A Rorschach Exploration of the DSM-IV Borderline Personality Disorder

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Rorschach data has been useful in identifying the DSM Borderline Personality Disorder (BPD) and has potential for improving our understanding of this disorder. Recently, the DSM-IV BPD has been shown to be composed of 3 primary or core factors: Factor I—unstable self–other images, Factor II—deficits in affect and thought modulation, and Factor III—impulsive self-damaging actions. In a sample of outpatients with personality disorders, we explored the relationships among 6 psychoanalytically derived Rorschach scales (primitive aggression, oral dependency, self-other differentiation, splitting, devaluation, and projective identification), and the core BPD features. Significant correlations were found between 5 of the Rorschach variables and BPD total scores. Correlations between these 5 variables and the BPD core features showed that oral dependency needs

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were negatively associated with all 3 BPD core features, whereas the defenses of devaluation and splitting were positively associated with these core features. The clinical implications of these findings are reviewed. © 1999 John Wiley & Sons, Inc. J Clin Psychol 55: 563–572, 1999.

Although no definitive borderline Rorschach profile exists (Murray, 1993), the ability of Rorschach assessment data to aid in the diagnosis of Borderline Personality Disorder (BPD) is empirically well established (Acklin, 1993; Berg, 1990; Berg, Packer, & Nunno, 1993; Exner, 1986; Farris, 1988; Gacono, Meloy, & Berg, 1992; Gartner, Hurt, & Gartner, 1989; Hilsenroth, Hibbard, Nash, & Handler, 1993). For example, research using Rorschach structural summary variables (atheoretical empirically developed test signs) has shown patients with BPD to be extratensive and affect oriented in their functioning, to use more egocentric thinking, and to be more vulnerable to disorganization under stress, than either schizotypal or schizophrenic patients (Exner, 1986). Additionally, Rorschach data from scales or scoring systems based upon psychoanalytic concepts or theories (such as Kernberg's [1975] psychoanalytic model for classifying personality organization) have also been useful in clarifying similarities and differences among the DSM Cluster B Personality Disorders (PD), particularly, BPD, Narcissistic PD (NPD), and Antisocial PD (ANPD). Farris (1988) found patients with BPD to have more cognitive-perceptual distortions and to employ the defenses of splitting and projective identification more frequently than did patients with NPD. Berg (1990) found that patients with BPD demonstrated significantly more unusual perceptions and higher levels of splitting than did patients with NPD, whereas the patients with NPD produced more signs of grandiosity. Gacono et al. (1992) found meaningful similarities and differences in the object-relation patterns and level of personality organization, among the Cluster B PDs. For example, patients with psychopathic ANPD and NPD had higher levels of self-absorption (Reflection and Personalized responses), than patients with nonpsychopathic ANPD or BPD, whereas the object-relation patterns of patients with BPD and psychopathic ANPD were more primitive than those of patients with NPD. In fact, the BPD protocols in particular evidenced object-relation patterns consistent with "a core damaged and aggressed against self-identity with an extremely malevolent, vulnerable, and conflicted internalized object world" (Gacono et al., 1992, p. 46). Using Rorschach scales designed to tap aggression, defensive functioning, and egocentricity, Hilsenroth et al. (1993) found that patients with BPD employed more primitive defenses (splitting and projective identification) and had more intense and more overall aggression than did patients with NPD, whereas patients with NPD had higher levels of egocentricity than did the patients with BPD. Across these psychoanalytically grounded Rorschach studies, patients with BPD have consistently employed more primitive defenses, particularly splitting and projective identification, and have more dysfunctional object-relations than other Cluster B PDs and nonclinical participants.

Such Rorschach findings help increase our understanding of the psychological properties that give rise to the DSM BPD criteria and may ultimately lead to improved methods for diagnosing and treating this disorder. Unfortunately, the rate of diagnostic and therapeutic advancement for BPD has been slowed by the heterogeneity of patients diagnosed with this condition. Although the DSM developed distinct diagnostic criteria in attempting to better define the boundaries of BPD, the polythetic nature of the DSM classification system results in more than 100 possible variants of BPD. An alternative

strategy for advancing our understanding of BPD would be to determine core features or characteristics of the disorder and then focus research attention on those features. The goal for this approach to studying BPD would be to identify the traits common to most of the DSM BPD variants.

