

Personality Disorders: Theory, Research, and Treatment

An Expert Consensus Approach to Relating the Proposed DSM-5 Types and Traits

Douglas B. Samuel, Donald R. Lynam, Thomas A. Widiger, and Samuel A. Ball

Online First Publication, July 4, 2011. doi: 10.1037/a0023787

CITATION

Samuel, D. B., Lynam, D. R., Widiger, T. A., & Ball, S. A. (2011, July 4). An Expert Consensus Approach to Relating the Proposed DSM-5 Types and Traits. *Personality Disorders: Theory, Research, and Treatment*. Advance online publication. doi: 10.1037/a0023787

An Expert Consensus Approach to Relating the Proposed *DSM-5* Types and Traits

Douglas B. Samuel

Yale School of Medicine and VA New England
MIRECC, West Haven, Connecticut

Thomas A. Widiger

University of Kentucky

Donald R. Lynam

Purdue University

Samuel A. Ball

Yale School of Medicine and APT Foundation,
New Haven, Connecticut

Although personality disorders (PDs) have been defined categorically throughout the history of psychiatric nomenclatures, the *DSM-5* Personality and Personality Disorders Work Group proposed a substantial shift to a dimensional conceptualization and diagnosis of personality pathology. This proposal included the adoption of a trait model with 37 specific traits that fell within six higher-order domains. In addition, they specified that half of the current diagnoses be recast as types defined by narrative description, with the other half deleted. Instead, the deleted categories would be diagnosed through ratings on specifically assigned traits. The Work Group also specified a number of traits that are relevant to each of the five *DSM-5* types. However, these assignments for the types and deleted *DSM-IV* PDs lack empirical justification. The current study examined the relations between the *DSM-5* traits and PDs slated for inclusion and exclusion using an expert consensus approach. Researchers with expertise on specific PDs provided descriptions of either the *DSM-5* type narratives or a prototypic case of *DSM-IV* PDs in terms of the trait model. The ratings by experts in the current study demonstrated moderate agreement with the Work Group's assignments, but also identified notable discrepancies between how these types were described by the Work Group and how they were perceived by other PD researchers. These results hold promise for improving the currently proposed system and will help inform researchers and clinicians who will ultimately use the *DSM-5* model.

Keywords: *DSM-5*, personality disorders, types, traits, dimensional

Since the first *Diagnostic and Statistical Manual of Mental Disorders (DSM)* was published by the American Psychiatric Association (APA) in 1952, personality disorders (PDs)

have been categorical constructs. Within *DSM-IV-TR* (APA, 2000), they are defined and assessed by a set of between seven and nine polythetic criteria. For example, a diagnosis of borderline personality disorder requires an individual to meet at least five of nine diagnostic criteria. Although the diagnostic labels associated with these constructs provide rapid communication about a person (Frances, 1993), researchers have pointed out numerous limitations of this categorical approach (Clark, 2007; Trull & Durrett, 2005) and suggested that alternative dimensional models provide more validity (Widiger & Simonsen, 2005). In light of this, the *DSM-5* Personality and Personality Disorder Work Group (2010) proposed changes that will dramatically alter the conceptualization and diagnosis of personality pathology. Specifically, their proposal suggests a general diagnosis of

Douglas B. Samuel and Samuel A. Ball, Department of Psychiatry, Yale School of Medicine; Donald R. Lynam, Department of Psychological Sciences, Purdue University; Thomas A. Widiger, Department of Psychology, University of Kentucky.

Writing of this article was supported by the Office of Academic Affiliations, Advanced Fellowship Program in Mental Illness Research and Treatment, Department of Veterans Affairs.

Correspondence concerning this article should be addressed to Douglas B. Samuel who is now at the Department of Psychological Sciences, Purdue University, 703 Third Street, West Lafayette, IN 47907. E-mail: dbsamuel@purdue.edu

personality disorder that is further specified and defined using two somewhat distinct approaches.

