Diagnostic Validity of Antisocial Personality-Disorder - A Prototypical Analysis

Diagnostic Validity of Antisocial Personality Disorder

A Prototypical Analysis*

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Competing models of antisocial personality disorder have important consequences for mentally disordered offenders and their management in the criminal justice system. In order to provide a fresh perspective on these enduring diagnostic problems, we conducted a prototypical analysis on 250 adult subjects' perceptions of psychopathy from a set of criteria, which included DSM-II, DSM-III, DSM-III-R, and Psychopathy Checklist (PCL) scores. Through principal components analysis we identified four factors: (a) impaired relationships and deception, (b) aggressive behavior, (c) nonviolent delinquency, and (d) frequent sexual relationships not attributable to mental illness/substance abuse. These factors appear to be more closely allied with PCL and two new proposals for DSM-IV than the current DSM-III-R model.

The diagnosis of antisocial personality disorder (APD) often plays an instrumental role in psycholegal assessments of mentally disordered offenders. In consultations to the courts that include diversion from the criminal justice system, transfer of juveniles to adult court, sentencing, and special offender status, a pivotal although sometimes implicit issue is whether an offender meets the APD criteria (Rogers &

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Mitchell, 1991). Far-ranging judgments are made about "psychopaths" on matters such as dangerousness, recidivism, and treatability (for an overview, see Meloy, 1988; Reid, 1978). What is alarming about these judgments is that the validity of both DSM III-R and commonly employed psychometric models of APD is seriously questioned (Rogers & Dion, 1991).

Validation of Personality Disorders

Personality disorders, unlike schizophrenic and mood disorders, do not have well-established biological markers and do not evidence predictable responses to treatment challenges. Invoking the classic Syndenham criteria (i.e., inclusion, exclusion, and outcome criteria; see Murphy, Woodruff, Herjanic, & Fischer, 1974) for an Axis II diagnosis is problematic. Since personality traits tend to be overlapping and, by definition, life-long, exclusion and outcome criteria are difficult to achieve.

Spitzer (1983) recommended the Longitudinal Expert Evaluation using the All Data (LEAD) model for validating diagnoses in the absence of criterion-related validity. However, the LEAD model lacks specific guidelines for what constitutes an expert evaluation or how "all" data should be weighted and integrated. Skodol, Rosnick, Kellman, Oldman, and Hyler (1988) attempted to apply the LEAD model to 20 personality-disordered patients with SCID-generated DSM-III-R diagnoses. They found a moderate degree of convergence (70% hit rate; kappas were not reported) between the two methods.

Livesley (1985a, 1985b, 1986) has championed the use of prototypical analysis as an alternative approach to the validation of personality disorders. Prototype theory, based largely on the work of Rosch (1973, 1978), seeks to construct categories (e.g., diagnoses) through ratings of most representative or central characteristics. Livesley and his colleagues (Livesley & Jackson, 1986; Livesley, Reiffer, Sheldon, & West, 1987) performed an extensive survey of 938 North American psychiatrists on the 11 DSM-III personality disorders. Psychiatrists were asked to make prototypicality ratings for a single personality disorder. Unfortunately, respondents for each disorder ranged from 38 to 49 and thus provided a very modest sampling of clinicians (i.e., fewer subjects than variables). Mean ratings for individual criteria were generally high (>5 on a 7-point scale) for each diagnosis, which tended to obscure differences in prototypicality.

Current approaches to validation (i.e., LEAD and protypical) while presently favored, are by no means exhaustive. Other attempts to validate Axis II disorders include (a) the development of a circumplex model (Conte & Plutchik, 1981; Plutchik & Conte, 1988), in which validity is based on similarity ratings of personality traits that are compared across each disorder, and (b) interpersonal models (e.g., Kiesler, 1985), in which validity is derived from a translation of personality disorders into interpersonal schemata that are subsequently tested against a priori hypotheses. Still others (e.g., Frances, 1982, 1985) argue for a dismantling of the current categorical system of diagnosis in favor of a dimensional model; validity of dimensional diagnoses would correspond closely to test validation of psychometric measures.

Current Status of APD Diagnosis

DSM III-R diagnostic criteria (American Psychiatric Association, 1987) and its recent predecessor DSM-III (American Psychiatric Association, 1980) reflect a radical departure from the earlier characterological models of APD (American Psychiatric Association, 1968; Cleckley, 1976). In contrast to the DSM-II emphasis on impaired socialization and impulse control, DSM-III focused on overt behavioral disturbances with formal inclusion criteria for dyssocial and antisocial behavior. More recently, DSM-III-R has continued the descriptive model but changed the developmental criteria to reflect violently antisocial acts.

