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THE PREDICTIVE POWER OF HORNEY'S PSYCHOANALYTIC APPROACH: AN EMPIRICAL STUDY

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This study investigated the construct validity of a measure of Karen Horney's (1945) psychoanalytic theory that postulated three neurotic trends: compliant, aggressive, and detached. Her theory was operationalized by the Horney-Coolidge Type Indicator (HCTI). One hundred seventy-two adults completed the HCTI and the short form of the Coolidge Axis II Inventory, a measure of the three *DSM-IV* personality disorder clusters. Multiple regression and canonical correlation analyses revealed significant and differential patterns of the three HCTI dimensions with the three clusters. Because Paris (1994) has noted that Horney's neurotic trends may today be conceived of as personality disorders, one implication of the present findings is that Horney's dynamic theory can be valid and useful in the general understanding of personality disorders from a cluster perspective.

KEY WORDS: HCTI; personality disorders; Karen Horney; personality disorder clusters; aggression; compliance; detachment.

This study investigated the construct validity of a new measure of Karen Horney's (1945) psychoanalytic theory. Horney proposed that people would defend against a basic anxiety (loss or separation from their mothers and helplessness in a hostile world) by various combinations of three strategies: moving towards other people (Compliant Trend), against other people (Aggressive Trend), and/or away from other people (Detached Trend). Horney saw the role of predetermined triangular conflicts, that is, Oedipal conflicts as secondary to child-mother or child-parent dyadic failure in the psychogenesis of character disturbances. She further postulated that healthy adults might operate freely and flexibly along all three dimensions, while ''neurotic adults'' may become crystallized or fixated along a single dimension. It has been suggested that her term ''neurosis''

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is synonymous with the modern *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV*; American Psychiatric Association, 1994) concept of personality disorders (Paris, 1994).

In Horney's later work (1950), she elaborated on the intrapsychic mechanisms involved in these interpersonal strategies. She evolved a psychoanalytic structure describing the comprehensive ''solutions'' (actually pseudo-solutions) to these interpersonal strategies. Thus, the compliant character trend became known as the self-effacing solution with intrapsychic needs of help, dependence, and ''surrendering love'' (Horney, 1950 p. 215). The aggressive trend became the expansive solution with needs for dominance, mastery, and self-aggrandizement. The detached trend became the resigned solution with the need for emotional avoidance and it's accompanying hypersensitivity to any outside coercion or influence.

Horney's theory spanned the interpersonal and the intrapsychic as well as the family and the larger culture. Horney could be called a systemicist and, because of her systemic conceptualizations of these fields, she had at various times been called a cultural psychoanalyst, an interpersonal psychoanalyst, a self-psychoanalyst, and a holistic psychoanalyst. Thus, it is equally valid to attempt to operationalize her thinking at the level of the family, larger culture, interpersonal trends, or intrapsychic solutions. In fact, Leland van den Daele (1987) invited researchers to use Horney theory because ''it provides a large set of highly specific clinical hypotheses that relate to personality organization'' (p. 100).

In this study, the operationalized measures of Horney's theory are drawn from her interpersonal descriptions of character trends in *Our Inner Conflicts* (1945). The inventory is called the Horney–Coolidge Type Indicator (HCTI; Coolidge, 1999) and measures her personality dimensions in strict accordance with her theory. For the sake of parsimony, the three trends are identified as Compliance, Aggression, and Detachment. The HCTI also identifies three underlying facets of each dimension (for complete details, see Coolidge, Moor, Yamazaki, Stewart, & Segal, 2001). There have been at least two prior attempts to operationalize Horney's three neurotic trends. Cohen (1967) created a 35-item scale measuring compliant, aggressive, and detached types in a study of consumer behavior. DeRosis and Pellegrino (1976) offered 48 questions for self-identification of overcompliance (love-addicted), domineering, and uninvolved types of women, in a non-standardized and non-empirical self-help book. In the present study, the predictive power (construct validity) of the HCTI was investigated by examining its relationship to the *DSM-IV* personality disorder clusters.