The first aspect of the proposal is the inclusion of a dimensional trait model that attempts to organize the universe of personality pathology into component parts, consistent with the approaches of Clark (1993), Livesley (2003), and Widiger (2005). The transition to a dimensional trait model has the potential to address several limitations of the previous diagnostic system. For example, a dimensional trait system might eliminate the problematic comorbidity across and the heterogeneity within the *DSM-IV* categories by providing a trait profile that is unique to each individual (Widiger & Trull, 2007). Additionally, such a model holds the promise of improving diagnostic stability as traits have demonstrated greater temporal consistency than diagnostic categories (Morey et al., 2007). The proposed model comprises 37 maladaptive personality traits that are said to fall within the six higher-order domains of negative emotionality, introversion, antagonism, disinhibition, compulsivity, and schizotypy. These traits are unipolar and focus only on maladaptive functioning, as opposed to bipolar models that span normal and pathological personality (e.g., Samuel, in press; Widiger, in press; Widiger & Mullins-Sweatt, 2009). Thus, clinicians and researchers rate each of the traits as either *not at all or very little*, *mildly descriptive*, *moderately descriptive*, or *extremely descriptive* of the individual. Those traits that are rated as *extremely descriptive* would qualify for the diagnosis of a personality disorder when accompanied by other general criteria (i.e., impairment in self and interpersonal functioning, relatively stable across time and situations, not better accounted for by the individual's culture, and not due to the effects of a substance or general medical condition). It should be noted that the 37-trait model has potentially been reduced to 25 traits on the basis of a factor analysis of a self-report instrument designed for this process (Krueger et al., in press). Specifically, the traits of pessimism, low self-esteem, guilt/shame, self-harm, social detachment, aggression, oppositionality, rigidity, orderliness, cognitive dysfunction, and dissociation proneness do not appear in Krueger and colleagues' (in press) list of 25 traits, while the trait of risk aversion was combined with recklessness.

However, because the process is still ongoing and both options will be examined in the field trials, we focus our primary analyses on the more inclusive 37-trait model, but do provide supplemental results for the subset of 25 traits that might better approximate the ultimate trait system included in *DSM-5*.

The second aspect of the proposal includes "types" that differ from the *DSM-IV* PDs with respect to both quantity and diagnostic method. Whereas the *DSM-IV* diagnosis of a PD is based on meeting a specified number (typically half, or one more than half) of polythetic diagnostic criteria, the proposed *DSM-5* types would be diagnosed by providing a dimensional rating on a 5-point scale that quantifies the degree to which a patient resembles a narrative description that is one to three paragraphs in length. This approach is based primarily on the work of Westen and Shedler (2000), who suggest the prototype matching approach more closely approximates how clinicians diagnose within their clinical practice (Shedler & Westen, 2007).

Although the inclusion of types represents a notable shift away from the specific and explicit criterion sets that were the primary innovation of *DSM-III* (APA, 1980), perhaps an even more striking departure from the current nomenclature is that the *DSM-5* PD Work Group has proposed to retain only half of the PD constructs included in *DSM-IV* (APA, 2000). These include borderline, avoidant, schizotypal, obsessive-compulsive, and antisocial/psychopathic. As such, the proposal would eliminate the constructs of narcissistic, dependent, paranoid, schizoid, and histrionic PD. The rationale for deciding which PDs to retain versus delete was based upon a literature review conducted by members of the Work Group. They suggested that borderline, schizotypal, antisocial, avoidant, and obsessive-compulsive were retained based on their prevalence, clinical utility, associations with impairment, economic burden, and/or increased mental health care utilization (Skodol et al., 2011). Nonetheless, there has not been a clear articulation regarding the decision to drop the other diagnoses and there is considerable controversy, with others in the field suggesting that the deleted types have equally large literatures supporting their validity (e.g., Bornstein, in press; Ronningstam, in press). Even a member of the Work Group suggested that "the criteria for deciding which

PD diagnoses to delete are not explicit and the final selection appears arbitrary” (Livesley, 2010, p. 309).