DSM-III and DSM-III-R instituted a primarily polythetic model that specifies minimum criteria (i.e., any 3 of 12 developmental plus any 4 of 10 adult symptoms) of which any combination would qualify for APD. The polythetic model makes two implicit assumptions: First, all criteria and subcriteria should be accorded equal weight (e.g., truancy and firesetting are treated equally in making a diagnosis). Second, no distinction is made on the basis of frequency or severity of symptoms (e.g., no difference between one assault with a weapon and a dozen such assaults). To treat any combination of APD criteria meeting or exceeding minimal DSM-III-R standards as comparable results in a bewildering and rather discordant array of diagnostic possibilities. Rogers and Dion (1991) computed the possible variations of DSM-III-R APD disorder at 3.4×10^8 for the criteria alone and 2.9×10^{10} when each subcriterion is also considered.

The diagnostic reliability of APD is probably constrained by the complexity of its criteria and subcriteria.[1] Based on DSM-III field trials (Spitzer, Forman, & Nee, 1979), APD initially appeared to have adequate interrater reliability (kappas of .87 and .68), although a subsequent study by Mellsop, Varghese, Joshua, and Hicks (1982) proved far less successful (kappa = .49). Efforts to improve the diagnostic reliability of APD through the use of structured interviews have produced mixed results. Reliabilities of APD diagnosis derived from the Diagnostic Interview Schedule (DIS, Robins, Helzer, Croughan, & Ratcliff, 1981) range from kappas of .63 (Robins et al., 1981), .58 to .65 (Vandiver & Sher, 1991), .56 (Helzer et al., 1985), and .54 (Perry, Lavori, Cooper, Hoke, & O'Connell, 1987) to .42 (Blouin, Perez, & Blouin, 1988) for a computerized version. Zimmerman and Coryell (1989), in a study of Structured Interview of DSM-III Personality Disorders (SIDP, Stangel, Pfohl, Zimmerman, Bowers, & Corenthal, 1985), found a kappa of .66 for APD in a nonpatient sample. With the use of the Personality Disorder Examination (PDE), Loranger, Susman, Odham, and Russakoff (1987) found a kappa of .70 based on seven APD cases. Finally, the widely used Structured Clinical Interview for DSM-III-R (SCID) has not published its reliability estimates for APD (Spitzer, Williams, Gibbon, & First, 1989). If we accept the DSM III threshold of kappas $\geq .70$ as indicative of "good agreement" (American Psychiatric Association, 1980, p. 468), then only two of 10 studies meet this

[1] We are not aware of any research that examines the reliability of individual criteria and subcriteria; such data would prove invaluable to subsequent revisions of APD.

criterion.[2] As a further complication, each of the above studies examines DSM-III, not DSM III-R diagnosis; we simply have no reliability data on APD according to the DSM-III-R criteria.

Psychometric Approaches to APD

Psychometric methods of assessing APD were developed independently of DSM nosology. Therefore, it is not surprising that fundamental differences in the conceptualization of APD are reflected in low correlations between test results and DSM-III. For example, Scale 4 of the MMPI was constructed on persons with extensive histories of minor delinquency (Greene, 1989); biserial correlations between Scale 4 and DSM-III average a mere .26 (Hare, 1985a). Similarly, Millon (1981) proposed a biosocial learning theory as the basis for personality disorders and posited that antisocial personality (Scale 6A of the MCMI-II) was based on aggressive feelings, sensation seeking, vindictiveness, and perceived hostility in others. MCMI's divergence from DSM-III is readily apparent in the modest correlation between the two approaches (r = .28; Widiger & Sanderson, 1987).

As alternative to traditional test methods was devised by Hare (1981, 1985b, 1991) in the form of the Psychopathy Checklist (PCL). The PCL and a subsequent revision (PCL-R) have good psychometric properties (see Hare, 1985a; Harper, Hakstian, & Hare, 1988; Schroeder, Schroeder, & Hare, 1983) that include interrater reliability (r = .89), internal consistency (α = .90), and correlation with a criterion-based measure (r = .80). In addition, scores on the PCL demonstrated expected differences in the management of correctional inmates (Hare & McPherson, 1984) and predictive validity for both recidivism (Hart, Kropp, & Hare, 1988) and treatment response (Ogloff, Wong, & Greenwood, 1990). Most recently, the PCL-CV (Hare, Cox, & Hart, 1989) was developed and is expected to be a catalyst for further modifications of APD in DSM-IV (Hart & Hare, 1991).

