Questioning the Coherence of Histrionic Personality Disorder

Borderline and Hysterical Personality Subtypes in Adults and Adolescents

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Abstract: After the introduction of histrionic personality disorder (HPD), nosologists struggled to reduce its overlap with borderline personality disorder and other PDs. We studied the coherence of HPD in adults and adolescents as part of 2 larger studies. Clinicians described a random patient with personality pathology using rigorous psychometrics, including the SWAP-II (a Q-sort that captures personality and its pathology in adults) in study 1 and the SWAP-II-A (the adolescent version) in study 2. Using DSM-IV-based measures, we identified patients who met HPD criteria with varying degrees of diagnostic confidence. Central tendencies in the SWAP-II and SWAP-II-A profiles revealed that both the most descriptive and most distinctive features of the patients included some features of HPD but also many features of borderline personality disorder. Q-factor analyses of the SWAP data yielded 3 types of patients in each of the 2 samples. The HPD diagnosis may not be sufficiently coherent or valid.

Key Words: Histrionic personality disorder, hysterical personality, personality pathology, classification, Q-factor analysis, Shedler-Westen assessment procedure.

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The modest amount of research on histrionic personality disorder (HPD) suggests the presence of a persisting difficulty in differentiating HPD from other personality disorders (PDs) (Blagov et al., 2007b). We conducted 2 studies (1 in adults and 1 in adolescents) in an attempt to (*a*) refine empirically the criteria that describe HPD; and (*b*) examine the coherence of the construct by identifying empirical clusters or subtypes of patients with HPD.

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HISTORY OF DIAGNOSTIC CONFUSION

Research on personality pathology benefited from the operationalization of PDs since the Diagnostic and Statistical Manual of Mental Disorders, 3rd edition (DSM-III; American Psychiatric Association, 1980) introduced axis II and explicit diagnostic criteria (Spitzer et al., 1980) and its revised version (DSM-III-R; American Psychiatric Association, 1987) applied polythetic criteria to all PDs (Widiger et al., 1988). The current version of the manual (DSM-IV-TR; American Psychiatric Association, 2000) continues to define PDs as discrete categories with polythetic criteria. However, research has revealed covariation among the disorders that is so substantial that it most likely represents inadequate psychometrics of the diagnostic criteria or the diagnoses (Lilienfeld et al., 1994; Nathan, 1998). Theorists have argued that the covariation among PDs is inflated by the reliance of the DSM on categories to capture dimensional personality phenomena (e.g., Widiger, 1993), by its use of arbitrary cut-offs, and by the expert committee approach to writing criteria sets (and then testing them in the field) instead of selecting criteria empirically from the start (Frances, 1980; Skodol et al., 2002; Westen and Shedler, 2000). HPD, in particular, has the notoriety of a "committee-based concoction" (Hyman, 2002) and a history of repeated efforts by the DSMs' Advisory Boards to rewrite the diagnosis to make it fit the DSM vision of a severe condition that is distinct from other PDs.

DSM-IV-TR (American Psychiatric Association, 2000) defines HPD as a pervasive pattern of excessive emotionality and attention seeking. It evolved out of the notion of hysterical personality and shares its history of diagnostic confusion (Alam and Merskey, 1992; Chodoff, 1974; Pollak, 1981). In DSM-III (American Psychiatric Association, 1980), HPD was introduced to allay concerns over gender bias and to underscore its divergence from conversion and somatization (Spitzer et al., 1980). Some DSM-III criteria were deleted from DSM-III-R (i.e., excitement craving; angry outburst; and manipulative parasuicidality; American Psychiatric Association, 1987) to reduce diagnostic overlap with other conditions, particularly borderline personality disorder (BPD). DSM-III-R reintroduced inappropriate seductiveness and impressionistic speech, whereas DSM-IV (American

Psychiatric Association, 1994) dropped 2 criteria (low frustration tolerance and constant demands for reassurance or praise) that did not contribute internal consistency to HPD (Pfohl, 1991).

Individuals who receive HPD diagnoses commonly also receive borderline, antisocial, narcissistic, or dependent PD diagnoses, and it may be difficult to judge whether the issue at stake is poor discriminant validity, comorbidity, or co-occurrence (Lilienfeld et al., 1994). This is especially true of HPD, because of the limited amount of research and the variability and inconsistency in the use of assessment methods and diagnostic criteria. In studies from 1983 to 1990, HPD was the PD most frequently associated with BPD (Grueniech, 1992). In studies of emotional regulation and identity disturbance (Westen and Heim, 2003; Wilkinson-Ryan and Westen, 2000), a histrionic personality subtype of BPD emerged. Criterion discrimination between HPD and narcissistic personality disorder (NPD) may be poor in the DSM-IV (Blais and Norman, 1997). Associations between HPD and the constructs of Antisocial PD and psychopathy further complicate the picture (Cale and Lilienfeld, 2002; Hamburger et al., 1996; Standage et al., 1984). Concerns regarding sex bias in the diagnosis of HPD (e.g., Ford and Widiger, 1989) have also led to a long-standing debate regarding the future of HPD diagnostic criteria (Sprock, 2000; Widiger, 1998). To make things worse, the DSM arbitrarily sets a high diagnostic threshold for HPD, whereas recent evidence suggests that a mild form of personality pathology similar to hysterical personality and most likely continuous with HPD on a scale of severity may merit clinical attention (Blagov, et al., 2007a).

GOALS OF THE PRESENT STUDIES

Studies 1 and 2 had 2 goals: (*a*) to refine the HPD construct and diagnostic criteria in adults and adolescents; and (*b*) to identify empirical clusters or subtypes of HPD patients. We report data from 2 large NIMH-funded studies of patients from community samples as described by their treating clinicians using reliable measures.

The logic of the first goal is analogous to a field trial (testing of candidate criteria using a large multisite sample), except that field trials tend to test fewer criteria. We collected comprehensive personality descriptions using a standardized instrument consisting of 200 candidate diagnostic criteria. We aggregated the descriptions for patients with HPD to create composites reflecting the core features of the disorder. In large samples, aggregation cancels out idiosyncrasies of individual patients and clinicians (Horowitz et al., 1979). Testing candidate criteria with experienced clinicians in naturalistic settings provides for ecological validity.

The present studies differ from previous research using this method in 3 ways (Shedler and Westen, 2004a; Westen and Shedler, 1999b; Westen et al., 2003). First, instead of asking for a specified PD, which could introduce selection biases, we asked clinicians to follow a procedure designed to select a random patient in their care with any form of personality pathology.

Second, to identify characteristics that define the disorder without assuming the optimality of current diagnostic criteria, we used 2 alternate methods for selecting patients with HPD from the larger sample: (*a*) we selected patients who met DSM-IV criteria for HPD on a symptom checklist; and (*b*) we asked clinicians to rate the extent to which the patient resembled each DSM-IV PD construct overall (using a 5-point scale) without presuming specific criteria.

Third, we captured not only the most descriptive features of HPD but also its most distinctive features. Emotional lability, for example, may be central to HPD but not specific to it. Thus, we generated composite personality descriptions of HPD in 2 ways: (*a*) by aggregating raw item scores across patients with HPD, thus producing a description of the average patient; (*b*) by aggregating descriptions after standardizing (Z-scoring) the items. Procedure (*b*) de-emphasizes items that describe most patients (e.g., dysphoria) and weighs more heavily those items that uniquely distinguish HPD patients. Thus, the descriptions of HPD based on raw data emphasize diagnostic sensitivity; those based on standardized data (Z-scores) emphasize specificity.

A second goal was to identify subtypes of HPD using Q-factor analysis as a step toward the future study of differential etiologies, prognoses, and outcomes within HPD. In those personality disorders that have received the most empirical attention (i.e. Borderline, Antisocial, and Schizotypal PDs and also psychopathy), research has suggested the presence of subtypes (based symptom presentation, trait structure, or developmental trajectory) with significant implications for etiology, prognosis, and treatment (Bradley et al., 2005; Conklin et al., 2006; Hicks et al., 2004; Leihener et al., 2003; Moffitt et al., 1996; Raine, 2006; Walker et al., 1999). For e.g., Conklin et al. (2006) found internalizing, externalizing, and histrionic-impulsive subtypes of BPD based on patients' predominant styles of emotion regulation, whereas Bradley et al., (2005) reported high-functioning internalizing, depressive internalizing, angry externalizing, and histrionic personality subtypes in adolescent girls with BPD. In addition to underscoring the importance of studying the heterogeneity of the personality pathology of patients within a diagnostic category, these studies raise once again the question about the coherence versus heterogeneity of HPD. To our knowledge, previous research has not addressed subtypes in HPD.