Recently, the factor structure of the DSM-IV BPD was examined (Blais, Hilsenroth, & Castlebury, 1997) and found to contain three core factors consistent with three of the four essential features of BPD as outlined in the DSM-IV (American Psychiatric Association, 1994). The factor solution reported by Blais et al. was highly similar to the one reported by Clarkin, Hull, and Hurt (1993) and to a lesser degree the one reported by Livesley and Schroeder (1991) in studies of the DSM-III-R BPD. The correspondence of the BPD factor structure across multiple studies employing distinct assessment methods and different populations suggests that these factors represent the core qualities of the DSM BPD. Briefly, the three core factors or features of the DSM-IV BPD include: Feature I, made up of Criteria 1, 2, 3, & 7, which reflects the BPD's difficulties with self-identity and interpersonal relations; Feature II, Criteria 6, 8, & 9, which identifies deficits in affect modulation and cognitive slippage that characterize BPD functioning; and Feature III, made up of Criteria 2, 4, 5, & 6, which reveals the impulsive self-damaging behaviors that are also associated with the BPD's unstable interpersonal relationships (Blais et al., 1997). The present study sought to further our understanding of the DSM-IV BPD by exploring the relationship of select conceptually derived Rorschach scales to the DSM-IV BPD criteria and the recently identified core features of BPD. Building on the Rorschach studies reviewed previously, the following Rorschach variables were used to explore the DSM-IV BPD: primitive (primary process) aggression, quality of object relations, oral dependency needs, and defensive functioning. Although the studies reviewed earlier focused on the ability of Rorschach variables to differentiate diagnostic groups, ours is the first study to directly investigate the relationship of these Rorschach variables to the specific DSM-IV BPD criteria and the core features of this important disorder.

METHOD

Participants

The participants in this study were drawn from an archival search of files at a university-based outpatient psychology clinic. Each file reviewed contained a signed informed consent allowing the anonymous use of the clinic record for either teaching, or research purposes, or both. This review included approximately 800 case files covering a 7-year period. A number of previous studies have successfully utilized chart information to retrospectively rate patients for Axis II diagnostic criteria (McGann, 1991; Morey, 1985). The selection of cases proceeded in three phases. In Phase 1, 217 cases were identified as having been diagnosed with a PD. The original clinical diagnoses were rendered by a team consisting of an advanced clinical psychology doctoral student and a supervising licensed clinical psychologist upon completion of the clinic's intake/assessment procedure.

In Phase 2, the chart material for these 217 patients was rated for the presence or absence of a DSM-IV PD diagnosis. The presence or absence of a PD was determined through a retrospective review of the patient records, which included an evaluation report, session notes from the first 12 weeks of therapy, and 3-month treatment reviews when available. Information regarding patient identity, diagnosis, and test data (including all Rorschach data) were appropriately masked from the reviewers. Raters in this phase of the study were four advanced doctoral students in an APA-approved clinical psychology program. The raters had received special training in the diagnosis of DSM-IV Axis II

disorders. Interrater reliability was established by independent ratings of a randomly selected pool of 31 patients; the obtained Kappa value was .90 for the presence or absence of a DSM-IV personality disorder. Of the 217 records reviewed in this manner, 79 were found to have met the DSM-IV criteria for an Axis II disorder and have completed the Rorschach. The PD distribution for these patients was as follows: antisocial (ANPD) = 16, borderline (BPD) = 23, histrionic (HPD) = 5, narcissistic (NPD) = 12, Cluster A PD = 10, and Cluster C PD = 13.