The personality disorder clusters first appeared in *DSM-III* (American Psychiatric Association, 1980), and with a single exception (in *DSM-IV*,

the passive-aggressive personality disorder was dropped from Cluster C), they have remained unchanged through *DSM-IV* (Coolidge & Segal, 1998). Cluster A (odd or eccentric) includes paranoid, schizoid, and schizotypal personality disorders; Cluster B (dramatic, emotional, or erratic) is comprised of antisocial, borderline, histrionic, and narcissistic personality disorders; and Cluster C (anxious or fearful) includes avoidant, dependent, and obsessive-compulsive personality disorders. The cluster approach has been the source of some controversy, although there are a few studies that provide limited support. Paris, Frank, Buonvino, and Bond (1991) found that a parental bond measure was able to discriminate among 163 outpatients of a psychiatric clinic in the three clusters. Aleem (1992) found gender differences for Clusters A and B in 150 graduate students. Cloninger and his colleagues found the clusters useful in subtyping personality disorders according to his Temperament and Character Inventory (e.g., Cloninger, 2000; Svrakic, Whitehead, Przybeck, & Cloninger, 1993). Torgersen et al. (2000) found varying heritability estimates for the three clusters in an adult retrospective twin study. Austin and Deary (2000) found the clusters useful in examining a common framework for normal and abnormal behavior in a factor analytic study. Finally, Blais, Hilsenroth, Castlebury, Fowler, and Baity (2001) found incremental validity for the Cluster B personality disorder criteria from MMPI-2 and Rorschach data.

In the present study, it was hypothesized that the three HCTI dimensions and their facets would successfully differentiate among the three *DSM-IV* personality disorder clusters when the clusters were measured in aggregate fashion. It is also important to note that the appropriateness of using non-clinical populations to study personality disorders and their features has been amply demonstrated (e.g., Jang, Livesley, Vernon, & Jackson, 1996; Livesley, Jang, Jackson, & Vernon, 1993; Raine, Sheard, Reynolds, & Lencz, 1992).

METHOD

Participants and Procedure

One hundred seventy two adult community-dwelling volunteers (87 males, 85 females; *M* age = 19.7 years, age range 16–48 years; 85% Caucasian; median education = 13.1 years) were recruited by college students who received extra credit for procuring participants. Informed consent was obtained, and the participants completed a measure of the three personality disorder clusters and the HCTI in a single sitting at home or at the university.

Measures

The HCTI is a three scale, 57-item inventory with each item answered on a 4-point Likert scale ranging from 1 = *hardly ever* to 4 = *nearly always*. There are 19-items per scale. The items were created directly from descriptions of Horney's three personality types in her 1945 book *Our Inner Conflicts*. The HCTI was normed on 630 normal adults, 315 males, 315 females, ages 16–93, *M* age = 21.0 years. Approximately 98% of participants had at least a high school education. They were predominantly Caucasian (79%), Hispanic (8%), Black (5%), Asian (5%), and Other (3%). Their marital status was 81% single, 13% married or living with a significant other, and 6% were divorced or separated. The internal scale reliabilities (Cronbach's alpha) are as follows: Compliance, .80; Aggression, .82; Detachment, .83. The test-retest (1-week interval) reliabilities are as follows: Compliance, .92; Aggression, .92; Detachment, .91. Preliminary construct validity for the three scales with individual personality disorders has been established (Coolidge et al., 2001).

Coolidge et al. (2001) established the three facets of each dimension through principal components factor analysis with varimax rotation. For the Compliance scale, the three facets are Altruism (items related to an altruistic nature, desire to help others, sympathy, and unselfishness), Need for Relationships (a strong need to be in a relationship and the desire for others), and Self-Abasement (the subjugation of one's own needs to another). The internal reliabilities are .70, .71, and .65, respectively. For the Aggression scale, the three facets are Malevolence (a malevolent view of others, their motivations, and the world), Power (desire to be in command and outsmarting others), and Strength (values related to bravery, uninhibited behavior, and toughness). The internal reliabilities are .78, .75, and .64, respectively. For the Detachment scale, the three facets are the Need for Aloneness (preference for being alone and feeling better when alone), Avoidance (avoidance and resistance of personal interactions), and Self-Sufficiency (enjoyment of living independent of family and friends). The internal reliabilities are .78, .56, and .62, respectively (Coolidge, 1999).