Study 2 had the additional goal of examining the extent to which the HPD diagnosis captures the personality pathology of adolescents who receive it. A growing body of research has suggested that personality syndromes are recognizable in adolescence (Grilo et al., 1998; Ludolph et al., 1990; Moffitt et al., 1996; Westen et al., 1990; Wixom et al., 1993). Axis II disorders in adolescence may have prevalence rates similar to those in adults, show some stability over time, and predict axis I and axis II conditions in young adulthood even with childhood axis I disorders held constant (Bernstein et al., 1996; Bernstein et al., 1993; Johnson et al., 1999; Kasen et al., 1999). Adolescent HPD has received relatively little attention.

TABLE 1. Demographic Characteristics of the Overall Samples of Adult (N = 1201) and Adolescent (N = 950) Patients and the Subsamples of Adults (N = 93) and Adolescents (N = 78) With HPD

	Adult		Adolescent	
	All	HPD	All	HPD
Clinicians				
Discipline (%)				
Psychiatry	29.5	28.0	28.3	45.5
Psychology	70.5	72.0	71.7	54.5
Sex (%)				
Women	45.8	54.8	42.4	60.5
Men	54.2	45.2	57.6	39.5
Experience				
M (yr)	19.8	20.4	18.5	16.6
SD	9.2	8.4	8.6	7.4
Patients				
Age (yr)				
M	42.3	40.5	15.6	15.6
SD	12.3	13.3	1.6	1.6
Sex (%)				
Women	53.3	69.9	50.7	80.5
Men	46.7	30.1	49.3	19.5
Ethnicity (%)				
White	82.6	88.2	78.7	79.2
African-American	6.6	5.4	7.8	5.2
Hispanic	5.9	3.2	7.2	9.1
Other	4.9	3.2	6.3	7.5
SES (%)				
Poor	5.8	6.5	5.9	9.1
Working class	27.5	35.5	19.2	15.6
Middle class	38.8	28.0	40.7	45.5
Upper/upper middle	27.9	30.0	34.2	29.9
Treatment characteristics				
Length (mo)				
M	13.6	14.3	12.4	12.8
SD	8.4	8.4	10.1	8.6
Md	13	15	10.0	11.0
Theoretical orientation (%)				
Eclectic	43.2	44.1	52.1	62.8
Psychodynamic cognitive	25.8	24.7	18.7	15.4
Behavioral	18.2	17.2	20.5	9.0
Biological	3.7	6.5	3.4	7.7
Other	9.1	7.5	5.3	5.1
Marital status (%)				
Married/cohabiting	38.8	71.0	—	—
Single/divorced	61.2	29.0	—	—
Global functioning (GAF)				
M	57.9	55.6	56.8	53.2
SD	1.8	1.8	9.8	9.7
Primary				
Dysthymia	46.3	46.3	40.8	30.8
Axis I				
Major depression	37.6	4.9	27.6	28.2
Diagnosis (%)				
GAD/anxiety NOS	32.7	28.7	26.8	32.1
Adjustment disorder	16.1	24.7	23.9	17.9
Substance use	18.8	23.7	17.4	25.6
Eating disorder	—	—	12.5	20.4
ADHD	—	—	27.5	32.1
Conduct disorder	—	—	33.9	17.9
Clinical setting (%)				
Private practice	73.1	65.2	70.3	74.0
Clinic	16.8	20.7	18.1	11.7
Inpatient/residential	4.7	5.4	6.1	7.8
Forensic	2.8	3.3	2.1	1.3
Other/school	2.6	5.4	3.3	5.2

STUDY 1: THE HISTRIONIC DIAGNOSIS IN ADULTS

Methods

Participants

We contacted a probability sample of psychiatrists and psychologists with at least 5 years of experience from the American Psychiatric and Psychological Associations. Participating clinicians (N = 1201) received $200 for a 2-hour procedure. We asked them to describe a current adult patient "who has enduring pattern of thoughts, feeling, motivation, or behavior—that is, personality problems—that cause distress or dysfunction." To broaden the range of personality pathology, we emphasized that patients need not have a PD diagnosis. They had to be at least 18 years of age, free of psychosis, and known well by the clinician (at least 6 clinical hours but less than 2 years of therapy, to minimize the effects of treatment on personality). To minimize selection biases, we directed clinicians to select the last patient they saw during the previous week who met study criteria. Over 95% of clinicians reported adhering to the procedures. Table 1 summarizes the demographic characteristics.

Measures

The Clinical Data Form asks for demographic data on the clinician (including theoretical orientation and years of experience) and the patient. Such data correlate highly (r = 0.60–0.80) with those obtained by interview (Westen and Muderrisoglu, 2003; Westen et al., 1997).

The axis II checklist lists the axis II PD symptoms randomized. Clinicians rated each symptom as present or absent as in DSM-IV. We used these data to derive DSM-IV PD diagnoses without having to depend on clinicians' global judgment. Results from this method tend to mirror such structured interviews as the SCID-II (Blais and Norman, 1997; First et al., 1997; Morey, 1988; Westen et al., 2003).

In the PD construct rating, clinicians rated on a 5-point scale the extent to which the patient was prototypical of each PD using as guides the 1-sentence DSM-IV summaries of the disorders (e.g., "the essential feature of HPD is pervasive and excessive emotionality and attention-seeking behavior," American Psychiatric Association, 2000). Ratings of 3 corresponded to "features" of the disorder, and ratings of 4 and 5 corresponded to "caseness." Thus, we could identify patients whom clinicians would consider "having" HPD, without consulting DSM-IV cut-offs.

The Shedler-Westen Assessment Procedure-II (SWAP-II) (Westen and Shedler, 1999a, 2000; 2007) is the revised SWAP-200, a Q-sort for assessing personality and its pathology. An experienced clinician rank-orders 200 statements into categories (piles) from nondescriptive (0) to highly descriptive (7) of the patient with intermediate piles implying varying degrees of relevance. Clinicians sort the items in a fixed distribution based on data from a clinical interview or psychotherapy with the patient. It resembles the right half of a normal distribution, 100 items in pile 0 and progressively fewer items in each higher category. Thus, the SWAP-II yields a 0 to 7 score for each of 200 items derived from such sources as DSM-III-R and DSM-IV axis II criteria, clinical and empirical literature on personality pathology, research on normal traits and psychological health, and pilot interviews. The item set was developed over several years using standard psychometric methods such as asking hundreds of experienced clinicians to use it over several iterations and to comment on anything important about the patient's personality they could not describe with the item set, eliminating empirically redundant items, eliminating or rewriting items with minimal variance, and so forth. Research supports the reliability and validity of the SWAP-II and its adolescent version (Westen and Shedler, 2007).

Statistical Procedures and Analyses

To identify patients with HPD, we applied DSM-IV algorithms to the axis II checklist and used them along with the PD construct rating to avoid relying on less reliable global decisions regarding the presence of the disorder. Research suggests that DSM-III-R and DSM-IV algorithms may yield undesirably high patterns of comorbidity on axis II, whereas prototype matching may offer a reliable alternative (Westen et al., 2006). Therefore, we examined a subsample based on the DSM-IV algorithms, and we also examined a subsample identified by requiring a high rating (caseness) on the PD construct rating.

Descriptive and distinctive characteristics: to create prototypes or composite profiles of HPD patients, independent of the diagnostic measures, we calculated mean rankings first for the raw SWAP-II item rankings and then for their Z-scores (standardized across the overall clinical sample). By taking the items with the highest mean ranks, we were able to construct prototypes for HPD that consisted of items that were most descriptive of *HPD* patients regardless of the extent to which the items were descriptive of patients without HPD. By taking the items with the highest mean Z-scores, we were able to construct prototypes that were most distinctive of HPD, as they tended to be unique to the patients in the HPD sample relative to the overall sample. In each case, we focused on the top 18 items or correlations, because the fixed distribution of the SWAP-II allows 18 items to receive the highest ranks of 7 or 6 that correspond to great confidence that the items describe the patient well.

Empirical derivation of disorder subtypes with exploratory Q-factor analysisQ-analysis is a set of procedures for identifying naturally occurring groups such as people who share personality features (Block, 1978; Block et al., 1991; Colvin et al., 1995; John and Robins, 1994; Shedler and Block, 1990) or personality pathology (Westen and Shedler, 1999b). Q-analysis with the SWAP-II follows factor-analytic convention familiar from trait research, but instead of correlating items across patients it correlates patients across items. In other words, it intercorrelates SWAP-II profiles to extract groups of patients who resemble one another and differ from others in the sample. To determine how many Q-factors to extract, an initial extraction is performed and only components with eigenvalues of 1 or higher are retained (Keiser criteria). Examination of the scree plot and percent of variance accounted for then determines the number of factors to extract. These factors can be rotated to create orthogonal or oblique solutions. SWAP-II items with the highest loadings on a factor can be used to write a prototype that describes that group of patients. To maximize the accuracy of estimation in a relatively small sample, we used an unweighted least squares (ULS) extraction. The Promax rotation is an oblique rotation appropriate when factors are intercorrelated, and it is more likely to reflect the realities of personality than an orthogonal rotation. We used a Promax rotation with $\kappa = 2$ to balance the need for ecological validity with the taxonomic need for obtaining relatively independent Q-factors.

