to identifying the defense, devaluation is also rated on a five-point continuum. Underlying the continuum are three dimensions. The first dimension involves the degree to which the humanness of the figure is retained. For example, such percepts as waiters or clowns are accorded a higher score than are more distorted forms, such as monsters and mythological objects. A temporal-spatial consideration determines the second dimension. Contemporary human percepts set in a current and close locale are scored higher than are those percepts from either the past or future and set in a distant setting. The final dimension involves the severity of depreciation as conveyed in the affective description. Figures described in more primitive, blatant, socially unacceptable ways are scored lower than are those that are described in negatively tinged but more civilized and socially acceptable ways. To denote devaluation, use the symbol DV. Add to this score the number below corresponding to the appropriate level of devaluation. For example, "an angry man" is scored DV1.

- (1) The humanness dimension is retained, there is no distancing of the figure in time or space, and the figure is described in negatively tinged but socially acceptable terms: for example, "two people fighting,"; "a girl in a funny costume."
- (2) The humanness dimension is retained, there may or may not be distancing of the figure in time or space, and the figure is described in blatantly negative and socially unacceptable negative terms. This score would also include human figures with parts missing: for example, "a diseased African child,"; "a woman defecating,"; "sinister-looking male figure," "a disjointed figure with the head missing."
- (3) The humanness dimension is retained, but involved in the percept is a distortion of human form; There may or may not be distancing of the figure in time or space; and if the figure is described negatively, it is in socially acceptable terms. This rating includes such

figures as clowns, elves, savages, witches, devils, and figures of the occult: for example, "sad looking clowns"; "cannibal standing over a pot"; "the bad witch."

(4) The humanness dimension is retained, but implied in the percept is a distortion of human form. There may or may not be distancing of the figure in time or space, and the figure is described in blatantly negative and socially unacceptable terms. This rating involves the same types of figures as in (3); however, the negative description is more severe: for example, "a couple of evil witches"; "two people from Mars who look very scary"; "a sinister Ku Klux Klansman."

(5) The humanness dimension is lost, there may or may not be distancing of the distorted form in time or space, and the figure is described in either neutral or negative terms. This rating includes puppets, mannequins, robots, creatures with some human characteristics, part-human part-animal responses, and human responses with one or more animal features: for example, "Mannequins with dresses but missing a head"; "two people but half-male and half-animal; from outer space"; "a woman with breasts, high-heeled shoes, and bird's beak for a mouth."

Idealization

Idealization involves a denial of unwanted characteristics of an object and then an enhancing of the object by projecting one's own libido or omnipotence onto it. It aims at keeping an object completely separate from persecutory objects, which preserves the object from harm and destruction. This defensive aspect of idealization—that is, its aim is to protect the object from inner harm—is precarious, for the more ideal the object becomes, the more likely it is to arouse envy. As in the case of devaluation, idealization is also rated on a five-point continuum. Underlying the continuum are the same three dimensions. For scoring, denote idealization with the letter I. Add to this score the number below

corresponding with the appropriate level of idealization. Thus, "a person with a big smile" is scored I1.

(1) The humanness dimension is retained, there is no distancing of the figure in time or space, and the figure is described in a positive but not excessively flattering way: for example, "two nice people looking over a fence"; "a person with a happy smile."

(2) The humanness dimension is retained, there may or may not be distancing of the person in time or space, and the figure is described in blatantly and excessively positive terms: for example, "two handsome, muscular Russians doing that famous dance"; "What an angelic figure; long hair, a flowing gown, and a look of complete serenity."

(3) The humanness dimension is retained, but implied in the percept is a distortion of human form. There may or may not be distancing of the figure in time or space, and if the figure is described positively, it is in moderate terms. This rating includes such objects of fame, adoration, or strength as civic leaders, officials, and famous people: for example, "Charles de Gaulle"; "an astronaut, one of those fellows who landed on the moon."

(4) The humanness dimension is retained, but implied in the percept is a distortion of human form. There may or may not be distancing of the figure in time or space, and the figure is described in blatantly and excessively positive terms. This rating includes the same types of figures as in (3); however, the positive description is more excessive: for example, "a warrior; not just any warrior but the tallest, strongest, and bravest"; "Attila the Hun, but with the largest genitals I have ever seen."