The 79 patients identified through this retrospective case review made up our sample. Fifty-one percent of the sample were men and had a mean age of 28 years ($SD = 8$) at the time of the clinic intake. They averaged 14 years of education ($SD = 2$) and their mean Wechsler full scale IQ was 106 ($SD = 13$; Wechsler, 1981). Forty-five patients were single, nine were married, 24 had been divorced, and one widowed. In Phase 3, the records of all 79 patients were again independently rated on all of the DSM-IV Cluster B PD symptom criteria (ANPD, BPD, HPD, & NPD) using the same case material and methodology outlined earlier. Again interrater reliability was established by independent ratings of a randomly selected pool of 25 patients. Interrater agreement for the presence or absence of each individual DSM-IV Cluster B symptom criteria were .80 (BPD), .86 (ANPD), .90 (HPD), and .90 (NPD).

Rorschach Scales. Holt's (1977) Level 1 Aggression (A1) scale was used as a measure of primitive, primary process aggression. In Holt's system, A1 scores relate to primitive raw unsocialized forms of aggression such as murderous or sadomasochistic rage. Excellent construct validity has been obtained for the Holt scales (see Hilsenroth et al., 1993, for a review of these studies). The Rorschach Oral Dependency (ROD) Scale (Masling, Rabie, & Blondheim, 1967) provided a composite measure of both the oral and dependent content present in the protocol. The ROD is the most widely used projective measure of interpersonal dependency (Bornstein, 1996). Urist's (1977) Mutuality of Autonomy Scale (MOA), a measure of self-other differentiation and the degree to which these interactions are malevolent or benevolent, was used to assess internal object relations. The MOA Scale rates the thematic content of interactions depicted in Rorschach responses on a 1 to 7 scale, representing a continuum from 1 (*mutual empathic relatedness*) to 7 (*malevolent engulfment and destruction*). In this study the participant's highest obtained MOA score was used as a marker of his or her most primitive level of object relations. Three of the Lerner and Lerner's Rorschach Defense Scales (LDS; Lerner, 1991) were scored. The LDS is a Rorschach content scoring system based upon Kernberg's (1975) theoretical conception of primitive defenses. The LDS identifies primitive defenses as they are represented in human and quasi-human and, in some circumstances, human detail Rorschach responses. The LDS variables of splitting, devaluation, and projective identification were employed in this study. Scores for the LDS splitting and projective identification scales represent simple summations, whereas devaluation is first scored on a continuum of pathology from 1 (*low*) to 5 (*high*), and then summed into an overall score (Hilsenroth et al., 1993). For example, if there were three instances of devaluation on a participant's protocol, one being a Level 1 and the other two being Level 3s, the participant would receive a devaluation score of 7, $(1 + 3 + 3 = 7)$.

Procedure

The Rorschach was originally administered and scored following the procedures of Exner (1986, 1993). All Rorschach protocols were rescored for the Rorschach variables under study by the second author (MH), who was blind to previous scores and patient diag-

noses. Interrater reliability (Weiner, 1991) was obtained by having the third author (CF), who was blind to the first coder's scores and patient diagnosis, score 20 randomly selected protocols. The obtained interrater reliabilities were: LDS, 88%; A1, 87%; MOAS-H, 84%; and ROD, 98%. All Rorschach protocols were reviewed for validity; none were found to have fewer than 14 responses and a Lambda above 1.0.