RESULTS

Composite SWAP-II Profiles of HPD

Based on DSM-IV algorithms applied to the axis II checklist, 132 patients met HPD criteria. On the PD construct rating, 54 patients received ratings of caseness. Of the patients who met DSM-IV criteria on the checklist, only 33 also received a rating of 4 or 5 on the construct rating, whereas 93 received ratings of 3 (features) or higher. We examined the SWAP-II profiles of the patients from the first 2 groupings for descriptive and distinctive characteristics (Table 2).

Most Descriptive Characteristics

Table 2 shows the SWAP-II items with 18 highest mean scores (ranks from 1 to 30 are boldface) for the sample based on the axis II checklist ($N = 132$). SWAP-II items corresponding to 4 out of the 8 DSM-IV criteria for HPD (criteria 2, 4, 5, and 7) did not make this list. Instead, the patients seemed to have a mixture of features linked to BPD and HPD (emotional dysregulation, rejection sensitivity, etc.). For the sample based on the PD construct rating ($N = 54$, Table 2), the SWAP-II items with highest means similarly described emotional dysregulation and conceptually resembled BPD much more closely than they did HPD. In fact, 4 out of 8 DSM-IV criteria for HPD (criteria 2, 4, 5, and 7) were not represented among the 18 top-ranking items. Thus, clinicians did not see many of DSM-IV's HPD criteria as central when describing patients with HPD. On an average, patients with HPD tended to present as anxious, depressed, emotionally labile, dependent, dramatic, and demanding of attention.

Most Distinctive Characteristics

Table 2 lists in boldface the SWAP-II items with highest mean Z-scores for the sample based on DSM-IV

TABLE 2. Most Descriptive and Most Distinctive Personality Characteristics of Adult Patients With Histrionic Personality Disorder

		Descriptive Rank*		Distinctive Rank*	
	SWAP-II Item	**A-II**	**CR**	**A-II**	**CR**
74	**Expresses emotion in exaggerated and theatrical ways.[a]**	**5**	**1**	**1**	**1**
48	**Seeks to be the center of attention.[a]**	**15**	**17**	**2**	**2**
191	**Emotions tend to change rapidly and unpredictably.[a]**	**16**	**11**	**8**	**4**
134	Tends to be impulsive.[b,c]	**8**	**19**	6	**14**
14	Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	**17**	**16**	**28**	**17**
157	Tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning.[b]	**13**	**7**	**29**	**9**
117	Is unable to soothe or comfort him/herself without the help of another person (i.e. has difficulty regulating own emotions).	**7**	4	**25**	**12**
11	**Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship.[a]**	**11**	**25**	**7**	**20**
194	Tends to be manipulative.[b,c]	**21**	**21**	**14**	**11**
12	Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.[d]	**1**	**2**	32	**7**
8	Tends to get into power struggles.	**14**	**14**	50	**30**
34	**Tends to be sexually seductive or provocative (eg may be inappropriately flirtatious, preoccupied with sexual conquest, prone to "lead people on," etc.).[a]**	**24**	35	**3**	**5**
153	Relationships tend to be unstable, chaotic, and rapidly changing.[b]	**23**	43	**10**	**29**
98	Tends to fear she/he will be rejected or abandoned.[b]	**2**	**5**	112	97
77	Tends to be needy or dependent.	**3**	**3**	62	37
35	Tends to feel anxious.	**4**	**8**	142	141
189	Tends to feel unhappy, depressed, or despondent.	**6**	**18**	160	183
127	Tends to feel misunderstood, mistreated, or victimized.	**9**	6	93	50
103	Tends to react to perceived slights or criticism with rage and humiliation.[b,c]	**10**	**10**	34	33
9	When upset, has trouble perceiving both positive and negative qualities in the same person at the same time; sees others in black or white terms (e.g. may swing from seeing someone as caring to seeing him/her as malevolent and intentionally hurtful).	**12**	**13**	40	157
90	Is prone to painful feelings of emptiness (e.g. may feel lost, bereft, abjectly alone even in the presence of others, etc.).[b]	**20**	**12**	126	88
148	Has little psychological insight into own motives, behavior, etc.	**18**	**24**	38	52
190	Seems to feel privileged and entitled; expects preferential treatment.[d]	**26**	51	**11**	35
73	Tends to "catastrophize"; is prone to see problems as disastrous, unsolvable, etc.	33	**9**	101	**15**
97	**Tends to use his/her physical attractiveness to an excessive degree to gain attention or notice.[a]**	51	61	**4**	**6**
53	Seems to treat others primarily as an audience to witness own importance, brilliance, beauty, etc.[d]	58	84	**5**	**13**
5	Tends to be emotionally intrusive (e.g. may not respect other people's needs for autonomy, privacy, etc.).	35	55	**9**	**23**
154	Tends to draw others into scenarios, or "pull" them into roles, that feel alien or unfamiliar (e.g. being uncharacteristically insensitive or cruel, feeling like the only person in the world who can help, etc.).	137	129	**17**	**16**
72	**Tends to perceive things in global and impressionistic ways (e.g. misses details, glosses over inconsistencies, mispronounces names).[a]**	73	31	**22**	**3**
18	Tends to stir up conflict or animosity between other people (e.g. may portray a situation differently to different people, leading them to form contradictory views or work at cross purposes).	103	73	**21**	**8**
71	Tends to seek thrills, novelty, excitement, etc.; seems to require a high level of stimulation.	79	76	**16**	**22**
36	Tends to feel helpless, powerless, or at the mercy of forces outside his/her control.	32	**15**	167	107
132	Tends to have numerous sexual involvements; is promiscuous.	83	121	**12**	42
4	Has an exaggerated sense of self-importance (e.g. feels special, superior, grand, or envied).[d]	34	45	**13**	32
3	Takes advantage of others; is out for number one.	82	106	**15**	40
113	Experiences little or no remorse for harm or injury caused to others.[c]	98	139	**18**	65
107	Tends to express qualities or mannerisms traditionally associated with own gender to an exaggerated or stereotypical degree (i.e. a hyper-feminine woman; a hyper-masculine, "macho" man).	151	102	45	**10**
10	Believes that some important other has a special, seemingly magical ability to know his/her innermost thoughts or feelings (e.g. imagines rapport is so perfect that ordinary communication is superfluous).	165	137	51	**18**

*The table lists the SWAP-II items with the 18 highest ranking mean scores (M) and mean Z-scores (M_Z) for each of 2 diagnostic methods: DSM-IV diagnosis on an Axis II symptom checklist (A-II, $N = 132$) or meeting a "caseness" cut-off on a DSM-IV Personality Disorder construct rating task (CR, $N = 54$). Ranks of 30 or less are in boldface.

Similar to a DSM-IV symptom of the following:

[a]Histrionic.

[b]Borderline.

[c]Antisocial Personality Disorder.

[d]Narcissistic.

A-II indicates axis II checklist; CR, construct rating.

algorithms ($N = 132$). Relative to the overall sample, these patients were characterized by features of HPD and NPD, and also by impulsive, thrill seeking, and manipulative features linked to psychopathy. Three DSM-IV HPD symptoms (5, 6, and 7) were not represented. Six SWAP-II items that corresponded to DSM-IV HPD symptoms (criteria 1 through 6) emerged as having the highest mean Z-scores in the sample based on the PD construct rating ($N = 54$). They were followed by a number of items that describe features linked to BPD. The DSM-IV criteria for HPD numbered 7 and 8 were missing among the 30 top-ranking items from in this list.