(5) The humanness dimension is lost, but implied in the distortion is an enhancement of identity. There may or may not be distancing of the distorted form in time or space, and the figure is described in either neutral or positive terms. This rating includes statues of famous figures, giants, supermen or superwomen, space figures with supernatural powers, angels, and idols. Also included are half-humans in which the nonhuman half adds to the

figure's appearance or power: for example, "a bust of Queen Victoria"; "powerful beings from another planet ruling over these softer creatures."

Projective Identification

This refers to a process in which parts of the self are split off and projected onto an external object or part-object. It differs from projection proper in that what is projected onto the object is not experienced as ego alien. Rather, the self "empathizes" (Kernberg, 1975) with the object and tries to control the object by means of the projection. A close examination of the concept of projective identification suggests the operation of at least three subprocesses: an externalization of parts of the self with a disregard of real characteristics of the external object, a capacity to blur boundaries between self and other, and an overriding need to control the other. The two indices of projective identification represent an attempt to assess these subprocesses. To denote this score, use the letters PI.

Score projective identification in the following cases:

(A) Confabulatory responses involving human figures in which the form level² is Fw- or F- and the percept is overly embellished with associative elaboration to the point that real properties of the blot are disregarded and replaced by fantasies and affects. More typically, the associative elaboration involves material with aggressive or sexual meaning, as in the following example: "A huge man coming to get me. I can see his huge teeth. He's staring straight at me. His hands are up as if he will strike me."

(B) Those human or detail responses in which the location is Dr, the determinant is FC, and the figure is described as either aggressive or having been aggressed against³: for example, "an ugly face" (with forehead and features seen in reference to the inner portion of Card IV); "an injured man" (Card VI upper, center area).

Denial

Denial in this system refers to a broad group of defenses arranged on a continuum based on the degree of reality distortion involved in the response. Higher-level forms of denial involve a minimum of reality distortion, whereas middle and lower level manifestations of denial include increasingly greater degrees of reality distortion. Examples of denial at the highest level include several defensive processes observed by Holt (1970) and presented in his manual for the scoring of manifestations of primary process thinking. Middle-level denial includes responses in which there is a major contradiction between the human figure perceived and the actions or characteristics ascribed to that figure. Lower-level manifestations of denial involve significant distortions of reality to the point that a segment of subjective experience or of the external world is not integrated with the rest of the experience. There is a striking loss of reality testing, and the individual acts as if he were unaware of an urgent, pressing aspect of reality. To score denial, use the symbol DN. Add to this score the number below corresponding to the level of denial. Thus, the response "I know they are not fighting" would be scored DNI.

(1) *Higher level denial:* Denial at this level consists of several subsidiary defenses manifested in responses in which the form level of the percept is F+, Fo, or Fw+.

(a) *Negation:* Negation involves a disavowal of impulse. The disavowal may be manifested in two ways. In one, the disavowal is smoothly blended into the response itself, whereas in the other the response, or aspects of the response, are couched in negative terms: for example, "virgin"; "angel"; "These figures are not angry."

(b) *Intellectualization:* In this process, the response is stripped of its drive and affective charge by its being presented in an overly technical, scientific, literate, or intellectual way: for example, "two homo sapiens"; "two Kafkaesque figures."

(c) *Minimization*: With minimization, drive-laden material is included in the response but in a reduced and nonthreatening way. This includes changing a human figure into a caricature or cartoon figure: for example, "a shadow cast by an evil person"; "a child with his hand clenched in a fist"; "a funny man, more like a caricature."

(d) *Repudiation*: With repudiation, a response is retracted or the individual denies having even given the response.

(2) *Middle-level denial*: Denial at this level involves responses in which the form level is F+, Fo, or Fw+ and involved in the response is a basic contradiction. The contradiction may be on affective, logical, or reality grounds: for example, "a sexy Santa Claus"; "two nuns fighting"; "a man reading while asleep."

(3) *Lower level denial*: At this level, reality adherence is abrogated but in a particular way. Specifically, an acceptable response is rendered unacceptable either by adding something that is not there or by failing to take into account an aspect of the blot that is clearly to be seen. This corresponds to Mayman's (1970) form spoil (Fs) response.⁴ In addition, this level also includes responses in which incompatible descriptions are given to the percept: for example, "two people, but their top half is the female and bottom half male; each has breasts and a penis"; "a person, but instead of a mouth there is a bird's beak"; "person sitting on their huge tail."

¹This rating does not include monsters with or without human characteristics.