Statistical Analyses

The Cluster B (antisocial, borderline, histrionic, and narcissistic) symptoms ratings were summed to produce total scores (total number of criteria met) for each of the Cluster B PDs. This allowed for a dimensional evaluation of Cluster B PDs rather than a categorical one. Rorschach variables can be influenced by (or correlated with) the total number of Rorschach responses given by the participant (designated as *R* in the Rorschach scoring system). Before analyzing the data, the Rorschach variables were correlated with *R*, and for any significantly correlated variables, the effect of *R* was partialed out before other correlations were obtained. First, Pearson product moment correlations were obtained for the Rorschach variables and the Cluster B PD total scores. Second, point-biserial correlations were computed for the Rorschach variables and the nine individual BPD criteria. Lastly, Pearson correlations were obtained for the Rorschach variables and the three BPD core features. To do this analysis, factor (core feature) scales were created based upon the factor analytic results reported by Blais et al. (1997). These scales were created as follows: All BPD criteria with loadings of .40 or greater on a factor were summed, and this total was then divided by the number of loadings. The result is a factor/core feature score. For example, the BPD Factor I score was determined by summing criteria numbers 1, 2, 3, and 7 (all of which loaded at .40 or better) and dividing this total by four (the number of loadings). The Factor II score was determined by summing BPD criteria 6, 8, and 9 and dividing by three, and the Factor III score was determined by summing BPD criteria 2, 4, 5, and 6 and dividing by four. This procedure follows the accepted method for composing experimental scales from factor structures identified in previous research (Floyd & Widaman, 1995; Kim & Mueller, 1978; Tabachnick & Fiddell, 1983).

RESULTS

Table 1 provides the correlations among the Rorschach variables and the Cluster B PD total scores. Table 1 shows that the Rorschach variables A1, MOA-H, and Deval were all

Table 1. *Correlations Among the Rorschach Variables and the DSM-IV Cluster B PDs Total Scores*

	Rorschach Variables				
	A1	Split	Deval	MOA-H	ROD*b*
Cluster B PDs					
ANPD Total	−.04	−.10	−.08	−.02	−.19
BPD Total	.23*	.27**	.29**	.31**	−.43**
HPD Total	.00	.26*	.04	.09	.03
NPD Total	−.15	−.23*	−.16	.01	.03

Note.—*N* = 79. *p < .05. **p < .01. ANPD = Antisocial; NPD = Narcissistic; BPD = Borderline; HPD = Histrionic total scores. *b* indicates that the effect of *R* has been partialed out.

Table 2. *Correlations Among the Rorschach Variables and the DSM-IV Borderline PD Criteria*

	Rorschach Variables				
	A1	Split	Deval	MOA-H	ROD*b*
DSM-IV BPD Criteria					
1 Avoid abandonment	−.04	−.02	−.01	.18	−.13
2 Unstable relationships	.20	.28**	.30**	.28**	−.23*
3 Identity disturbance	.12	.08	.05	.06	−.18
4 Impulsivity	.21	.18	.09	−.13	−.30**
5 Suicidal behavior	.04	.14	.25*	.28**	−.08
6 Affective instability	.16	.19	.24*	.11	−.26*
7 Feeling empty	.19	.32**	.05	.15	−.25*
8 Intense anger	−.05	−.12	.15	.00	−.25*
9 Paranoid-dissociative	.11	.09	.07	.21	−.11

Note.—$N = 79$. *$p < .05$. **$p < .01$. *b* indicates that the effect of *R* has been partialed out.

positively associated with the BPD total score, whereas ROD was negatively associated with the BPD score. These correlations were all significant and exclusive to the BPD total scores. Splitting (Split) demonstrated multiple significant associations being positively correlated with BPD and HPD and negatively correlated with NPD. Projective Identification was not significantly correlated with any of the Cluster B PDs and was dropped from the remaining analyses.

Table 2 provides the correlations among the Rorschach variables and the nine individual DSM-IV BPD criteria. All but one (A1) of the Rorschach variables were significantly correlated with two or more of the individual BPD criteria.

Table 3 shows the correlations between the Rorschach variables and the core features/factors of the DSM-IV BPD. Significant negative correlations were found for ROD-R (oral dependency) and all three of the BPD core features. In addition, devaluing was positively associated with Feature II, whereas splitting, devaluing, A1, and MOA-H were all significantly associated positively with BPD Feature 3.