Suggestibility, currently a DSM-IV symptom criterion for HPD (criteria 7) was neither descriptive nor distinctive. Many of the current DSM symptoms (criteria 2, 4, 5, and 8) may be distinctive of HPD without being highly descriptive of it. Thus, patients for whom inappropriate sexualization, the use of physical appearance to draw attention, impressionistic thought, and exaggeration of the intimacy of relationships are central personality features are likely to have HPD. However, these characteristics are not the most central ones for most HPD patients. Other highly descriptive items had little in common with the DSM-IV definition of HPD and instead tapped into anxiety, depression, and such features of borderline personality as rejection sensitivity, idealization/devaluation, and feelings of emptiness. On the other hand, SWAP-II items corresponding to 3 DSM-IV symptoms (attention craving, rapidly shifting emotions, and dramatic emotional expression) emerged as both descriptive and distinctive of HPD. Thus, they are features shared by most HPD patients and they also distinguish these individuals from other patients. However, the descriptive and distinctive characteristics of HPD also included personality characteristics that are highly descriptive of BPD (American Psychiatric Association, 2000; Conklin and Westen, 2005).

Q-Factor Analysis

We examined a subsample based on the axis II checklist diagnosis of HPD and a rating of 3 or higher for HPD on the PD construct task (Table 1 for demographic characteristics). We subjected the SWAP-II profiles of these patients to principal components analysis. An examination of the scree plot pointed to a 4 Q-factor solution. We conducted an ULS extraction of 4 factors with a Promax rotation ($\kappa = 2$). The 4 Q-factors (patient groupings) were interpretable. In Q-factor analysis, participants receive factor loadings and items receive factor scores. Examining factor loadings greater than .30 allowed us to classify 81 of 93 patients into one of the 4 groups. Table 3 lists the 18 SWAP-II items with highest factor scores for each of the HPD subtypes.

The first group ($N = 29$) could best be described as impulsive borderline personality. Only 2 of the SWAP-II items that best described this subtype corresponded to DSM-IV criteria for HPD (rapidly shifting emotions and excessive emotionality) We labeled the second group ($N = 21$) angry/hostile borderline personality as it resembled features seen in angry patients with BPD or acute irritable hypomania. The description for this subtype contained only one SWAP-II item that corresponded to a DSM-IV symptom of HPD (excessive emotionality). The third group ($N = 17$) was markedly different, as its SWAP-II profile contained 5 HPD symptoms (all but rapidly shifting/shallow emotions and the 2 cognitive symptoms: impressionistic speech and suggestibility) and items tapping into psychological health, positive emotionality, and narcissism. Because of the apparent high functioning of these patients, we labeled the group hysterical personality to distinguish it from HPD. Finally, the 14 patients in the fourth group, dependent personality, had a resemblance to dependent PD (DPD) with only 1 DSM-IV HPD symptom appearing in the SWAP-II description (suggestibility). Thus, consistent with data from the most distinctive characteristics approach, the data from Q-factor analysis suggest that HPD could not adequately capture the personalities of patients with a DSM-IV diagnosis of HPD.

STUDY 2: THE HISTRIONIC DIAGNOSIS IN ADOLESCENTS

Methods

Participants

We recruited psychiatrists and psychologists who treated adolescents via a practice network (as in study 1). Participating clinicians ($N = 950$) provided data on the last patient they saw the week before who met study criteria and was in treatment for "enduring pattern of thoughts, feeling, motivation, or behavior—that is, personality problems—that cause distress or dysfunction." We instructed clinicians to disregard the applicability caveats in the DSM-IV regarding adolescent PD diagnoses. To obtain a broad range of personality pathology, we emphasized that patients must have personality problems but need not have a PD diagnosis. We asked clinicians to select a patient whose personality they knew well, using as limits at least 6 contact hours but no more than 2 years. The exclusion criteria were chronic psychosis and mental retardation. To maximize participation, we offered clinicians to respond on paper or over a secure website (psychsystems.net). As in previous research (e.g., Conklin et al., 2006), we found no systematic differences between the 2 methods. We stratified the patient sample by age (13–18) and gender but not by any particular diagnosis. Clinicians received a $200 honorarium. Table 1 presents the sample characteristics.

Measures

The axis II checklist and PD construct ratings were identical to the ones we used in study 1. The other 2 measures were the age-appropriate analogs of the clinical data form and the SWAP-II. The clinical data form–adolescent version collects such additional information as residential arrangements (e.g., custody) and current school functioning. The SWAP-II-A resembles the SWAP-200 and SWAP-II in its development and psychometrics but differs in the wording of some items to reflect constructs related to personality disturbance and psychological health in adolescents.

Statistical Procedures and Analyses

To identify adolescents with HPD, to create composite profiles with their most descriptive and distinctive character-

TABLE 3. Personality Subtypes of Patients With Histrionic Personality Disorder From the Adult and the Adolescent Samples

Subtypes in the Adult Sample

Q-factor 1: Borderline personality items (factor scores in parentheses)

Is prone to intense anger, out of proportion to the situation at hand (e.g. has rage episodes). (2.77) Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc. (2.61) Tends to be angry or hostile (whether consciously or unconsciously). (2.58) Tends to have extreme reactions to perceived slights or criticism (e.g. may react with rage, humiliation, etc.). (2.48) Tends to feel misunderstood, mistreated, or victimized. (2.47) Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices. (2.46) Expresses emotion in exaggerated and theatrical ways. (2.41) Tends to get into power struggles. (2.30) When upset, has trouble perceiving both positive and negative qualities in the same person at the same time (e.g. may see others in black or white terms, shift suddenly from seeing someone as caring to seeing him/her as malevolent and intentionally hurt. (2.06) Emotions tend to change rapidly and unpredictably. (2.05) Tends to act impulsively (e.g. acts without forethought or concern for consequences). (2.00) Tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning. (1.96) Has little psychological insight into own motives, behavior, etc. (1.95) Is unable to soothe or comfort him/herself without the help of another person (i.e. has difficulty regulating own emotions). (1.93) Tends to "catastrophize"; is prone to see problems as disastrous, unsolvable, etc. (1.84) Tends to hold grudges; may dwell on insults or slights for long periods. (1.82) Tends to feel unhappy, depressed, or despondent. (1.79) Relationships tend to be unstable, chaotic, and rapidly changing. (1.72)

Q-factor 2: Hysterical personality

Tends to be energetic and outgoing. (3.27) Seeks to be the center of attention. (3.27) Tends to use his/her physical attractiveness to an excessive degree to gain attention or notice. (2.85) Tends to be sexually seductive or provocative (e.g. may be inappropriately flirtatious, preoccupied with sexual conquest, prone to "lead people on," etc.). (2.85) Tends to be liked by other people. (2.29) Seems comfortable and at ease in social situations. (2.28) Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship. (2.26) Is able to use his/her talents, abilities, and energy effectively and productively. (2.12) Enjoys challenges; takes pleasure in accomplishing things. (2.09) Seems to feel privileged and entitled; expects preferential treatment. (2.05) Expresses emotion in exaggerated and theatrical ways. (2.03) Has a good sense of humor. (2.02) Has an exaggerated sense of self-importance (e.g. feels special, superior, grand, or envied). (2.02) Attempts to avoid or flee depressive feelings through excessive optimism, activity, energy, etc. (1.94) Seems to treat others primarily as an audience to witness own importance, brilliance, beauty, etc. (1.91) Fantasizes about ideal, perfect love. (1.87) Tends to seek thrills, novelty, excitement, etc.; seems to require a high level of stimulation. (1.82) Is able to assert him/herself effectively and appropriately when necessary. (1.75)

Q-factor 3: Dependent personality

Tends to be needy or dependent. (3.40) Tends to feel anxious. (3.30) Tends to feel guilty (e.g. may blame self or feel responsible for bad things that happen). (3.21) Tends to feel she/he is inadequate, inferior, or a failure. (3.09) Tends to feel helpless, powerless, or at the mercy of forces outside his/her control. (2.73) Tends to fear she/he will be rejected or abandoned. (2.70) Tends to feel unhappy, depressed, or despondent. (2.26) Tends to be ingratiating or submissive (e.g. consents to things she/he does not want to do, in the hope of getting support or approval). (2.25) Has trouble acknowledging or expressing anger toward others, and instead becomes depressed, self-critical, self-punitive, etc. (i.e. turns anger against self). (2.21) Tends to feel ashamed or embarrassed. (2.04) Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc. (1.89) Tends to express anger in passive and indirect ways (e.g. may make mistakes, procrastinate, forget, become sulky, etc.). (1.88) Tends to be suggestible or easily influenced. (1.71) Tends to ruminate; may dwell on problems, replay conversations in his/her mind, become preoccupied with thoughts about what could have been, etc. (1.62) Is self-critical; sets unrealistically high standards for self and is intolerant of own human defects. (1.59) Is unable to soothe or comfort him/herself without the help of another person (i.e. has difficulty regulating own emotions). (1.56) Tends to get drawn into or remain in relationships in which she/he is emotionally or physically abused, or needlessly puts self in dangerous situations (e.g. walking alone or agreeing to meet strangers in unsafe places). (1.53) Is prone to painful feelings of emptiness (e.g. may feel lost, bereft, abjectly alone even in the presence of others, etc.). (1.53)