Diagnostic Elusiveness of APD

The above review of APD could be expanded to include further diagnostic variations (e.g., Cleckley, 1976) and other psychometric measures less commonly employed in clinical practice (e.g., So scale of the CPI, Mergargee, 1977). Diagnostic approaches propounded in the clinical literature are highly divergent in their theoretical constructs and provide a bewildering array of criteria. The boundaries of what constitutes APD appear very diffuse and elusive.

A common thread among diverse if not competing APD models is partial agreement on a constellation of "antisocial" characteristics/behavior which violate "prosocial" normative standards. Who should judge the antisocial and prosocial dimensions? Mental health professionals have a substantial advantage over

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[2] We did not include in this summary a study by Coolidge, Merwin, Wooley, and Hyman (1990) that yielded a test–retest reliability of .89 at a one-week interval. The study employed a self-administered 22-item true–false questionnaire on 69 students; we worry about clinical applicability of this approach.

others in most matters of diagnosis, by virtue of their training and experience. This advantage may become a liability in case of a controversial diagnosis such as APD for two reasons: (a) clinicians may become theory-bound with slavish adherence to a particular model; and (b) APD, perhaps more than any other disorder, is an explicit deviation from social norms. Such delineation of social norms does not fall within clinical expertise but reflects a broader and more encompassing view of antisocial and prosocial behavior.

An interesting alternative is to survey nonprofessionals regarding antisocial dimensions inherent in APD. In this respect, Horowitz and his colleagues (Horowitz, Post, French, Wallis, & Siegelman, 1981; Horowitz, Wright, Lowenstein, & Parad, 1981; Horowitz, French, & Anderson, 1982) have demonstrated the usefulness of nonprofessionals in the prototypical analysis of psychiatric diagnoses. They found, for example, that ratings by nonprofessionals assisted in simplifying and clarifying the diagnosis of depression. Given the diagnostic elusiveness of APD, we decided to conduct a prototypical analysis on a substantial sample of nonprofessionals for DSM variations and PCL.

METHOD

Subjects

A sample of 250 adult volunteers was solicited through the research program at the Ontario Science Centre. The sample comprised 120 males and 126 females with missing data for gender on 4 subjects. National origin was relatively balanced between Canadian (109 or 43.6%) and American (99 or 39.6%), with comparatively small numbers from the United Kingdom (19 or 7.6%) and other countries (19 or 7.6%), or with missing data (4 or 1.6%). The group was generally well educated (M = 15.64 years, SD = 3.00) and covered much of the adult lifespan (M = 33.23, SD = 11.39).

Procedure

Criteria for the DSM classifications were placed on a master list. Since DSM II provides a description without formal criteria, we operationalized DSM-II as seven descriptors: (a) incapable of significant loyalty to individuals, groups, or social values, (b) selfish, (c) failure to accept responsibility, (d) poor judgment and failure to learn from experience, (e) boredom/low frustration level, (f) lack of remorse, and (g) blames others or offers plausible rationalizations for their behavior. All DSM-III (12 childhood and 9 adult) and DSM-III-R (12 childhood and 10 adult) criteria were placed on the list. In addition, 19 of the 22 PCL items were also included; we omitted three that appeared to be too vague and inferential (i.e., psychopath, criminal versatility, and early behavior problems).[3]

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[3] Although Cleckley's model of APD was supposed to be operationalized in the PCL, seven of the Cleckley criteria (absence of delusions and other signs of irrational thinking, absence of nervousness

We anticipated potential problems with ordering effects. To minimize this problem, four random sets of childhood criteria and adult criteria were generated. Ten copies of the four random sets were prepared in advance of each test day and given to subjects sequentially to avoid any subtle researcher bias.

All subjects were asked to rate the APD criteria on a 7-point scale with three anchors provided (i.e., 1 = *unimportant,* 4 = *moderately important,* and 7 = *very important*) to *their* perceptions of an antisocial personality. They were also informed through written instructions that such individuals might also be known as a "psychopath" or "sociopath" and that mental health professionals themselves lacked a consensus on the central or core elements of APD. In addition, the directions suggested that subjects might find it helpful in making these ratings to think of a particular person they would consider to have APD. Following the APD ratings, subjects were asked to provide basic background information and were then debriefed.