DISCUSSION

The results of this study provide additional support for the well-documented ability of Rorschach assessment data to aid in the identification of DSM BPD patients and symptoms (Acklin, 1993; Berg, 1990; Berg et al., 1993; Exner, 1986; Gacono et al., 1992; Gartner et al., 1989; Hilsenroth et al., 1993). Of the six Rorschach variables studied, five were significantly associated with the BPD total scores, and four of these variables (A1, MOA-H, ROD, and Devaluing) were exclusively associated with the BPD total score. These data show that compared to the other Cluster B PDs, the BPD criteria are related to greater disruptions in object relations (MOA-H and Split), more primitive defensive functioning (Splitting and Devaluing), and the presence of raw primitive aggressive impulses and imagery (A1). Two disorders, BPD and HPD, were associated with the defense of splitting. The defense of splitting is the principal marker for Kernberg's (1975) borderline level of personality organization. These data suggest that HPD and BPD possess a similar psychological structure. This is consistent with Kernberg's theory, which postulates that borderline personality organization can give rise to a wide range of phenomenologically different psychiatric disorders. In addition, we found NPD to be negatively associated

Table 3. *Correlations Among the Rorschach Variables and Borderline PD Core Features*

	BPD Core Features		
	I Unstable Identity/ Interpersonal	II Affect/ Cognition	III Impulsive Behavior
Factor 1 Items			
1 Avoid abandonment			
2 Unstable relationships	ROD*b* (−.32)**		
3 Identity disturbance	Split (.26)*		
7 Feeling empty	MOA-H (.26)*		
Factor 2 Items			
6 Affective instability			
8 Intensive anger		ROD*b* (−.30)**	
9 Paranoid-dissociative		Deval (.26)*	
Factor 3 Items			
2 Unstable relationships			ROD*b* (−.31)**
4 Impulsivity			Deval (.30)**
5 Suicidal behavior			Split (.27)**
6 Affective instability			MOA-H (.26)*
			A1 (.22)*

Note.—$N = 79$. *$p < .05$. **$p < .01$. *b* indicates that the effect of *R* has been partialed out.

with defensive splitting, suggesting that NPD is developmentally more advanced than either BPD or HPD. This is also consistent with Kernberg's structural theory (Kernberg, 1975).

Impressively, multiple significant correlations were found between four of the Rorschach variables and six of the nine individual BPD criteria. BPD Criterion 2 (unstable relationships) was strongly associated with the Rorschach variables evidencing four significant correlations. This is impressive empirical support for the ability of psychodynamically derived Rorschach scales to assess the quality of interpersonal functioning. Likewise, criteria 5 (suicide), 6 (affect instability), and 7 (feeling empty) were each associated with two of the Rorschach variables. Clearly, these findings indicate that the Rorschach variables studied were strongly related to the behavioral/observable qualities of the DSM-IV BPD criteria. The presence of such a strong relationship between Rorschach variables and the BPD criteria suggests that Rorschach-based research can provide insights into the psychological characteristics that underlay the BPD criteria.

The correlations of the Rorschach variables and the BPD core features are particularly informative in this regard. First, ROD, a measure of oral dependency, was the only Rorschach variable to be negatively associated with all three BPD core features. This finding suggests that the characteristics tapped by ROD are highly relevant to this disorder and likely represent a pervasive feature of the DSM BPD. ROD is an interesting variable as both low and high ROD scores are considered problematic (Duberstent & Talbot, 1993; Folwer, Hilsenroth, & Handler, 1996; O'Neil & Bornstein, 1991). Individuals who score low on ROD tend to relate to others in an emotionally closed and mistrustful manner. In addition, low ROD scores have been associated with an insecure attachment style (Ainsworth, Blechar, Water, & Wall, 1978). This form of attachment has been characterized as being counterdependent and as representing a "highly conflicted state in which conscious and unconscious efforts are made to avoid and refute a need for

closeness" motivated mainly by a fear and mistrust of others (Folwer et al., 1996, p. 403). High ROD scores, on the other hand, are associated with an overdependent, excessively needily interpersonal style (Duberstent & Talbot, 1993; Folwer et al., 1996). Our findings suggest that, for this sample of outpatients, the BPD criteria were associated with dependency needs that were highly conflicted and rigidly defended. In particular, it seems that the defenses of splitting and devaluation were employed to keep others from becoming too important or too emotionally close to patients with BPD criteria. We might speculate that as long as these patients stay emotionally unconnected to others, that is, effectively denying their dependency needs, they experience fewer or less severe BPD symptoms. Therefore, the clinically familiar BPD style of hostile independence may represent a strategy for coping with dependence needs that can neither be tolerated or modulated once they are activated within a caring relationship. Furthermore, the correlational data indicate that the majority of DSM-IV BPD criteria and all three of the BPD core features reflect behavioral efforts to control or to counteract these dependency needs.