Subtypes in the Adolescent Sample

Q-factor 1: Thrill seeking/manipulative personality (factor scores in parentheses)

Tends to seek thrills, novelty, excitement, etc.; seems to require a high level of stimulation. (3.22) Tends to act impulsively (e.g. acts without forethought or concern for consequences). (3.03) Tends to be manipulative. (2.72) Seeks to be the center of attention. (2.49) Tends to be sexually seductive or provocative (e.g. may be inappropriately flirtatious, preoccupied with sexual conquest, prone to use his/her physical attractiveness to an excessive degree to gain notice). (2.42) Is rebellious or defiant toward authority figures; tends to be oppositional, contrary, quick to disagree, etc. (2.39) Tends to be deceitful; tends to lie or mislead. (2.13) Seems impervious to consequences; seems unable or unwilling to modify behavior in response to threats or negative consequences. (2.09) Expresses emotion in exaggerated and theatrical ways. (2.07) Relationships tend to be unstable, chaotic, and rapidly changing. (2.02) Is prone to intense anger, out of proportion to the situation at hand (e.g. has rage episodes). (1.88) Tends to run away from home. (1.86) Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices. (1.82) Takes advantage of others; has little investment in moral values (e.g. puts own needs first, uses or exploits people with little regard for their feelings or welfare, etc.). (1.81) Is sexually promiscuous for a person of his/her age, background, etc. (1.81) Tends to be unreliable and irresponsible (e.g. may fail to meet school or work obligations). (1.79) Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship. (1.76) Has an exaggerated sense of self-importance (e.g. feels special, superior, grand; believes she/he is the object of envy; tends to boast or brag). (1.70)

Q-factor 2: Angry borderline personality

Tends to have extreme reactions to perceived slights or criticism (e.g. may react with rage, humiliation, etc.). (3.48) Tends to feel misunderstood, mistreated, or victimized. (3.06) Is prone to intense anger, out of proportion to the situation at hand (e.g. has rage episodes). (2.55) Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices. (2.54) Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc. (2.46) Expresses emotion in exaggerated and theatrical ways. (2.46) When upset, has trouble perceiving both positive and negative qualities in the same person at the same time (e.g. may see others in black or white terms, shift suddenly from seeing someone as caring to seeing him/her as malevolent and intentionally hurtful, etc.). (2.31) Attempts to avoid feeling helpless or depressed by becoming angry instead. (2.12) Tends to be angry or hostile (whether consciously or unconsciously). (2.01) When distressed, tends to revert to earlier, less mature ways of coping (e.g. clinging, whining, having tantrums). (1.98) Tends to

(*Continued*)

TABLE 3. (*Continued*)

Subtypes in the Adolescent Sample
become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning. (1.97) Has little psychological insight into own motives, behaviour, etc. (1.97) Tends to be critical of others. (1.96) Tends to fear she/he will be rejected or abandoned. (1.96) Tends to hold grudges; may dwell on insults or slights for long periods. (1.92) Emotions tend to change rapidly and unpredictably. (1.89) Is unable to soothe or comfort him/herself without the help of another person (i.e. has difficulty regulating own emotions). (1.71) Tends to feel unhappy, depressed, or despondent. (1.66)
Q-factor 3: Dependent borderline personality
Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship. (3.39) Tends to be needy or dependent. (2.94) Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc. (2.82) Tends to be suggestible or easily influenced. (2.70) Is unable to soothe or comfort him/herself without the help of another person (i.e. has difficulty regulating own emotions). (2.41) Tends to feel unhappy, depressed, or despondent. (2.36) Lacks a stable sense of who she/he is (e.g. attitudes, values, goals, and feelings about self seem unstable or ever-changing). (2.35) Tends to fear she/he will be rejected or abandoned. (2.23) Relationships tend to be unstable, chaotic, and rapidly changing. (2.11) Emotions tend to change rapidly and unpredictably. (2.08) Tends to feel she/he is inadequate, inferior, or a failure. (2.04) Fantasizes about ideal, perfect love. (2.02) Seems to fear being alone; may go to great lengths to avoid being alone. (2.01) Is prone to idealizing people; may see admired others as perfect, larger than life, all wise, etc. (1.99) Is sexually promiscuous for a person of his/her age, background, etc. (1.96) Tends to be sexually seductive or provocative (e.g. may be inappropriately flirtatious, preoccupied with sexual conquest, prone to use his/her physical attractiveness to an excessive degree to gain notice). (1.93) Tends to engage in self-mutilating behavior (e.g. self-cutting, self-burning, etc.). (1.92) Is prone to painful feelings of emptiness (e.g. may feel lost, bereft, abjectly alone even in the presence of others, etc.). (1.87)

istics independent of the diagnostic measures, and to derive empirically disorder subtypes, we applied the same procedures as in study 1.

RESULTS

Composite SWAP-II Profiles of HPD in Adolescents

Based on axis II checklist data, 102 patients met DSM-IV HPD criteria. On the PD construct rating, 51 patients received ratings of caseness (4 or 5). Of the patients who met DSM-IV criteria, 78 received construct ratings of 3 (features) or higher. As in study 1, we examined the SWAP-II-A profiles of the patients from the first 2 groupings for descriptive and distinctive characteristics, see Table 4.

Most Descriptive Characteristics

Table 4 shows the SWAP-II-A items with 30 highest mean scores for the sample based on the DSM-IV algorithm ($N = 102$). SWAP-II-A items corresponding to the cognitive DSM-IV symptoms of HPD (criterion 5, impressionistic speech, and 7, suggestibility) and the use of physical appearance criterion (4) did not make this list. As in study 1, the patients appeared to have a mixture of features linked to HPD and BPD, as well as isolated features linked to narcissism and psychopathy. For the sample based on the PD construct rating ($N = 51$), the findings were quite similar. Thus, results from the most descriptive characteristics approach suggested that the cognitive DSM-IV criteria for HPD were not central to understanding adolescents with the HPD diagnosis. On an average, the personalities of adolescents with HPD could best be described as emotionally dysregulated, attention seeking, manipulative, impulsive, thrill seeking, rejection sensitive, and also angry and despondent.

Most Distinctive Characteristics

Analogous to the display in study 1, Table 4 lists the SWAP-II-A items with highest mean Z-scores for the DSM-based ($N = 102$) and the PD construct-based sample ($N = 51$). Relative to the overall sample, these adolescents were characterized by features of HPD (less the cognitive symptoms) and NPD, and also by impulsivity, thrill seeking, and manipulativeness. Certain features of BPD present among the most descriptive characteristics did not rank highly among the most distinctive characteristics (e.g., dysregulation of anger or sadness, unstable self-image, fears of rejection, and difficulty self-soothing). Instead, a greater number of features related to narcissism and to exaggerated or maladaptive gender, romantic, and social role functioning emerged as most distinctive.

Q-Factor Analysis

We examined a subsample based on the axis II checklist diagnosis of HPD and a rating of 3 or higher for HPD on the PD construct task (Table 1 for demographic characteristics). We subjected the SWAP-II profiles of these patients to principal components analysis. An examination of the screen plot pointed to a 3 or a 4 Q-factor solution. We conducted an ULS extraction of 3 factors with a Promax rotation ($\kappa = 2$), because the 3 Q-factor solution (3 patient groupings) was most interpretable. In Q-factor analysis, participants receive factor loadings and items receive factor scores. Examining factor loadings greater than .30 allowed us to classify 78 of 93 patients (84%) into one of the 3 groups. Table 3 lists the 18 SWAP-II items with highest factor scores for each of the HPD subtypes.