RESULTS

Prototypicality ratings for childhood characteristics of APD manifested considerable variability (overall $M = 4.64$, $SD = .87$; range of individual M ratings was from 2.96 to 5.98). Seven of the 18 childhood characteristics were ranked high (≥ 5) in prototypicality (see Table 1).

The 38 adult characteristics of APD evidence somewhat less variability (overall $M = 4.52$, $SD = .70$; range of individual M ratings was from 3.00 to 5.91). Although the ratings appear less violent than the childhood criteria, this trend is likely an artifact of APD criteria that were studied.

Beyond the prototypicality ratings themselves, we were interested in what factors might emerge from the data and their correspondence to existing APD models. To this end, we conducted a principal components analysis (PCA) on the combined childhood and adult criteria. First, we performed a parallel analysis (Holden, Longman, Cota, & Fekken, 1989), a statistically derived and conservative estimate of the number of factors justified by the data, that suggested a four-factor solution. Second, we performed the PCA for a prespecified four-factor solution, rotated to a varimax solution.

Four relatively distinct factors emerged from the APD prototypicality ratings, which accounted for 46.6% of the variance (see Table 2). The first factor (15.1% of the variance), *impaired relationships and deception,* comprised 14 criteria related to the absence of emotions/empathy, lack of responsibility for self/others, and lying/conning. The second factor (12.7% of the variance), *aggressive behavior,* consisted of 10 criteria that were characterized by violence, cruelty, and gross negligence as a parent. The third factor (10.6% of the variance), *nonviolent delinquency,* consisted of nine criteria, which are associated with school and family

or neurosis, unreliable, incapacity for love, loss of insight, good intelligence, and inadequately motivated antisocial behavior) appear to have no direct parallel in PCL. Although supplementary in nature, we also included these additional seven criteria in our analysis.

Table 1. High Prototypicality Ratings for Childhood and Adult APD Characteristics

	M	*SD*	Sources
Childhood characteristics			
Forced sexual activity	5.98	1.41	DSM-III-R
Physical cruelty to people	5.73	1.46	DSM-III-R
Physical cruelty to animals	5.46	1.55	DSM-III-R
Stole (confronting victim)	5.46	1.67	DSM-III-R
Fight (using weapon)	5.37	1.66	DSM-III-R
Destroy property (not firesetting)	5.29	1.55	DSM-III and III-R
Firesetting	5.27	1.77	DSM-III-R
Adult characteristics			
Lack of remorse (mistreating others)	5.91	1.29	DSM-II and III-R, and PCL
Unlawful behavior (grounds for arrest)	5.84	1.40	DSM-III and III-R
Physical fights or assaults	5.49	1.48	DSM-III and III-R
No regard for the truth[a]	5.40	1.40	DSM-III and III-R
Pathological lying[a]	5.37	1.44	PCL
Irresponsible parenting	5.31	1.73	DSM-III and III-R
Callous/lack of empathy	5.22	1.56	PCL
Failure to accept one's responsibility	5.19	1.54	PCL
Reckless behavior (disregard for safety)	5.08	1.66	DSM-III and III-R

[a] Despite the apparent similarity between "no regard for the truth" and "pathological lying" and their comparable ratings, the two variables are only moderately correlated (r = .43).

problems and nonaggressive antisocial acts. The fourth factor (8.3% of the variance), *frequent sexual relationships not attributable to mental illness/substance abuse,* is composed of six criteria and characterized by superficial or frequent sexual relationships and the absence of alcohol, drugs, or mental illness as an explanation.

DISCUSSION

Prototypicality Ratings

High prototypicality ratings from childhood represent criminal behavior that is unambiguously violent. High ratings focus on aggression toward humans (sexual assault, fighting with a weapon, and cruelty), animals, and the destruction of property. Nonconformity, by itself, was insufficient to be ranked highly. For example, generally low ratings (i.e., $\leq$3.50) were found for (a) repeated sexual intercourse in a casual relationship (M = 2.96, SD = 1.91), (b) poor school grades (M = 3.45, SD = 1.65), and (c) running way from home (M = 3.50, SD = 1.71).

Only two adult criteria tap unlawful and aggressive behavior, and these were ranked among the highest (M's of 5.84 and 5.49). We cannot conclude, therefore, that violence is any less important in public perceptions of adult APD characteristics. Four common themes emerge from the nine adult APD characteristics (see Table 1) rated high in prototypicality: the above-cited antisocial behavior, plus lack of remorse/empathy, deception, and irresponsibility.