Our finding regarding the importance of dependency issues in BPD patients can be taken as empirical support for Gunderson's (1996) position that an "intolerance of aloneness" is the core psychological deficit in BPD. According to Gunderson, the BPD's inability to tolerate aloneness results in the development of a relational style that alternates between a "denial of dependent needs, the apparent absence of separation anxiety, and reluctance or fearfulness about becoming attached" (a style similar to the one identified in this study) on the one hand, and a fear of aloneness, a desire to establish contact, and needing attention or help on the other (Gunderson, 1996, p. 753).

Given the instability of the BPD's relational style, it would be informative to examine the expression of dependency in a sample of inpatient participants with BPD. We would hypothesize that patients requiring hospitalization are no longer able to contain or deny their dependency needs. Therefore, recently hospitalized patients with BPD should be overwhelmed by their dependency desires. Interpersonally, they would behave in an overly dependent and emotionally needy manner, and they would evidence an increase in either the number or severity of their BPD symptoms. If tested while in such a psychological state, patients with BPD would be expected to produce high ROD scores. If such a relationship between ROD scores and the BPD's alternating relational style were confirmed, it would provide an important insight into the psychology of patients with BPD and more fully validate Gunderson's (1996) views on the importance of "aloneness" in BPD.

The BPD Features I (unstable identity and relationships) and III (impulsive behaviors, suicidality, and unstable relationships) were most strongly associated with the Rorschach variables measuring disturbed object representations (Split and MOA-H). These data indicate that primitive aggression (A1) and malevolent (aggressive and destructive) interpersonal perceptions (Deval, Split, and MOAS-H) relate to both the BPD's lack of stable self and object representations and the tendency of these patients to engage in self-destructive impulsive actions. These findings are consistent with Benjamin and Wonderlick's (1996) recent study that found patients with BPD to have relationships characterized by high levels of hostility and autonomy.

A principle limitation of the present study is the use of chart review material for making the DSM-IV PD diagnoses. Although many past studies have successfully employed this investigative method, it is possible that some diagnostically important material was not present in the detailed clinic records we reviewed and therefore not available for this study. Although it is unlikely that such coding problems systematically biased our findings it is possible that the use of a different diagnostic procedure, such as a structured interview, may have yielded different results. However, as Zimmerman (1994) has indi-

cated, "patients whose conditions are diagnosed according to retrospective chart review are likely to be prototypic examples of the PD" (p. 234). Still, the present study demonstrates how the Rorschach assessment data, coupled with psychoanalytic theory, can enrich our understanding of the DSM BPD. We encourage other personality researchers to adopt a depth psychology approach to studying the DSM PD as such research will help clarify the psychological factors associated with these descriptive categories. In particular, it will be important for future research to examine our conclusion that the regulation and disregulation of intolerable relational issues (dependency needs) are crucial to understanding the fluctuations in the functioning of patients with Borderline Personality Disorder.

REFERENCES

Acklin, M. (1993). Psychodiagnosis of personality structure: II. Borderline personality organization. Journal of Personality Assessment, 61, 329–341.

Ainsworth, M.D.S., Blechar, M.C., Water, E., & Wall, S. (1978). Patterns of attachment. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Benjamin, L.S., & Wonderlick, S.A. (1996). Social perceptions and the borderline personality disorder: The relation to mood disorders. Journal of Abnormal Psychology, 103, 610–624.

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 self/object representation. Journal of Personality Assessment, 61, 311–323.

Blais, M., Hilsenroth, M., & Castlebury, F. (1997). Content validity of the DSM-IV borderline and narcissistic personality disorder criteria sets. Comprehensive Psychiatry, 38, 31–37.