The largest group (N = 43) could best be described as borderline personality. Only 2 of the SWAP-II items that best described this subtype corresponded to DSM-IV criteria for HPD (rapidly shifting emotions and excessive emotionality). The second group (N = 18) was markedly different, as its SWAP-II profile contained 5 HPD symptoms (all but rapidly shifting/shallow emotions and the 2 cognitive symptoms: impressionistic speech and suggestibility) and items tapping into psychological health, positive emotionality, and narcissism. Because of the apparent high functioning of these patients, we labeled the group hysterical personality to distinguish it from HPD. Finally, the 17 patients in the third

TABLE 4. Most Descriptive and Most Distinctive Personality Characteristics of Adolescent Patients With HPD

		Descriptive Rank*		Distinctive Rank*	
	SWAP-II Item	**A-II**	**CR**	**A-II**	**CR**
74	**Expresses emotion in exaggerated and theatrical ways.[a]**	**3**	**2**	**2**	**1**
48	**Seeks to be the center of attention.[a]**	**10**	**5**	**4**	**2**
191	**Emotions tend to change rapidly and unpredictably.[a]**	**6**	**4**	**13**	**4**
194	Tends to be manipulative.[c,d]	**4**	**6**	**11**	**7**
11	**Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship.[a]**	**8**	**19**	**5**	**6**
134	Tends to be impulsive.[b,c]	**2**	**3**	**16**	**13**
34	**Tends to be sexually seductive or provocative (e.g. may be inappropriately flirtatious, preoccupied with sexual conquest, prone to use his/her physical attractiveness to an excessive degree to gain notice).[a]**	**20**	**21**	**1**	**3**
185	Is prone to intense anger, out of proportion to the situation at hand.[b]	**11**	**12**	**26**	**23**
71	Tends to seek thrills, novelty, excitement, etc.; seems to require a high level of stimulation.	**23**	**30**	**8**	**16**
12	Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	**1**	**1**	32	**5**
157	Tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning.[b]	**18**	**7**	50	**15**
103	Tends to react to perceived slights or criticism with rage and humiliation.[b,c]	**22**	**11**	45	**26**
153	Relationships tend to be unstable, chaotic, and rapidly changing.[b]	**21**	35	**3**	**19**
9	When upset has trouble perceiving the same qualities in the same person at the same time (e.g. may see others in black or white terms, shift suddenly from seeing someone as caring to seeing him/her as malevolent and intentionally hurtful, etc.).	**5**	**8**	38	35
14	Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	**7**	**9**	39	42
117	Is unable to soothe or comfort him/herself without the help of another person (i.e. has difficulty regulating own emotions).	**17**	**14**	51	33
15	Lacks a stable sense of who she/he is (e.g. attitudes, values, goals, and feelings about self seem unstable or everchanging).[b]	**12**	**22**	42	64
77	Tends to be needy or dependent.	**25**	**10**	97	31
16	Tends to be angry or hostile (whether consciously or unconsciously).	**16**	**20**	85	88
127	Tends to feel misunderstood, mistreated, or victimized.	**9**	**29**	95	164
189	Tends to feel unhappy, depressed, or despondent.	**15**	**13**	149	171
98	Tends to fear she/he will be rejected or abandoned.[b]	**14**	**24**	111	127
4	Has an exaggerated sense of self-importance (e.g. feels special, superior, grand; believes she/he is the object of envy; tends to boast or brag).[d]	36	43	**7**	**10**
132	Is sexually promiscuous for a person of his/her age, background, etc.	46	60	**6**	**11**
154	Tends to draw others into scenarios, or "pull" them into roles, that feel alien or unfamiliar (e.g. feeling or acting uncharacteristically insensitive or sadistic, feeling like the only one in the world who can help, etc.).	132	139	**9**	**9**
53	Seems to treat others primarily as an audience to witness own importance, brilliance, beauty, etc.[d]	91	86	**14**	**14**
143	Tends to believe she/he can only be appreciated by, or should only associate with, people who are high-status, superior, or otherwise "special."[d]	111	131	**12**	**21**
181	Tends to choose sexual or romantic partners who seem inappropriate in terms of age, status (e.g. social, economic, intellectual), etc.	58	73	**15**	**22**
171	Seems to fear being alone; may go to great lengths to avoid being alone.	40	32	**29**	**8**
107	Tends to express qualities or mannerisms traditionally associated with own gender to an exaggerated degree (i.e. a hyperfeminine girl; a hypermasculine, "macho" boy).	140	132	**28**	**12**
20	Tends to be deceitful; tends to lie or mislead.[c]	**27**	56	**17**	69
148	Has little psychological insight into own motives, behavior, etc.	**13**	31	47	95
92	Is articulate; expresses self well in words.	57	**15**	190	90
49	When distressed, tends to revert to earlier, less mature ways of coping (e.g. clinging, whining, and having tantrums).	31	**16**	107	40
35	Tends to feel anxious.	33	**17**	167	124
18	Tends to stir up conflict or animosity between other people (e.g. may portray a situation differently to different people, leading them to form contradictory views or work at cross purposes).	35	70	**10**	46
70	Has uncontrolled eating binges followed by "purges" (e.g. makes self vomit, abuses laxatives, fasts, etc.); has bulimic episodes.	163	154	54	**17**

*The table lists the SWAP-II items with the 18 highest ranking mean scores (M) and mean Z-scores (M_Z) for each of 2 diagnostic methods: DSM-IV diagnosis on an Axis II symptom checklist (A-II, $N = 102$) or meeting a "caseness" cut-off on a DSM-IV Personality Disorder construct rating task (CR, $N = 51$). Ranks of 30 or less are in boldface.

Similar to a DSM-IV symptom of the following:

[a]Histrionic.

[b]Borderline.

[c]Antisocial personality disorder.

[d]Narcissistic.

group, dependent personality, had a resemblance to dependent PD (DPD) with only 1 DSM-IV HPD symptom appearing in the SWAP-II description (suggestibility). Thus, consistent with data from the most distinctive characteristics approach, the data from Q-factor analysis suggest that HPD could not adequately capture the personalities of patients with a DSM-IV diagnosis of HPD.

DISCUSSION

In each of 2 studies, we employed 2 methods of identifying community patients with DSM-IV HPD (axis II checklist and PD construct ratings) and 2 methods of creating aggregate descriptions of their personalities using a comprehensive instrument (the SWAP). Aggregated raw scores provided the most descriptive (diagnostically most sensitive) characteristics of the patients, whereas aggregated Z-scores provided the most distinctive (diagnostically most specific) features. In addition, we used Q-factor analysis to identify HPD subtypes among adults (study 1) and adolescents (study 2). Despite a long history of attempts by nosologists to disambiguate HPD from other PDs, our findings indicate that the personalities of patients who met criteria for HPD were not best described by all DSM-IV symptoms of HPD.

In study 1, several HPD criteria did not emerge as most descriptive of adults with HPD, suggesting that the sexualization and cognitive symptoms of the HPD diagnosis have low sensitivity. The average patient profile resembled a borderline personality with histrionic features. This finding is consistent with previous findings from our laboratory in several different patient samples in which the DSM-IV delineation of HPD and BPD did not match empirical reality (Shedler and Westen, 2004b).

The most distinctive (or most sensitive) characteristics of adult HPD patients included features of HPD (except for impressionistic speech, self-dramatization, and suggestibility), NPD, and psychopathy. Thus, even when considering features that may not describe well all HPD patients but are relatively unique to them, we did not find strong support for the current DSM-IV definition of the disorder. The intercept between descriptive and distinctive features in Table 2 suggests that, on average, the features that were present in most patients and also distinguished them from those with other kinds of personality pathology were a mixture of histrionic (emotion seeking, excessive emotionality, sexualization, and premature intimacy) and borderline (emotional dysregulation, unstable relationships, externalization, manipulativeness, and significant deterioration of functioning under emotional activation) personality symptoms.

Subtyping the personalities of adult patients (using Q-factor analysis) revealed 1 high-functioning subtype that was consistent with the literature on hysterical personality (Blagov et al., 2007a; Slavney, 1978) as well as 2 subtypes that resembled closely BPD and DPD. Thus, the data suggest that patients who meet the DSM-IV criteria for HPD either (*a*) have hysterical personality features but their personality disturbance is not severe enough to fit the DSM notion of a PD or (*b*) represent variants of BPD or DPD with histrionic features. Our finding that a "pure" HPD case is likely to be a high-functioning individual is consistent with certain previous findings regarding HPD. For example, Baker et al. (1996) selected undergraduates who had elevations on an HPD scale but not on other PD scales and found that they reported coming from families with greater intellectual-cultural orientation than did controls.

The findings from study 2 similarly suggest that the personality pathology of adolescent patients selected to meet DSM-IV criteria for HPD was not, on average, best described by all DSM-IV HPD symptoms. The cognitive symptoms were not among the most descriptive and distinctive criteria. On average, the patients met many criteria for BPD, NPD, and psychopathy. Features that were both descriptive and distinctive for these patients were largely the same HPD and BPD symptoms as in study 1 with the addition of thrill seeking.

Q-factoring the profiles of adolescents with HPD revealed 3 personality subtypes: thrill-seeking/manipulative personality, angry borderline personality, and dependent borderline personality. We did not find the high-functioning hysterical personality that emerged in study 1, perhaps because adolescents tend to be referred to therapy by others, for whom the gregarious hysterical personality style in a teen may not pose a concern. We can speculate that adults with hysterical personalities sometimes refer themselves to therapy because of the kinds of life disappointments that are linked to subthreshold personality pathology. Conversely, we did not observe a psychopathic personality subtype in the adult sample, likely because individuals with such personalities likely do not seek treatment. An alternative explanation may be that adults who had the thrill-seeking/manipulative personality subtype of HPD as adolescents did not meet DSM-IV HPD criteria anymore (regardless of whether or not they have other PDs or psychopathy in adulthood).