Personality disorder clusters were assessed with the short-form of the Coolidge Axis II Inventory (SCATI; Coolidge, 2001b). The SCATI is a 70 item, self-report measure designed to assess the 12 personality disorders from *DSM-IV* and two personality disorders, sadistic and self-defeating, from *DSM-III-R* (American Psychiatric Association, 1987). The SCATI was created from the items of the full form of the Coolidge Axis II Inventory (Coolidge, 1993; Coolidge, 2001a; Coolidge & Merwin, 1992). There are five items per scale of the SCATI that were chosen on the basis of their

high individual item correlations with the full CATI, and it was assured that each of the items on a scale represented a different personality disorder criterion from *DSM-IV*. Responses to items on the SCATI are given on a 4-point true-false scale, ranging from 1 = *strongly false* to 4 = *strongly true*. Preliminary norms were obtained from 254 adults, ages 17–69, mean age = 26.0 years, 75% Caucasian, 70% were single, and 98% had a high school education or more. Fifteen items from the paranoid, schizoid, and schizotypal personality disorder scales were summed to form a single measure of Cluster A (eccentric). Cluster B (emotional) contained 20 items from the antisocial, borderline, histrionic, and narcissistic personality disorder scales; and Cluster C (fearful) contained 15 items from the avoidant, dependent, and obsessive-compulsive personality disorder scales. On the normative sample, the internal scale reliabilities (Cronbach's alpha) were .82 for Cluster A, .77 for Cluster B, and .79 for Cluster C. The test-retest reliabilities (n = 73, 1-week interval) were as follows: Cluster A, .92; Cluster B, .87; and Cluster C, .88.

RESULTS

Multiple regression analyses [which allow the assessment of the strength of relationship between one dependent variable (DV) and several independent variables (IV's)] were first performed upon each personality disorder cluster as the DV and the three HCTI scales (Compliance, Aggression, and Detachment) as the IV's. The R, R^2, adjusted R^2, F values and significance levels, and standardized beta (β) coefficients and significance levels are presented in Table 1. R is a parameter that assesses the strength of the relationship between the DV and IV's and can be interpreted like a correlation coefficient. R^2 can be interpreted as the percentage of variance accounted for by the relationship between the DV and the IV's. Adjusted R^2 is also the percentage of variance but is smaller than R^2 because of the expected inflation that occurs in the sample (therefore, R tends to be an overestimate). F values are used to assess the significance of the multiple regression equation. Standardized β coefficients can be interpreted like correlation coefficients and establish the individual contributions of each IV in the prediction of the DV. Multiple regression analyses were also performed for each personality disorder cluster as the DV with the nine facets of the three HCTI dimensions as the IV's. A summary of these analyses also appears in Table 1.

Interestingly, the three main HCTI scales produced a unique and significant combination for each cluster. For Cluster A (eccentric), Detachment and Aggression were positive and significant predictors, with Detachment the stronger predictor. For Cluster B (emotional), Aggression emerged as a

TABLE 1. Multiple Regression Analyses for the Personality Disorders Clusters A, B, and C and the HCTI Three Dimensions and Nine Facets

Cluster	R	R^2	Adj. R^2	F	p	Predictor	Standardized β Coefficients	t	p
Personality Disorder Clusters A, B, and C with the Three HCTI Dimensions									
A	.59	.35	.34	44.77	.001	Compliance	−.05	.95	.342
						Aggression	.29	5.41	.001
						Detachment	.41	7.50	.001
B	.55	.30	.29	35.48	.001	Compliance	.15	2.80	.006
						Aggression	.57	10.08	.001
						Detachment	−.09	−1.59	.114
C	.41	.17	.16	17.05	.001	Compliance	.30	5.03	.001
						Aggression	.17	1.90	.059
						Detachment	.31	4.95	.001
Personality Disorder Clusters A, B, and C with the Nine HCTI Facets									
A	.66	.44	.42	21.59	.001	Relations	−.14	−2.26	.025
						Altruism	−.12	−2.32	.021
						Abasement	.14	2.68	.008
						Malevolence	.35	5.55	.001
						Power	.07	1.25	.214
						Strength	−.02	−.37	.710
						Aloneness	.15	2.38	.018
						Avoidance	.21	3.88	.001
						Self-Suff.	.05	.76	.451
B	.59	.35	.32	14.47	.001	Relations	.09	1.40	.163
						Altruism	−.06	−1.08	.283
						Abasement	.12	2.13	.034
						Malevolence	.27	4.05	.001
						Power	.14	2.22	.027
						Strength	.22	3.15	.002
						Aloneness	−.24	−3.50	.001
						Avoidance	.10	1.74	.083
						Self-Suff.	.07	1.03	.303
C	.56	.31	.29	12.40	.001	Relations	.06	.96	.338
						Altruism	−.02	−.34	.731
						Abasement	.35	6.03	.001
						Malevolence	.35	5.04	.001
						Power	−.13	−1.92	.057
						Strength	−.08	−1.16	.248
						Aloneness	.07	.98	.328
						Avoidance	.11	1.82	.070
						Self-Suff.	.11	1.63	.104

strong positive predictor, with Compliance demonstrating a significant positive but weaker relationship. For Cluster C (fearful), Compliance and Detachment were both positive and significant predictors of approximately equal strength.