Bornstein, R.F. (1996). Construct validity of interpersonal dependency inventory: 1977–1992. Journal of Personality Disorders, 10, 65–77.

Clarkin, J., Hull, J., & Hurt, S. (1993). Factor structure of the borderline personality disorder criteria. Journal of Personality Disorders, 7, 137–143.

Duberstein, P., & Talbot, N. (1993). Rorschach oral imagery, attachment style and interpersonal relatedness. Journal of Personality Assessment, 61, 294–310.

Exner, J. (1986). The Rorschach: A comprehensive system: Vol. 1. Basic foundations (2nd ed.). New York: John Wiley & Sons.

Exner, J. (1993). The Rorschach: A comprehensive system: Vol. 1. Basic foundations (3rd ed.). New York: John Wiley & Sons.

Farris, M. (1988). Differential diagnosis of borderline and narcissistic personality disorder. In H. Lerner & P. Lerner (Eds.), Primitive mental states and the Rorschach (pp. 299–338). New York: International Universities Press.

Floyd, F., & Widaman, K. (1995). Factor analysis in the development and refinement of clinical assessment instruments. Psychological Assessment, 7, 286–299.

Fowler, C., Hilsenroth, M., & Handler, L. (1996). A multimethod approach to assessing dependency: The early memory dependency probe. Journal of Personality Assessment, 67, 399–413.

Gacono, C., Meloy, J., & Berg, J. (1992). Object relations, defensive operations, and affect states in narcissistic, borderline, and antisocial personality disorders. Journal of Personality Assessment, 59, 32–49.

Gartner, J., Hurt, S.W., & Gartner, A. (1989). Psychological test signs of borderline personality disorder. Journal of Personality Assessment, 53, 423–441.

Gunderson, J.G. (1996). The borderline patient's intolerance of aloneness: Insecure attachments and therapist availability. American Journal of Psychiatry, 153, 752–758.

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.

Holt, R. (1977). A method for assessing primary process manifestations and their control in Rorschach responses. In M. Ricker-Ovsinkina (Ed.), Rorschach psychology (2nd ed., pp. 263–315). Huntington, NY: Krieger.

Kernberg, O. (1975). Borderline conditions and pathological narcissism. New York: Aronson.

Kim, J., & Mueller, C.W. (1978). Factor analysis. Beverly Hills, CA: Sage.

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

Livesley, W.J., & Schroeder, J. (1991). Dimensions of personality disorders: The DSM-III-R cluster B diagnoses. Journal of Nervous and Mental Disease, 179, 320–328.

McCann, J. (1991). Convergent and discriminant validity of the MCMI-II and MMPI personality disorder scales. Psychological Assessment, 3, 9–18.

Masling, J., Rabie, L., & Blondheim, S. (1967). Obesity, level of aspiration, and Rorschach and TAT measures of oral dependence. Journal of Consulting Psychology, 31, 233–239.

Morey, L. (1985). A psychometric analysis of five DSM-III categories. Personality and Individual Differences, 6, 323–329.

Murray, J. (1993). The Rorschach search for the borderline holy grail: An examination of personality structure, personality style, and situation. Journal of Personality Assessment, 61, 342–357.

O'Neill, R., & Bornstein, R. (1991). Orality and depression in psychiatric inpatients. Journal of Personality Disorders, 5, 1–11.

Urist, J. (1977). The Rorschach test and the assessment of object relations. Journal of Personality Assessment, 41, 3–9.

Tabachnick, B.G., & Fiddell, L.S. (1983). Using multivariate statistics. New York: Harper & Row.

Wechsler, D. (1981). Wechsler Adult Intelligence Scale-Revised. New York: The Psychological Corporation.

Weiner, I. (1991). Editor's note: Interscorer agreement in Rorschach research. Journal of Personality Assessment, 56, 1.

Zimmerman, M. (1994). Diagnosing personality disorders: A review of issues and methods. Archives of General Psychiatry, 51, 225–245.