²These scores are taken from Mayman's (1970) manual for form level scoring. The Fw-score is assigned to unconvincing weak form responses in which only one blot detail is accurately perceived. The F- score refers to arbitrary form responses in which there is little resemblance between the percept and the area of the blot being responded to.

³Dr is a location score used when the area chosen is small, rarely used, and arbitrarily delimited (Rapaport, Gill, and Schafer, 1945). F(C) is a determinant used when the subject makes out forms within a heavily shaded area without using shading as shading or uses the nuances of shading within a colored area (Rapaport, Gill, and Schafer, 1945).

⁴The form spoil response differs from the F- response in that a basically acceptable response is spoiled by a perceptual oversight or distortion. In the F - response the percept is totally unacceptable.

SOURCE: Lerner, P. (1991). *Psychoanalytic theory and the Rorschach*. Hillsdale, NJ: The Analytic Press.

APPENDIX B-3
RORSCHACH ORAL DEPENDENCY SCALE

1. Foods and drinks

- a. Anything that can be eaten or drunk in its present state is scored—meat, bread, milk, whiskey, carrot, mushroom ("mushroom-shaped cloud" is not scored).
- b. An animal is scored only if it is invariably associated with being edible (e.g., chicken). Duck or turkey is not scored unless phrases descriptive of food are used (e.g., "roast duck," "turkey leg"). Descriptions of animal life in the sea (e.g., crabs, lobsters, fish on Card 10) are not scored unless they are qualified as edible ("boiled lobster").

2. Food sources

- a. Obvious sources of food—restaurant, bar, saloon, picnic, birthday party.
- b. Inferred sources—breast, bra, well-endowed woman, buxom woman.

3. Food objects—kettle, decanter, silverware, drinking glass. Score "pot" and "cauldron" on Card 3 only if the act of cooking is implied.

4. Food provider—waiter, cook, bartender.

5. Passive food receiver—bird in nest, piggy bank. References to either "fat" body shapes or "thin, slender" shapes (e.g., fat man, thin man, skinny legs, big stomach, flat stomach) are scored.

6. Beggars, those praying for help—person saying prayers, two dogs begging, person asking forgiveness.

7. Food organs—mouth, stomach, lips, jaw, liver, intestines, teeth.

8. Oral instruments—lipstick, clarinet, tuba, cigarette, whistle, dentures, toothbrush, telephone, megaphone.

9. Nurturers—parent, mother, father, doctor, nurse, God, Jesus, genie, angel, life preserver, Good Fairy.
10. Gifts and gift givers—Xmas tree, Santa Claus, cornucopia.
11. Good luck—wishbone, rabbit's foot, or horseshoe if these are in the context of a good-luck talisman; four-leaf clover.
12. Oral activity—eating, talking, gossiping, arguing, singing, shouting, smoking, kissing, dogs howling or barking, lipstick stains.
13. Passivity and helplessness
 - a. Explicit statements of helpless or passive condition—"he looks confused," "unable to protect himself," "he is lost."
 - b. Embryo is scored. Baby is not scored unless there is some suggestion of passiveness, frailness.
14. Pregnancy and reproductive organs—placenta, womb, ovaries, pregnancy. Vagina, penis, pelvis, sex organs are not scored.
15. Baby talk in the subject's responses—teeny-weeny person, bunny rabbit, playing patty-cake, pussycat.
16. Negations of oral percepts are scored—"there is no mouth here," "she is not pregnant," "empty cupboard," "woman with no breasts," "definitely not a Christ figure."

SOURCE: Masling, J. (1986). Orality, pathology, and interpersonal behavior. In J. Masling (Ed.), *Empirical studies of psychoanalytic theories* (pp. 73-106; Vol. 2). Hillsdale, NJ: Earlbaum.

APPENDIX B-4

MUTUALITY OF AUTONOMY SCALE

The Mutuality of Autonomy on the Rorschach developed by Urist (1977) is a scale based on a developmental model that defines various levels or stages of relatedness based on a sense of individual autonomy and the capacity to establish mutuality. Rorschach responses are scored on this 7-point scale if a relationship is stated or clearly implied between animate (people or animals) or inanimate objects. A response is scored even if there is only one animate or inanimate object, but a relationship is clearly implied. Thus, an object that is a consequence of an action (a bear rug cut in half or a squashed cat) or has the potential for an action on another object (a nuclear explosion) is scored in this analysis of Rorschach responses.