In their influential reviews, Pollak (Pollak, 1981) and Pfohl (Pfohl, 1991) summarized research findings on HPD defined using pre-DSM-IV criteria and concluded that sufficient evidence had accrued for the disorder's validity. The findings they reviewed were based on operationalizations of HPD that are not fully consistent with the current definition and many of the findings have not been sufficiently replicated. For example, DSM-III (American Psychiatric Association, 1980) included criteria that were later removed because it was thought that they led to an overlap between HPD and BPD (e.g., craving for activity and excitement; irrational, angry outburst or tantrums; and proneness to manipulative suicidal attempts). Similarly, DSM-III-R (American Psychiatric Association, 1987) included 2 criteria that may overlap with DPD and BPD (constant demands for reassurance and praise; and self-centeredness and low frustration tolerance). Even with the removal of these criteria in DSM-IV and with the addition of certain criteria that emphasize histrionicity, a definition of HPD as separate from BPD and DPD at the high end of the severity continuum remains difficult to obtain empirically.

Limitations and Potential Objections

The current studies had the advantage of large sample sizes of community patients with varying degrees and kinds

of personality pathology and the inclusion of several ways of measuring it. The nature of our samples might limit the generalizability of the findings to persons who do not seek treatment, to inpatients, or to special (e.g., geriatric or forensic) populations. Another limitation includes the fact that, even though all DSM-III-R and DSM-IV symptoms of HPD were included as items in the SWAP, in some cases the phrasing of the items different slightly from the DSM-IV symptoms.

The reliance on a single informant, the treating clinician, may present a limitation. We have addressed the rationale for using clinician report in detail elsewhere (Westen and Shedler, 2007; Westen and Weinberger, 2004). In brief, it rests on the statistical aggregation of clinical observations, thus avoiding the pitfalls of holistic clinical decisions while benefiting in validity (from the observations of highly trained and clinically sophisticated informants) and reliability (from the actuarial advantages of statistical aggregation and prediction). The use of a single informant is a genuine limitation, as it raises questions about the possibility of biases in informant judgment. Concerns about respondent biases and reliability are not specific to clinicians as informants and apply equally to most studies in psychiatry, in which most or all data come from a single observer, the patient (whether obtained by interview or questionnaire). Thus far, we have not identified systematic biases when clinicians' responses are quantified using psychometric instruments (Shedler and Westen, 2004a). A related concern is that clinicians' knowledge of the DSM or their theoretical views substantially biased their descriptions of the patient. To reduce such biases, we did not ask clinicians to describe patients with a particular disorder but rather asked them to describe a patient with "enduring maladaptive patterns of thought, feeling, motivation, or behavior." Furthermore, familiarity with the DSM would render the present findings conservative, biasing them away from divergences from DSM diagnostic criteria, whereas our findings question the DSM description of HPD. The emergence of disparate subgroups of HPD similarly suggests that clinicians were not producing descriptions of their patients based on the DSM. Furthermore, tests of the association of clinician's theoretical orientation (biological, psychodynamic, cognitive-behavioral, or eclectic) and the predominant HPD subtype in the adults ($\chi^2 = 8.67$, $df = 9$, $p = 0.468$) and adolescents ($\chi^2 = 2.86$, $df = 6$, $p = 0.826$) yielded nonsignificant results, suggesting that the heterogeneity among HPD patients that we observed did not covary with the clinicians' theoretical views of psychopathology.

CONCLUSIONS

In light of the present findings, along with the dearth of literature to suggest that a diagnosis of HPD in isolation from other PDs is linked to clinically significant impairment, distress, or adverse outcomes (Blagov et al., 2007b), we question the DSM-IV classification of HPD as a severe and distinct PD. Instead, consistent with previous research, we find converging evidence for a hysterical personality style that may merit clinical attention on its own in certain high-functioning patients, and we also find evidence for a histrionic subtype of the more severe borderline and dependent personality pathologies. This calls into memory a view of hysterical personality from the descriptive clinical literature (Kernberg, 1996; McWilliams, 1994) as one of several personality styles that may present at any level of personality dysfunction, from relatively healthy to relatively pathological depending on the extent of borderline pathology present. Future research should address the extent to which hysterical personality has any incremental validity in predicting adaptive functioning, subjective distress, objective life outcomes, or treatment outcome variables above and beyond other forms of personality pathology (particularly borderline personality). It should also examine the developmental trajectories of patients with pure hysterical personality in comparison to those whose histrionic features are linked to a subtype of more severe personality pathology (borderline, dependent, and putatively psychopathic).

The results are congruent with the position of researchers who question the way personality pathology is classified and diagnosed in the current DSM (e.g., Widiger, 1993). Here and elsewhere (e.g., Blagov et al., 2007a; Westen et al., 2006) we have presented an alternative approach, namely the empirical derivation of diagnostic prototypes consisting of the most distinctive and descriptive characteristics of naturally occurring groupings of patients. Such prototypes make possible both categorical and dimensional diagnosis, minimize the artifactual co-occurrence among personality constellations, and allow clinicians or researchers to match patients' comprehensive personality descriptions to the prototypes quantitatively (Westen and Shedler, 2000). We suspect that the empirically derived prototypes of hysterical personality presented here might outperform psychometrically the increasingly suspect HPD diagnosis in future research.

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REFERENCES

Alam CN, Merskey C (1992) The development of the hysterical personality. *Hist Psychiatry*. 3:135–165.

American Psychiatric Association (1980) *Diagnostic & Statistical Manual of Mental Disorders* (3rd ed). Washington (DC): American Psychiatric Association.

American Psychiatric Association (1987) *Diagnostic & Statistical Manual of Mental Disorders* (3rd rev ed). Washington (DC): American Psychiatric Association.

American Psychiatric Association (1994) *Diagnostic & Statistical Manual of Mental Disorders* (4th ed). Washington (DC): American Psychiatric Association.

American Psychiatric Association. (2000). *Diagnostic & Statistical Manual of Mental Disorders* (Text rev, 4th ed). Washington (DC): American Psychiatric Association.

Baker JD, Capron EW, Azorlosa J (1996) Family environment characteristics of persons with histrionic and dependent personality disorders. *J Personal Disord*. 10:82–87.

Bernstein DP, Cohen P, Skodol AE, Bezirganian S, Brook JS (1996) Childhood antecedents of adolescent personality disorders. *Am J Psychiatry*. 153:907–913.

Bernstein DP, Cohen P, Velez CN, Schwab-Stone M, Siever LJ, Shinsato L (1993) Prevalence and stability of the DSM-III-R personality disorders in a community-based survey of adolescents. *Am J Psychiatry*. 150:1237–1243.

Blagov PS, Bradley R, Westen D (2007a) Under the axis II radar: Clinically relevant personality constellations that escape DSM-IV diagnosis. *J Nerv Ment Dis*. 195:477–483.

Blagov PS, Fowler K, Lilienfeld S (2007b) Histrionic personality disorder. In W O'Dononue, SO Lilienfeld, KA Fowler (Eds), *Personality Disorders: Toward DSM-V* (pp 203–232). Thousand Oaks (CA): Sage.

Blais MA, Norman DK (1997) A psychometric evaluation of the DSM-IV personality disorder criteria. *J Personal Disord*. 11:168–176.

Block J (1978) *The Q-Sort Method in Personality Assessment and Psychiatric Research.* Palo Alto (CA): Consulting Psychologists.

Block J, Gjerde PF, Block JH (1991) Personality antecedents of depressive tendencies in 18-year-olds: A prospective study. *J Pers Soc Psychol*. 60:726–738.

Bradley R, Conklin CZ, Westen D (2005) The borderline personality diagnosis in adolescents: gender differences and subtypes. *J Child Psychol Psychiatry*. 46:1006–1019.

Cale EM, Lilienfeld SO (2002) Histrionic personality disorder and antisocial personality disorder: Sex-differentiated manifestations of psychopathy. *J Personal Disord*. 16:52–72.

Chodoff P (1974) The diagnosis of hysteria: An overview. *Am J Psychiatry*. 131:1073–1078.

Colvin R, Block J, Funder D (1995) Overly positive self-evaluations and personality: Negative implications for mental health. *J Personal Soc Psychol*. 68:1152–1162.

Conklin CZ, Bradley R, Westen D (2006) Affect regulation in borderline personality disorder. *J Nerv Ment Dis*. 194:69–77.