Instead of retaining these other five PDs as types, the Work Group recommends that they should be “diagnosed by a combination of core impairment in personality functioning and specific pathological personality traits, rather than as a specific type” (Personality & Personality Disorder Work Group, 2010). For example, they specify that rather than including it as a separate type, the construct represented by *DSM-IV* narcissistic PD would be diagnosed using the traits of narcissism (or grandiosity), manipulateness, histrionism (or attention seeking), and callousness. The Work Group offered similar assignments for the other disorders so that clinicians who desire to diagnose the *DSM-IV* histrionic, dependent, paranoid, and schizoid PDs could do so using a few specific traits. In addition to specifying traits for diagnosing the five *DSM-IV* PDs proposed for elimination, the Work Group also provides a list of traits relevant for describing each of the proposed types. For example, they propose that after rating the extent to which an individual matches the narrative description of the borderline type, one should then also assess the 10 specific traits of emotional lability, self-harm, separation insecurity, anxiousness, low self-esteem, depressivity, hostility, aggression, impulsivity, and dissociation proneness.

However, a difficulty with the assignments of the traits to each of the *DSM-IV* PDs slated for deletion or the proposed *DSM-5* types is that empirical evidence to support the trait assignments is not provided (Miller, Widiger, & Campbell, 2010; Skodol et al., in press). If clinicians and researchers are to use the traits to diagnose PD types, it is crucial that research demonstrate that the traits assigned for this purpose are, in fact, relevant to the description of each particular PD. At this critical juncture of considering major changes to the personality disorder diagnostic system, it is essential to investigate the relations between the dimensional traits and the types currently proposed for inclusion and exclusion.

One method of testing these conceptual relations is an expert consensus approach that surveys a group of researchers with expertise in specific PDs. This approach has been utilized in previous studies concerning the relations be-

tween the five-factor model of personality (FFM; McCrae & Costa, 2008) and the PD constructs (i.e., Lynam & Widiger, 2001; Miller, Lynam, Widiger, & Leukefeld, 2001; Samuel & Widiger, 2004). For example, Lynam and Widiger (2001) assembled a comprehensive list of researchers, who had published on respective *DSM-IV* PDs, and asked them to describe a prototypic case of that PD in terms of the FFM. They then averaged the descriptions across raters to produce a FFM profile for each PD. These profiles were reliable and related highly to profiles derived from other methods (i.e., Samuel & Widiger, 2008).

Our use of the expert consensus approach in the current study had the appreciable advantage of measuring the opinions of researchers from a variety of backgrounds and theoretical orientations. This minimized the impact of idiosyncratic interpretations and allowed analysis of overall patterns of agreement. We evaluated expert consensus of the proposed *DSM-5* types and the *DSM-IV* PDs slated for elimination in terms of the dimensional trait model proposed for *DSM-5*. The consensus trait ratings for each PD or type were compared with the specific traits assigned by the *DSM-5* Personality and Personality Disorders Work Group. This allowed an examination of those assignments and provided empirical data about how the two somewhat distinct aspects of the *DSM-5* proposal relate to one another.

Method

Procedures

We first updated the list of PD experts assembled by Lynam and Widiger (2001) by excluding individuals who had not published since 2000. Next, we searched PsycINFO for each specific *DSM-IV* PD (e.g., “antisocial personality disorder”), as well as psychopathy, published between 2001 and 2010 and added the contact author for each relevant search result. We excluded the 11 members of the *DSM-5* Personality and Personality Disorders Work Group because it was their own trait assignments that were tested. We assigned individuals with expertise in more than one PD to a single construct, with the goal of maximizing the samples for specific disorders with small research literatures. Experts in avoidant, schizotypal,

borderline, and obsessive–compulsive groups were assigned, using a random number generator, to either describe the *DSM–IV* version or the proposed *DSM–5* type. Individuals with expertise in antisocial PD and/or psychopathy were divided randomly into three groups, with one third describing *DSM–IV* antisocial PD, one third describing psychopathy, and one third describing the antisocial/psychopathic type proposed for inclusion in *DSM–5*. Because there are no direct *DSM–5* counterparts proposed for paranoid, schizoid, narcissistic, histrionic, and dependent PD, all of these experts described the *DSM–IV* version.