The nine facets of the three HCTI dimensions were also entered as predictors of each cluster in three separate multiple regression analyses (see Table 1). For Cluster A (eccentric), although the Compliance scale had a weak and non-significant contribution, the facet analysis revealed that all three facets were significant predictors. Cluster A personality disorders were negatively and significantly related to the Altruism and Need for Relationships facets, and positively and significantly associated with the Self-Abasement facet. Thus, it appears that the non-significant standardized β for the Compliance scale with Cluster A was created by the contrast between the two negatively related facets with the positively related facet. The latter finding appears to enhance the value of facet analysis of the three main Horney dimensions. With regard to the Aggression scale, the Malevolence facet was the only significant predictor of Cluster A. The Detachment facet analysis revealed that the Need for Aloneness and Avoidance facets were both significantly and positively related to scores on Cluster A.

For Cluster B (emotional), the only significant facet of the Compliance scale was a positive relationship with Self-Abasement. All three Aggression facets (Malevolence, Power, and Strength) were significantly and positively related to Cluster B. Only the Need for Aloneness facet of the Detachment scale was significantly and negatively associated with Cluster B scores.

For Cluster C (fearful), the only significant facet of Compliance was Self-Abasement, which was positively related. Of the Aggression facets, only Malevolence was significantly and positively related to Cluster C. Interestingly, none of the Detachment facets (Need for Aloneness, Avoidance, and Self-Sufficiency) had significant relationships. All were small and positively related to Cluster C. The latter finding may have accounted for the fact that the Detachment scale's standardized β was significantly associated with Cluster C, but none of its facets were.

Because research has also shown that there is some common variance among the three personality disorder clusters, canonical correlation analyses (which allow the assessment of the strength of a relationship between one set of variables and another set of variables) were also performed between the clusters and the three main HCTI dimensions and the clusters and the nine HCTI facets. The results of these analyses appear in Table 2. For the three main dimensions and the three clusters, there were three significant canonical variates (or three unique solutions between the

TABLE 2. Canonical Correlation Analyses for the Personality Disorders Clusters A, B, and C and the HCTI Three Dimensions and Nine Facets

	Canonical Variates		
	1	2	3
Personality Disorder Clusters A, B, and C with the Three HCTI Dimensions			
Cluster A	−.95	.09	.31
Cluster B	−.53	−.83	.21
Cluster C	−.32	−.05	.95
Compliance	.45	−.37	.81
Aggression	−.81	−.59	−.02
Detachment	−.17	.50	.40
	1	2	3
Personality Disorder Clusters A, B, and C with the Nine HCTI Facets			
Cluster A	.99	−.12	−.02
Cluster B	.37	−.91	−.20
Cluster C	.58	−.03	−.81
Compliance			
Need for Relationships	−.45	−.47	−.48
Altruism	−.40	.08	−.31
Self Abasement	.11	.00	−.84
Aggression			
Malevolence	.73	−.48	−.07
Power	.28	−.64	.37
Strength	.32	−.73	.21
Detachment			
Need for Aloneness	.69	.42	.19
Avoidance	.68	.02	−.10
Self-Sufficiency	.50	.07	.03

two sets at $p < .001$), and the canonical correlations (which assess the strength of relationship between the two sets and can be interpreted as correlation coefficients) were .61, .53, and .38, respectively. For the nine facets and the three clusters, there were also three significant canonical variates ($p < .001$), and they were .67, .58, and .50, respectively.

DISCUSSION

Overall, the results appear to indicate that Karen Horney's tridimensional psychoanalytic theory, as operationalized by the HCTI, helps in the differential understanding of personality disorders from a cluster perspec-

tive. Although personality disorder clusters have received modest empirical attention, and they come with the disclaimer in *DSM-IV* that they have not been consistently validated, the present findings provide some support for their continuation. The results of the multiple regressions and the canonical analyses on the three main Horneyan dimensions and their facets demonstrated the ability of the HCTI to understand differentially the nature of the three personality disorder clusters.