Table 2. Principal Components Analysis of Antisocial Personality Characteristics (Varimax Rotated)

APD Characteristics	Factor Structure			
	Factor 1	Factor 2	Factor 3	Factor 4
Callous, lack of empathy	.65	.12	−.04	.13
No regard for the truth	.64	.34	.12	.05
Unresponsive to others	.63	−.05	.08	.34
Lacks remorse	.62	.28	−.06	−.06
Pathological lying	.59	.16	.27	−.18
Blames others	.59	.07	.14	.29
Lack of affect	.58	.00	.16	.24
Conning, lack of sincerity	.57	.21	.18	.21
Unreliable	.57	.03	.29	.32
Incapable of loyalty	.57	.14	.16	.17
Poor behavioral control	.55	.13	.17	.25
Fails responsibilities	.55	.23	.28	.03
Lacks close relationships	.54	.11	.28	.31
Selfish	.54	−.11	.29	.21
Stole from victim (c)	.01	.75	.11	.12
Forced sex (c)	.03	.72	−.03	.14
Used weapon in fight (c)	.06	.71	.14	.09
Physically cruel to people (c)	.13	.67	.09	−.02
Deliberate firesetting (c)	−.01	.62	.23	.11
Physically cruel to animals (c)	.16	.58	.20	−.17
Unlawful behavior	.40	.54	.04	.15
Start physical fights (c)	.21	.53	.27	.14
Irritable, aggressive	.40	.52	−.15	.03
Irresponsible parent	.17	.50	.08	.28
Runaway overnight (c)	.07	.11	.65	.19
Often truant (c)	.07	.10	.64	.08
Expulsion/suspension (c)	.15	.18	.63	−.06
Chronic breaking of rules (c)	.19	.16	.61	.06
Poor school grades (c)	.21	.02	.60	.20
Casual sex (c)	−.06	.10	.58	.34
Often lied (c)	.34	.15	.56	.12
Stole (no confrontation) (c)	.15	.30	.55	.09
Delinquency (c)	.10	.52	.55	.03
Frequent marital relationships	.13	.20	.15	.71
Absence of delusions	.07	−.01	.07	.63
Absence of neurosis	.31	.01	.03	.56
Antisocial, unrelated to drugs	.08	.30	.09	.55
Glib, superficial charm	.45	−.02	.19	.54
Not monogamous	.26	.21	.19	.54

Note. High loadings (≥.50) are underlined. APD refers to antisocial personality disorder; (c) designates childhood criteria. For the sake of conciseness, only APD characteristics with high loadings are included.

APD Factors and Diagnostic Systems

The first factor, impaired relationships and deception, focuses almost exclusively on the interpersonal aspects of APD. This factor is remarkably dissimilar to the DSM-III-R (i.e., only 2 of 14 loadings are from DSM-III-R) used currently in the diagnosis of APD. Rather, the first factor would appear to offer convergent validity to the PCL, since Factor 1 of the PCL (Hare, Hakstian, Forth, Hart, & Newman, 1990; Harpur, Hare, & Hakstian, 1989) includes similar dimensions. More specifically, our prototypicality ratings found six criteria from the PCL with high loadings: callous, lack of empathy, pathological lying, lack of affect, conning, lack of sincerity, poor behavioral control, and failure to accept responsibility. With one exception (failure to accept responsibility), these loadings are also found on PCL Factor 1 (Harpur et al., 1989) and suggest a moderate correspondence between the two factors.

The second factor, aggressive behavior, loads heavily on the newly added DSM-III-R childhood criteria; all six of these were included on the second factor (viz., stole from a victim, forced sex, used a weapon in a fight, physical cruelty to people, deliberate firesetting, physical cruelty to animals). In addition, the two adult criteria that are likely to be associated with aggressive behavior (unlawful behavior and physical assaults) also loaded on this factor. Inspection of the second factor in relationship to the 38 adult criteria underscores a pronounced anomaly in DSM-III-R APD diagnosis: The emphasis on violence occurs almost exclusively in the childhood criteria and is conspicuously absent in the adult. We would suspect that if the artifically imposed age restriction (<15) was dropped from the aggressive characteristics, they would assume a more salient role in the definition of APD.