We contacted experts via e-mail and invited them to participate in the survey within a web-based research suite (Qualtrics Labs Inc, Provo, UT). All participants provided background demographic information. They also rated their familiarity with the *DSM–IV* PDs and *DSM–5* proposal on a 0–3 scale (1 = *not at all*, 2 = *mildly, moderately, or 3 = extremely familiar*) and reported their number of publications concerning PDs. Experts assigned to the *DSM–IV* PDs envisioned a prototypic case and rated it in terms of the 37 traits proposed for inclusion in *DSM–5*. After providing the rating of the first PD, experts were invited to describe a second (and third) PD if they felt they had additional areas of expertise. Those assigned to the *DSM–5* types were provided with the narrative description drawn from the website in May, 2010, and asked to rate the proposed type in terms of the 37 traits. The narrative description was continuously available so that the experts could consult it as necessary. After rating the assigned type, they were invited to describe a second type. The 37 trait names were followed by the brief definitions posted with the *DSM–5* proposal (e.g., “Emotional Lability—Having unstable emotional experiences and frequent, large mood changes; having emotions that are easily aroused, intense, and/or out of proportion to events and circumstances”). For each trait, experts selected from the response options of *not at all or very little, mildly descriptive, moderately descriptive, or extremely descriptive*, which were scored on a 0–3 metric. The traits were organized under the six higher order domains and appeared in the same order proposed by the *DSM–5* work group.

Participants

Of the 542 experts identified, 29 e-mails were returned as undeliverable and alternate contact information could not be located. Two-hundred and fifty-eight (50%) of the possible sample of 513 experts provided usable responses. Response rates were similar for the *DSM–IV* PDs (49%) and the proposed *DSM–5* types (53%). Table 1 provides demographic variables for the two samples. A majority of the respondents were white, male, and had a Ph.D. Most participants lived and worked in North America, but approximately a quarter were from Europe, while Asia and Australia were also represented. Both samples were primarily engaged in research and had considerable experience, with an average of nearly 20 publications concerning PDs. They were quite familiar with the *DSM–IV* PDs, but only mildly familiar with the *DSM–5* proposal.

Table 2 provides response rates for each PD and type. Most were at or near 50%, with the exceptions of *DSM–IV* paranoid and schizoid PDs, which had less than 30% response rates. Of the 170 experts who described a *DSM–IV* PD (or psychopathy), 44 also described a second PD, and 20 of those a third, for 234 total ratings. Similarly, 17 provided ratings of a second *DSM–5* type, for 122 total ratings.

Data Analysis

An aim of the current study was to provide an expert consensus description of the five *DSM–5* types as well as the five *DSM–IV* PDs targeted for deletion in terms of the proposed trait set. To do so, we calculated the means and standard deviations of the trait ratings for each PD, which produced a trait profile for each construct. Another primary aim of this study was to examine the agreement between these expert ratings and the PD Work Group’s assignment of specific traits to each *DSM–IV* PD and *DSM–5* type. We calculated kappa values to index agreement. Traits assigned by the Work Group received a value of 1 and those not assigned received a 0. Guided by the response anchors provided in the *DSM–5* proposal, traits with a mean expert rating ≥ 2.50 were classified as extremely descriptive, which is the threshold a trait must reach to trigger a PD diagnosis (A. E. Skodol, personal communication, August 30,

Table 1
Demographic Variables

	<i>DSM-IV</i> PDs (<i>N</i> = 170)	<i>DSM-5</i> Types (<i>N</i> = 88)
Gender (% male)	70.0%	60.2%
Race		
White	95.9%	93.1%
Asian	2.9%	6.9%
Black	0.6%	
American Indian or Alaskan Native	0.6%	
Ethnicity		
Hispanic/Latino	3.7%	6.9%
Continent		
North America	68.2%	60.2%
Europe	25.3%	29.5%
Asia	3.5%	6.8%
Australia	2.9%	2.9%
Highest Degree		
PhD	79.0%	78.4%
MD	11.0%	13.6%
Masters	6.1%	8.0%
Other	3.9%	
Work Responsibilities (as % of time)		
Research [<i>M</i> (<i>SD</i>)]	49.3 (24.6)	52.5 (27.4)
Teaching [<i>M</i> (<i>SD</i>)]	20.1 (15.5)	15.2 (13.6)
Patient Care [<i>M</i> (<i>SD</i>)]	13.2 (18.6)	17.7 (21.9)
Administration [<i>M</i> (<i>SD</i>)]	9.9 (12.6)	8 (12.1)
Supervision [<i>M</i> (<i>SD</i>)]	7.5 (9.7)	6.5 (8.4)
<i>DSM-IV</i> Familiarity [<i>M</i> (<i>SD</i>)]	3.66 (.6)	3.54 (.7)
<i>DSM-5</i> Familiarity [<i>M</i> (<i>SD</i>)]	2.28 (.9)	2.03 (.9)
Publications [<i>M</i> (<i>SD</i>)]	18.3 (20.4)	20.3 (38.1)