Urist (1977) defines 7 scale points for the quality of relations between objects as follows:

Scale Point 1: Figures are engaged in some relationship or activity where they are together and involved with each other in such a way that conveys a reciprocal acknowledgment of their respective individuality. The image contains explicit or implicit reference to the fact that the figures are separate and autonomous and involved with each other in a way that recognizes or expresses a sense of mutuality in the relationship (e.g., "two bears toasting each other, clinking glasses").

At this level, the unique contributions of each individual object to the mutual interaction need to be emphasized. Thus, "two people dancing" would receive a 2, because there is no stated emphasis on the mutuality of their endeavor. To receive a score of 1, a response must have a special emphasis on the mutual but separate nature of a dyadic interaction. Each object must maintain its unique identity and contribution to a relationship in which both objects are mutually engaged.

Scale Point 2: Figures are engaged together in some relationship or parallel activity, but there is no stated emphasis of mutuality. Despite the lack of direct emphasis on mutuality, the response still conveys the potential for mutuality in the relationship (e.g., "two women doing their laundry"). A response is scored 2 when the integrity of the objects is maintained and there is a potential or an implicit capacity of mutuality, independent of the degree of logic, irrationality, or absurdity to the relationship.

Scale Point 3: Figures are dependent on each other but without an internal sense of capacity to sustain themselves. The objects do not "stand on their own two feet"; rather, they each require some degree of external support or direction. The objects lack a sense of being firmly self-supporting (e.g., "two penguins leaning against a telephone pole").

Scale Point 4: One figure is seen as the reflection, imprint, or symmetrical image of another. The relationship between objects conveys a sense that the definition or stability of an object exists only insofar as it is an extension or reflection of another. Shadows, footprints, and so on would be included here, as well as responses of Siamese twins or two animals joined together.

Scale Point 5: The nature of the relationship between figures is characterized by malevolent control of one figure by another. Themes of influencing, controlling, or casting spells may be present. One figure, either literally or figuratively, may be in the clutches of another. Such themes portray a severe imbalance in the mutuality of relations between figures. On the one hand, some figures seem powerless and helpless, while at the same time, others seem controlling and omnipotent. Themes of violation of an object's integrity through domination, or implied physical damage and destruction, are often present in these types of responses (e.g., puppets on a string, witches casting a spell, or a body cut open).

Scale Point 6: There is a severe imbalance in the mutuality of relations between figures in decidedly destructive terms. Two figures more than simply fighting—such as a figure being tortured by another, or an object being strangled by another—are considered to reflect a serious attack on the autonomy of the object. Literal physical damage is seen as having occurred. Similarly, included here are relationships portrayed as parasitic, where a gain by one figure results by definition in the diminution or destruction of another (e.g., a leech sucking up this man's blood, two people feasting after killing an animal, a compression hammer splitting through rock).

Scale Point 7: Relationships are characterized by an overpowering enveloping force. Figures are seen as swallowed up, devoured, or generally overwhelmed by forces completely beyond their control. Forces are described as overpowering, malevolent, perhaps even psychotic. Frequently, the force is described as existing outside of the relationship between two figures or objects, underscoring the massiveness of the force, its overwhelming nature, and the complete passivity and helplessness of the objects or figures involved (e.g., something being consumed by fire, destruction after a tornado, or God's wrath).

SOURCE: Urist, J. (1977). The Rorschach test and the assessment of object relations. *Journal of Personality Assessment*, 41(1), 3-9.

VITA

Mark J. Hilsenroth was born on November 20, 1968 and raised in New Haven, Connecticut. As an adolescent he moved to Avon, Ohio where he graduated from Avon High School in May of 1986. He entered The University of Akron in Akron, Ohio during August of 1986 where in May of 1990 he received the Bachelor of Arts in Psychology. He then entered the Graduate School of the University of Tennessee, Knoxville in August of 1990 to study clinical psychology. From 1993 to 1995 he was employed as a research consultant by the Veterans Affairs Medical Center at Mountain Home, Tennessee. He also served as the Clinic Coordinator at the University of Tennessee Psychological Clinic, Knoxville during the 1994-5 academic year.

He is presently completing a one-year internship in clinical psychology at The Cambridge Hospital, Harvard Medical School, in Cambridge, Massachusetts. Having completed all the requirements for graduation he will receive his Doctor of Philosophy degree with a major in Psychology from the University of Tennessee at Knoxville in May of 1996.