For example, it makes good clinical sense to see that individuals with Cluster A personality disorders would experience great social detachment due to the shared features of intense social discomfort, bizarre ideation, and fear of trusting others. Thus, the positive relationships with the Aggression and Detachment factors of the HCTI support the maladaptive relational aspect of Cluster A disorders. The results of the canonical correlations further elucidate this finding. For example, lower Compliance scores and higher Aggression and Detachment scores are clearly associated with the Cluster A personality disorders of paranoid, schizoid, and schizotypal.

An examination of the individual facets of each HCTI scale yielded an even more in-depth view of the relational component underlying the three clusters. For example, in the multiple regressions, the standardized β for the overall Compliance scale was not significantly related to Cluster A, yet all three facets of Compliance were significantly related to Cluster A but in contrasting directions. Thus, it is consistent with the nature of the paranoid, schizoid, and schizotypal personality disorders to not exhibit altruistic and sympathetic behaviors and have a low need for relationships. Of course, it is also highly consistent with these personality disorders that they would have a highly malevolent view of the world and others (an Aggression facet), as well as a high need for being alone and the avoidance of others' influence (Detachment facets). Also, the first canonical variate in the facet analysis strongly demonstrated that Cluster A and Cluster C, and to some extent Cluster B, in other words, most of the personality disorders, are associated with a lower need for relationships, lower altruistic behaviors, a malevolent view of the world, a strong need to be alone, to avoid others, and to be self-sufficient.

For Cluster B, aggression was the strongest predictor, suggesting that individuals in this group may be consistently dramatic and erratic with forceful and hurtful intent to themselves and others. Notably, antisocial persons are notorious for hurting others, whereas the aggressive impulses of the borderline individual are often turned inward as a suicidal act. In the multiple regression analyses, the Malevolence facet of Aggression was the strongest of the three facets of Aggression in the prediction of all three

personality disorder clusters. Again, this finding captures the maladaptive relational aspect of the personality disorders and suggests that underlying the differing relational postures of Horney's theory is a basic belief that people hurt other people and cannot be trusted. The canonical correlations also reinforced these suppositions. For example, the second canonical variate was primarily influenced by Cluster B, and the loadings from the HCTI demonstrated that this cluster, besides its strong Aggressive component, also has a Compliant component, as well as a negative Detachment component. In addition, the results suggest that people with Cluster B personality disorders of antisocial, borderline, histrionic, and narcissistic are more likely to see the world in a malevolent way but retain their need for relationships and do not value being alone.

The significant positive relationships for Compliance and Detachment with Cluster C also make clinical sense. The primary relational component to the three personality disorders underlying Cluster C (avoidant, dependent, and obsessive-compulsive personality disorders) is anxiety. The conflict between approach and avoidance depicted in these disorders is supported by the significant positive relationships found in the Compliance and Detachment dimensions of the HCTI. Furthermore, avoidant and dependent types are known to go to great lengths to maintain a relationship, and the obsessive-compulsive personality type is notorious for being rigid and concerned with rules. These traits would likely contribute to a high compliance score. The facet analyses further supported the notion that Cluster C disorders, probably the avoidant and dependent types, are more likely to subjugate their own needs and involve themselves in self-defeating behaviors.

The implications of the present study may be limited by the use of a non-clinical sample. It is also important to note that the study did not involve direct assessment of personality disorders per se, but was really a measure of personality disorder cluster traits or features that were distributed in a non-clinical population. Further studies using the HCTI in predicting the individual disorders within the clusters might also be of interest along with the inclusion of clinical samples. These studies would certainly require greater sample sizes.

It is interesting to note that recent concerns of personality research have been the number of dimensions that underlie personality and whether these dimensions are the same for the normal and abnormal personality (e.g., Block, 1995; Coolidge et al., 1994; Eysenck, 1992; Goldberg, 1993; McCrae & Costa, 1986). Perhaps, Horney's theory should be resurrected and included in the search. It is parsimonious, consisting of only three dimensions, yet systemic, as it bridges the interpersonal and intrapsychic and the normal and abnormal. Horney's theory also offers a

holistic framework for the understanding of personality disorder clusters and provides some support for the personality disorder cluster classification system. Certainly, further investigation is warranted.

REFERENCES

Aleem, S. (1992). Personality disorder among university students. *Journal of the Indian Academy of Applied Psychology, 18,* 79–81.

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC.

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed.- Revised). Washington, DC.

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

Austin, E. J., & Deary, K. U. (2000). The ''four As'': A common framework for normal and abnormal personality? *Personality and Individual Differences, 28,* 977–995.