Note. *DSM-IV* familiarity and *DSM-5* familiarity were rated on a 1–4 Likert-type scale where 1 = *not at all*, 2 = *mildly*, 3 = *moderately* and 4 = *extremely*. Publications variable indicates the number of publications each individual estimated they had on the topic of personality disorders.

2010). Recognizing that this high threshold could shift, we considered traits with mean ratings between 2.00 and 2.49 moderately descriptive. We dichotomized expert ratings according to both thresholds, which allowed the calculation of two separate kappa values for each PD or type. Finally, although our primary analyses focused on the officially proposed 37-trait model we also conducted supplemental analyses on a potentially reduced model that includes 25 traits to determine if this would affect agreement.

Results

Interrater Agreement

We transposed the data such that the raters were treated as variables and the traits as cases

before computing four measures of interrater agreement for each construct (i.e., *DSM-5* type or *DSM-IV* PD). Table 2 presents the average interrater *r*, which indicated the mean correlation between all possible pairs of raters and ranged from .53 (borderline type) to .72 (avoidant type) with a median value of .58. We then computed the average corrected item-total correlation, which indicated the correlation of each individual's profile ratings with the mean profile of all the other raters, excluding themselves. These values were all above .70, with a median of .75. Cronbach's alpha was .95 or higher for all constructs except *DSM-IV* paranoid PD (.92). Finally, we computed the average within group correlation (James, Demaree, & Wolf, 1993), which indexes interrater agreement among raters of a single target and repre-

Table 2
Response Rates and Measures of Agreement Among Raters for DSM-IV PDs and Proposed DSM-5 Types

Proposed <i>DSM-5</i> Types	Response Rate Statistics				Interrater Agreement			
	Solicited	Responses	Response Rate	Total Ratings	Avg Interrater r	Avg Corr. Item Total	α	Avg r_{wg}
Avoidant Type	24	13	54%	14	0.72	0.83	0.97	0.68
Borderline Type	48	32	67%	42	0.53	0.72	0.98	0.44
Schizotypal Type	33	14	42%	14	0.57	0.75	0.96	0.47
Antisocial/Psychopathic Type	38	17	45%	22	0.64	0.80	0.96	0.67
Obsessive compulsive Type	23	12	52%	13	0.59	0.75	0.95	0.44
<i>DSM-IV PDs</i>								
Paranoid	19	5	26%	9	0.56	0.71	0.92	0.52
Schizoid	25	7	28%	13	0.69	0.81	0.97	0.66
Histrionic	23	15	65%	17	0.56	0.73	0.96	0.53
Narcissistic	36	22	61%	29	0.58	0.75	0.98	0.57
Dependent	34	18	53%	20	0.55	0.73	0.96	0.58

Note. Avg Interrater r = the average of the correlations between experts' ratings in which experts were treated as variables and traits as cases. Avg Corr. Item Total r = the average of the correlations between each expert's profile and the composite profile computed without that rating. α = coefficient alpha for the composite profile in which experts are treated as variables and facets as cases; it does depend in part on the number of raters. Avg r_{wg} = the proportional reduction in error variance relative to a discrete uniform distribution.

sents the proportional reduction in error variance relative to a random process. These values ranged from .44 (borderline and obsessive-compulsive types) to .68 (avoidant type).