Examination of the third factor, nonviolent delinquency, suggests that a constellation of nonaggressive delinquent acts may constitute a relevantly distinct component of APD. The clear division in prototypicality ratings between aggressive and nonaggressive childhood criteria would suggest that this distinction may be useful in the diagnosis of conduct disorders, if not for APD itself. Interestingly, the aggressive and nonaggressive subtypes of conduct disorders were specified in DSM-III (American Psychiatric Association, 1980, pp. 47–50). In the absence of convincing empirical data, we wonder if their virtual deletion[4] in DSM-III-R (American Psychiatric Association, 1987, p. 56) was not premature.

The fourth and final factor, frequent sexual relationships not attributable to mental illness/substance abuse, combines criteria related to the lack of sustained intimacy with the absence of psychopathological explanations for APD (e.g., delusions, irrational thinking, neurosis, drugs, or alcohol). With respect to the exclusion of certain explanations, each diagnostic system has struggled, at least indirectly, with causal factors of APD. DSM-III excluded individuals whose APD characteristics were "due to" severe mental retardation, schizophrenia, or manic

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[4] The aggressive–nonaggressive dimension is not entirely eliminated; although a "solitary aggressive" type is retained, the clear distinction found in DSM-III is substantially blurred in both "group" and "undifferentiated" types and further confounded by severity ratings.

episodes (American Psychiatric Association, 1980, p. 321); DSM-III-R excluded antisocial behavior that occurred "exclusively during the course of schizophrenia or manic episodes" (American Psychiatric Association, 1987, p. 346). As noted by Rogers and Dion (1991), these exclusion criteria may be less than helpful since the onset of APD is typically in midchildhood, while the emergence of Axis I disorders usually occurs much later. The original PCL attempted a similar exclusion with substance abuse as "not direct cause of antisocial behavior" (Hare, 1991). The obvious problem with this exclusion, at least within correctional samples, is that APD rarely occurs without substance abuse (see Abram, 1990; Collins, Schlenger, & Jordan, 1988), and the etiological significance of these cooccurring disorders remains obscure.

In summary, a review of the four factors in relationship to the diagnostic systems provides several important observations. First, the interpersonal dimensions of APD should not be overlooked. Consistent with current research on the PCL and contrary to DSM-III-R, these dimensions may assume primacy in the conceptualization of APD. Second, aggression and violence appear relevant to APD and should not artificially be limited to youthful behavior (<15 years) as is currently the case with DSM-III-R. Third, nonconformity in childhood as proposed in DSM-III deserves further study, since it is perceived differently from the DSM-III-R emphasis on aggressive behavior. Fourth and finally, questions of etiology that are embedded in the diagnostic criteria (DSM-III, DSM-III-R, and PCL) may confound and confuse our diagnostic thinking about APD.

Rethinking the APD Diagnosis

The prototype approach offers a number of insights for mental disorders (Broughton, 1990; Cantor, Smith, French, & Mezzich, 1980) including the fuzziness of certain diagnoses. Use of prototypic features may clarify a particular diagnosis through the enumeration of core characteristics. In the case of APD, the current polythetic model has deemphasized these core characteristics and resulted in an atheoretical, nonempirical, and nonhierachical list of symptoms. The current prototypical analysis would suggest a rethinking and reorganization of APD. Based on the principal components analysis, APD might be reconceptualized to emphasize impaired relationships and deception, which formed the first factor of this study and is consistent with Factor 1 of the PCL. Both aggressive and nonconforming behavior should be considered separately, a distinction we believe is warranted on the basis of the delinquent literature (see, for example, Hamparian, 1987; Wolfgang & Tracy, 1982). In the assessment of deviant behavior, the central issue is the standard for judging such behavior. Toward this end, we argue that prototypical analysis of educated public may assist in our understanding of antisocial/prosocial dimensions of APD.

As underscored in the introduction, our current understanding of APD appears to be thoroughly muddled, with endless variations that are treated as if they were equal under the rubric of APD. We would argue that the recent adoption of a polythetic model in 1980 as an attempt to introduce greater flexibility into APD has vastly complicated its diagnosis and vitiated its conceptual underpinnings. We

are heartened that the DSM-IV field trials (Hare, Hart, & Harpur, 1991) for APD are testing four alternative sets of criteria, two of which (dyssocial personality disorder and psychopathic personality disorder) prominently include items associated with impaired relationships and deception. We worry, however, about the continued emphasis on a single APD disorder. Instead, we would advocate an investigation of APD subtypes, if not separate-but-related disorders, based on a convergence of factors from (a) prototypic methods and (b) field trial data from APD and non-APD subjects.

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