Blais, M. A., Hilsenroth, M. J., Castlebury, F., Fowler, J. C., & Baity, M. R. (2001). Predicting *DSM-IV* cluster B personality disorder criteria from MMPI-2 and Rorschach data: A test of incremental validity. *Journal of Personality Assessment, 76,* 150–168.

Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin, 117,* 187–215.

Cloninger, C. R. (2000). A practical way to diagnosis personality disorder: A proposal. *Journal of Personality Disorders, 14,* 99–108.

Cohen, J. B. (1967). An interpersonal orientation to the study of consumer behavior. *Journal of Marketing Research, 4,* 270–278.

Coolidge, F. L. (1993). *Coolidge axis II inventory: manual.* Clermont, FL: Synergistic Office Solutions.

Coolidge, F. L. (2001a). *Coolidge assessment battery*. Port Huron, MI: Sigma Assessment Systems.

Coolidge, F. L. (1999). *Horney–Coolidge type indicator: Manual.* Colorado Springs, CO.

Coolidge, F. L. (2001b). *Short-form of the coolidge axis II inventory (SCATI): Manual*. Colorado Springs, CO.

Coolidge, F. L., Becker, L. A., DiRito, D. C., Durham, R. L., Kinlaw, M. M., & Philbrick, P. B. (1994). On the relationship of the five-factor personality model to personality disorders: Four reservations. *Psychological Reports, 75,* 11–21.

Coolidge, F. L., & Merwin, M. M. (1992). Reliability and validity of the Coolidge Axis II inventory: A new inventory for the assessment of personality disorders. *Journal of Personality Assessment, 59,* 223–238.

Coolidge, F. L., Moor, C., Yamazaki, G. F., Stewart, S. E., & Segal, D. L. (2001). On the relationship between Karen Horney's tripartite neurotic type theory and personality disorder features. *Personality and Individual Differences, 30,* 1387–1400.

Coolidge, F. L., & Segal, D. L. (1998). Evolution of personality disorder diagnosis in the Diagnostic and Statistical Manual of Mental Disorders. *Clinical Psychology Review, 18,* 585–599.

DeRosis, H. A., & Pellegrino, V. Y. (1976). *The book of hope: How women can overcome depression.* New York: MacMillan Publishing Co.

Eysenck, H. J. (1992). Four ways five factors are not basic. *Personality and Individual Differences, 13,* 667–673.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist, 48,* 26–34.

Horney, K. (1945). *Our inner conflicts.* New York: W. W. Norton & Co.

Horney, K. (1950). *Neurosis and human growth.* New York: W. W. Norton & Co.

Jang, K. L., Livesley, W. J., Vernon, P. A., & Jackson, D. N. (1996). Heritability of personality disorder traits: A twin study. *Acta Psychiatrica Scandinavica, 94,* 438–444.

Livesley, W. J., Jang, K. L., Jackson, D. N., & Vernon, P. A. (1993). Genetic and environmental contributions to dimensions of personality disorder. *American Journal of Psychiatry, 150,* 1826–1831.

McCrae, R. R., & Costa, P. T., Jr. (1986). Clinical assessment can benefit from recent advances in personality psychology. *American Psychologist, 41,* 1001–1003.

Paris, B. J. (1994). *Karen Horney: A psychoanalyst's search for self-understanding.* New Haven, CT: Yale University Press.

Paris, J., Frank, H., Buinvino, M., & Bond, M. (1991). Recollection of parental behavior and Axis II cluster diagnosis. *Journal of Personality Disorders, 5,* 102–106.

Raine, A., Sheard, C., Reynolds, G. P., & Lencz, T. (1992). Pre-frontal structural and functional deficits associated with individual differences in schizotypal personality. *Schizophrenia Research, 7,* 237–247.

Svracik, D. M., Whitehead, C., Przybeck, T. R., & Cloninger, C. R. (1993). Differential diagnosis of personality disorders by the seven-factor model of temperament and character. *Archives for General Psychiatry, 50,* 991–999.

Torgersen, S., Lydgren, S., Oien, P. A., Skre, I., Onstad, S., Edvardsen, J., Tambs, K., & Kringlen, E. (2000). A twin study of personality disorders. *Comprehensive Psychiatry, 41,* 416–425.

Van den Daele, L. (1987). Research in Horney's psychoanalytic theory. *American Journal of Psychoanalysis, 47,* 99–104.