Ratings of the Proposed *DSM-5* Types

Table 3 presents our experts' ratings of the proposed *DSM-5* types. When looking across the rows, one sees the mean ratings on a trait for each of the five types. For example, experts rated the trait of emotional lability very highly (e.g., 2.79) for the borderline type, but it was not particularly relevant for the description of the avoidant, schizotypal, and obsessive-compulsive types. Down each column are the trait profiles for each type, which were the primary results of interest. For instance, the borderline type was described primarily by traits from the domain of negative emotionality, including emotional lability, separation insecurity, and self-harm. In contrast, the obsessive-compulsive type was defined primarily by the traits of perfectionism, rigidity, and orderliness from the domain of compulsivity.

In addition, traits assigned to each type by the Work Group were marked with an "H" within Table 3. To facilitate comparison of the experts' ratings with the Work Group's assignments, Table 4 presents the traits categorized based on their level of descriptiveness for each type. The

assigned traits were marked in bold. The bottom row includes traits that were assigned by the Work Group, but were considered less than moderately descriptive by experts in this study.

The top row of Table 4 indicates that the *DSM-5* Work Group assignments achieved strong consensus with our experts at the highest threshold, as all the traits rated as extremely descriptive by the experts were, in fact, assigned by the Work Group to each respective PD. In other words, the Work Group did not fail to identify a trait that our experts viewed as being extremely descriptive of a PD. The assignments for the antisocial/psychopathic type were particularly convergent as all nine assigned traits obtained mean ratings above 2.50. The Work Group and the experts surveyed in the current study appeared to be in complete agreement about traits that should and should not be used to diagnose the antisocial/psychopathic type.

However, agreement was weaker for the other types as our experts did not rate as extremely descriptive several traits assigned by the Work Group. For example, assigned traits that our experts considered only moderately descriptive (and thus not used for the diagnosis) included anxiousness, risk aversion, and guilt/shame for the avoidant, impulsivity and low self-esteem for the borderline, intimacy avoidance for the schizotypal, and perseveration for the obsessive-compulsive types. We quantified

Table 3

Expert Ratings of the Proposed DSM-5 Types in Terms of the Proposed DSM-5 Trait Ratings