Conklin CZ, Westen D (2005) Borderline personality disorder in clinical practice. *Am J Psychiatry*. 162:867–875.

First MB, Spitzer RL, Gibbon M, Williams JBW (1997) *Structured Clinical Interview for DSM-IV Personality Disorders, (SCID-II)*. Washington (DC): American Psychiatric Press.

Ford MR, Widiger TA (1989) Sex bias in the diagnosis of histrionic and antisocial personality disorders. *J Consult Clin Psychol*. 57:301–305.

Frances AJ (1980) The DSM-III personality disorders section: A commentary. *Am J Psychiatry*. 137:1050–1054.

Grilo CM, McGlashan TH, Quinlan DM, Walker ML, Greenfeld D, Edell WS (1998) Frequency of personality disorders in two age cohorts of psychiatric inpatients. *Am J Psychiatry*. 155:140–142.

Grueniech R (1992) The borderline personality disorder diagnoses: Reliability, diagnostic efficiency and covariation with other personality disorder diagnoses. *J Personal Disord*. 6:197–212.

Hamburger ME, Lilienfeld SO, Hogben M (1996) Psychopathy, gender and gender roles: Implications for antisocial and histrionic personality disorders. *J Personal Disord*. 10:41–55.

Hicks BM, Markon KE, Patrick CJ, Krueger RF, Newman JP (2004) Identifying psychopathy subtypes on the basis of personality structure. *Psychol Assess*. 16:276–288.

Horowitz L, Inouye D, Siegelman E (1979) On averaging judges' ratings to increase their correlation with an external criterion. *J Consult Clin Psychol*. 47:453–458.

Hyman SE (2002) A new beginning for research on borderline personality disorder. *Biol Psychiatry*. 51:933–935.

John O, Robins RW (1994) Accuracy and bias in self-perception: Individual differences in self-enhancement and the role narcissism. *J Personal Soc Psychol*. 66:206–219.

Johnson JG, Cohen P, Skodol AE, Oldham J, Kasen S, Brook JS (1999) Personality disorders in adolescence and risk of major mental disorders and suicidality during adulthood. *Arch Gen Psychiatry*. 56:805–811.

Kasen S, Cohen P, Skodol AE, Johnson JG, Brook JS (1999) Influence of child and adolescent psychiatric disorders on young adult personality disorder. *Am J Psychiatry*. 156:1529–1535.

Kernberg O (1996) A psychoanalytic theory of personality disorders. In J Clarkin, M Lenzenweger (Eds), *Major Theories of Personality Disorder* (pp 106–140). New York: Guilford.

Leihener F, Wagner A, Haaf B, Schmidt C, Lieb K, Stieglitz R, Bohus M (2003) Subtype differentiation of patients with borderline personality disorder using a circumplex model of interpersonal behavior. *J Nerv Ment Dis*. 191:248–254.

Lilienfeld SO, Waldman I, Israel AC (1994) A critical examination of the use of the term and concept of comorbidity in psychopathology research. *Clin Psychol Sci Pract*. 1:71–83.

Ludolph PS, Westen D, Misle B, Jackson A, Wixom J, Wiss FC (1990) The borderline diagnosis in adolescents: symptoms and developmental history. *Am J Psychiatry*. 147:470–476.

McWilliams N (1994) *Psychoanalytic Diagnosis.* New York: Guilford.

Moffitt T, Caspi A, Dickson N, Silva P, Stanton W (1996) Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Dev Psychopathol*. 8:399–424.

Morey LC (1988) Personality disorders in DSM-III and DSM-III-R: Convergence, coverage and internal consistency. *Am J Psychiatry*. 145:573–577.

Nathan P (1998) The DSM-iv and its antecedents: Enhancing syndromal diagnosis. In J Barron (Ed), *Making Diagnosis Meaningful: Enhancing Evaluation and Treatment of Psychological Disorders* (pp 3–27). Washington (DC): American Psychiatric Association.

Patrick CJ (Ed) (2006) Handbook of psychopathy. New York: Guilford.

Pfohl B (1991) Histrionic personality disorder: A review of available data and recommendations for DSM-IV. *J Personal Disord*. 5:150–166.

Pollak JM (1981) Hysterical personality: An appraisal in light of empirical research. *Genet Psychol Monogr*. 104:71–105.

Raine A (2006) Schizotypal personality: Neurodevelopmental and psychosocial trajectories. *Annu Rev Clinl Psychol*. 2:291–326.

Shedler J, Block J (1990) Adolescent drug use and psychological health: A longitudinal inquiry. *Am Psychol*. 45:612–630.

Shedler J, Westen D (2004a) Dimensions of personality pathology: An alternative to the five factor model. *Am J Psychiatry*. 161:1743–1754.

Shedler J, Westen D (2004b) Refining personality disorder diagnosis: Integrating science and practice. *Am J Psychiatry*. 161:1350–1365.

Skodol AE, Gunderson JG, Pfohl B, Widiger TA, Livesley WJ, Siever LJ (2002) The borderline diagnosis I: Psychopathology, comorbidity and personality structure. *Bioll Psychiatry*. 51:936–950.

Slavney PR (1978) The diagnosis of hysterical personality disorder: A study of attitudes. *Compr Psychiatry*. 19(6):501–507.

Spitzer RL, Williams JB, Skodol AE (1980) DSM-III: The major achievements and an overview. *Am J Psychiatry*. 137:151–164.

Sprock J (2000) Gender-typed behavioral examples of histrionic personality disorder. *J Psychopathol Behav Assess*. 22:107–121.

Standage K, Bilsbury C, Jain S, Smith D (1984) An investigation of role-taking in histrionic personalities. *Can J Psychiatry*. 29:407–411.

Walker EF, Diforio D, Baum K (1999) Developmental neuropathology and the precursors of schizophrenia. *Acta Psychiatr Scand Suppl*. 395:12–9.

Westen D, Heim AK (2003) Disturbances of self and identity in personality disorders. In Leary MR Tangney JP (Eds), *Handbook of Self & Identity* (pp 643–664). New York (NY): The Guilford.

Westen D, Ludolph P, Misle B, Ruffins S (1990) Physical and sexual abuse in adolescent girls with borderline personality disorder. *Am J Orthopsychiatry*. 60:55–66.

Westen D, Muderrisoglu S (2003) Reliability and validity of personality disorder assessment using a systematic clinical interview: Evaluating an alternative to structured interviews. *J Personal Disord*. 17:350–368.

Westen D, Muderrisoglu S, Shedler J, Fowler C, Koren D (1997) Affect regulation and affective experience: Individual differences, group differences and measurement using a Q-sort procedure. *J Consult Clin Psychol*. 65:429–439.

Westen D, Shedler J (1999a) Revising and assessing axis II, part 1: Developing a clinically and empirically valid assessment method. *Am J Psychiatry*. 156:258–272.

Westen D, Shedler J (1999b) Revising and assessing axis II, part 2: Toward an empirically based and clinically useful classification of personality disorders. *Am J Psychiatry*. 156:273–285.

Westen D, Shedler J (2000) A prototype matching approach to diagnosing personality disorders toward DSM-V. *J Personal Disord*. 14:109–126.

Westen D, Shedler J (2007). Personality diagnosis with the Shedler-Westen Assessment Procedure (SWAP): Integrating clinical and statistical measurement and prediction. *J Abnorm Psychol*. 116:810–822.

Westen D, Shedler J, Bradley R (2006) A prototype approach to personality disorder diagnosis. *Am J Psychiatry*. 163:846–856.

Westen D, Shedler J, Durrett C, Glass S, Martens A (2003) Personality diagnosis in adolescence: DSM-IV axis II diagnoses and an empirically derived alternative. *Am J Psychiatry*. 160:952–966.

Westen D, Weinberger J (2004) When clinical description becomes statistical prediction. *Am Psychol*. 59:595–613.

Widiger TA (1993) The DSM-III–R categorical personality disorder diagnoses: A critique and an alternative. *Psychol Inq*. 4:75–90.

Widiger TA (1998) Invited essay: Sex biases in the diagnosis of personality disorders: An example of sex bias. *J Personal Disord*. 12:95–118.

Widiger TA, Frances A, Spitzer RL, Williams JBW (1988) The DSM-III-R personality disorders: An overview. *Am J Psychiatry*. 145:786–794.

Wilkinson-Ryan T, Westen D (2000) Identity disturbance in borderline personality disorder: An empirical investigation. *Am J Psychiatry*. 157: 528–541.

Wixom J, Ludolph P, Westen D (1993) The quality of depression in adolescents with borderline personality disorder. *J Am Acad ChildAdolesc Psychiatry*. 32:1172–1177.