	Avoidant Type		Borderline Type		Schizotypal Type		Antisocial/ Psychopathic Type		Obsessive Compulsive Type	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Negative Emotionality	1.51	(0.36)	1.94	(0.46)	0.86	(0.61)	0.51	(0.32)	0.82	(0.45)
Emotional lability	0.43	(0.85)	2.79	(0.47)	H 0.64	(0.63)	1.36	(1.00)	0.33	(0.49)
Anxiousness	2.43	(0.76)	H 1.93	(0.81)	H 1.64	(0.74)	H 0.23	(0.43)	1.62	(1.04)
Submissiveness	2.07	(0.83)	1.43	(0.70)	0.43	(0.94)	0.09	(0.43)	0.54	(0.66)
Separation insecurity	1.07	(1.14)	H 2.69	(0.56)	H 0.43	(0.76)	0.09	(0.29)	0.54	(0.97)
Pessimism	1.93	(0.83)	H 1.29	(0.94)	0.57	(0.85)	0.52	(0.68)	1.15	(0.99)
Low self-esteem	2.93	(0.27)	H 2.00	(0.70)	H 0.57	(0.94)	0.18	(0.50)	0.85	(0.80)
Guilt/shame	2.00	(0.78)	H 1.48	(1.02)	0.64	(0.84)	0.19	(0.51)	1.54	(0.88)
Self-harm	0.14	(0.36)	2.60	(0.59)	H 0.36	(0.93)	0.62	(0.67)	0.54	(1.05)
Depressivity	1.36	(0.63)	1.90	(1.01)	H 0.79	(0.80)	0.24	(0.44)	0.69	(0.85)
Suspiciousness	0.79	(0.70)	1.32	(0.91)	2.50	(0.65)	H 1.57	(1.12)	0.38	(0.65)
Introversiveness	1.59	(0.47)	0.46	(0.63)	2.20	(0.43)	1.01	(0.52)	1.02	(0.82)
Social withdrawal	2.86	(0.36)	H 0.48	(0.77)	2.71	(0.47)	H 0.24	(0.44)	0.62	(0.77)
Social detachment	0.71	(0.73)	H 0.29	(0.64)	2.29	(0.91)	1.62	(0.97)	1.23	(1.09)
Intimacy avoidance	1.79	(1.05)	H 0.67	(0.95)	2.29	(0.61)	H 1.10	(0.79)	0.92	(1.04)
Restricted affectivity	1.21	(1.12)	H 0.29	(0.67)	1.93	(0.92)	H 1.62	(1.02)	1.46	(1.05)
Anhedonia	1.36	(1.08)	H 0.57	(0.74)	1.79	(1.05)	0.48	(0.75)	0.85	(0.99)
Antagonism	0.08	(0.14)	1.07	(0.64)	0.43	(0.72)	2.54	(0.35)	0.73	(0.54)
Callousness	0.00	(0.00)	1.17	(0.91)	0.64	(0.93)	2.86	(0.36)	H 1.15	(0.90)
Manipulativeness	0.07	(0.27)	0.95	(0.99)	0.29	(0.83)	2.95	(0.22)	H 0.85	(0.99)
Narcissism	0.36	(0.50)	0.55	(0.80)	0.50	(0.85)	2.57	(0.60)	H 1.00	(1.04)
Histrionism	0.00	(0.00)	1.10	(1.10)	0.36	(0.74)	1.43	(0.98)	0.23	(0.60)
Hostility	0.07	(0.27)	1.90	(0.73)	H 0.43	(0.85)	2.62	(0.67)	H 1.00	(0.71)
Aggression	0.00	(0.00)	1.31	(0.81)	H 0.29	(0.61)	2.81	(0.40)	H 0.42	(0.67)
Oppositionality	0.07	(0.27)	0.93	(0.96)	0.64	(1.01)	2.38	(0.67)	0.92	(1.08)
Deceitfulness	0.07	(0.27)	0.69	(0.84)	0.29	(0.61)	2.67	(0.73)	H 0.31	(0.63)
Disinhibition	0.16	(0.29)	1.60	(0.77)	0.86	(0.91)	2.37	(0.59)	0.25	(0.62)
Impulsivity	0.07	(0.27)	2.48	(0.80)	H 0.71	(0.91)	2.62	(0.59)	H 0.31	(0.85)
Distractibility	0.50	(0.76)	1.12	(1.08)	1.36	(1.01)	1.38	(1.20)	0.46	(0.88)
Recklessness	0.07	(0.27)	1.69	(0.95)	0.57	(1.02)	2.71	(0.56)	H 0.08	(0.28)
Irresponsibility	0.00	(0.00)	1.12	(1.06)	0.79	(1.05)	2.76	(0.54)	H 0.15	(0.55)
Compulsivity	0.80	(0.33)	0.45	(0.63)	0.68	(0.81)	0.16	(0.26)	2.66	(0.35)
Perfectionism	1.29	(0.61)	0.57	(0.80)	0.50	(0.94)	0.05	(0.22)	3.00	(0.00)
Perseveration	0.29	(0.47)	0.45	(0.80)	0.62	(0.87)	0.14	(0.36)	2.46	(0.78)
Rigidity	0.21	(0.58)	0.74	(0.91)	1.14	(1.03)	0.52	(0.93)	3.00	(0.00)
Orderliness	0.14	(0.36)	0.24	(0.62)	0.57	(0.94)	0.00	(0.00)	3.00	(0.00)
Risk aversion	2.07	(0.73)	H 0.26	(0.63)	0.57	(0.94)	0.10	(0.44)	1.85	(1.07)
Schizotypy	0.04	(0.12)	0.95	(0.65)	2.67	(0.28)	0.17	(0.22)	0.26	(0.57)
Unusual perceptions	0.00	(0.00)	0.57	(0.67)	2.86	(0.36)	H 0.10	(0.30)	0.23	(0.60)
Unusual beliefs	0.07	(0.27)	0.55	(0.86)	2.93	(0.27)	H 0.24	(0.44)	0.23	(0.60)
Eccentricity	0.00	(0.00)	0.49	(0.95)	2.86	(0.36)	H 0.14	(0.36)	0.31	(0.63)
Cognitive dysregulation	0.07	(0.27)	1.43	(0.94)	2.71	(0.47)	H 0.33	(0.48)	0.31	(0.85)
Dissociation proneness	0.07	(0.27)	1.70	(0.82)	H 2.00	(0.68)	0.05	(0.22)	0.23	(0.60)

Note. All ratings on a 0–3 Likert-type Scale where 0 = *very little or not at all*, 1 = *mildly descriptive*, 2 = *moderately descriptive*, and 3 = *extremely descriptive*. The capital “H” indicate those traits assigned to each proposed type by the DSM-5 Personality and Personality Disorders Work Group (2010).

Table 4
Proposed DSM-5 Traits Sorted by Level of Descriptiveness for Each Proposed DSM-5 Type

	Avoidant	Borderline	Schizotypal	Antisocial/ Psychopathic	Obsessive Compulsive
Extremely Descriptive (>2.50)	Low self-esteem Social withdrawal	Emotional lability Separation insecurity Self-harm	Unusual beliefs Unusual perceptions Eccentricity Cognitive dysregulation Social withdrawal Suspiciousness	Manipulativeness Callousness Aggression Irresponsibility Recklessness Deceitfulness Impulsivity Hostility Narcissism Oppositionality	Rigidity Perfectionism Orderliness
Moderately Descriptive (2.00–2.49)	Anxiousness Risk aversion Submissiveness	Impulsivity Low self-esteem	Social detachment Intimacy avoidance Dissociation proneness		Perseveration
Other Assignments Less Descriptive (0–1.99)	Guilt/shame Pessimism Intimacy avoidance Anhedonia Restricted affectivity Separation insecurity Social detachment	Anxiousness Depressivity Hostility Dissociation proneness Aggression	Restricted affectivity Anxiousness		Anxiousness Guilt/shame Restricted affectivity Pessimism Oppositionality

Note. Traits listed down the columns are sorted by mean ratings. The traits with a mean rating of 2.5 or higher were classified as extremely descriptive and those between 2.00 and 2.49 were classified as moderately descriptive by our experts. Those trait terms in boldface type were assigned as the prominent features of each proposed type by the DSM-5 Work Group. Assigned traits that did not obtain a mean rating above 2.0 are listed in the bottom row.

the agreement between the traits classified as extremely descriptive (>2.50) and those assigned by the Work Group. The kappa values were 1.00 for antisocial/psychopathic, .75 for schizotypal, .43 for obsessive–compulsive, .39 for borderline, and .24 for the avoidant types.

One could use these additional traits to assign a diagnosis (if the threshold was lowered to include moderately descriptive traits), but then more traits not recognized by the Work Group would also meet that threshold and should also be included, according to the results of our survey. These additional traits include submissiveness for avoidant, social detachment and dissociation proneness for schizotypal, and oppositionality for antisocial/psychopathic. Changing the cutpoint (≥ 2.00) negligibly decreased kappas for antisocial/psychopathic (.93) and schizotypal (.71), and only modestly improved overall agreement for avoidant (.48), borderline (.49), and obsessive–compulsive (.55) types.

It was interesting that certain traits not assigned by the Work Group were seen as descriptive by our experts. Even more striking, though, was the finding that many traits assigned by the Work Group were not considered even moderately descriptive by our experts. These included the traits of restricted affectivity, pessimism, intimacy avoidance, anhedonia, separation insecurity, and social detachment for avoidant; anxiousness, depressivity, hostility, dissociation proneness, and aggression for borderline; anxiousness, and restricted affectivity for schizotypal; and anxiousness, restricted affectivity guilt/shame, pessimism, and oppositionality for obsessive–compulsive.

Ratings of the *DSM-IV* Personality Disorders Targeted for Deletion Within the *DSM-5* Proposal

Table 5 presents the means and standard deviations for the experts' ratings of *DSM-IV* paranoid, schizoid, histrionic, narcissistic, and dependent PDs. We noted that the interrater agreement for these five PDs was very similar to that obtained for the five types retained within *DSM-5*. As described previously, traits with mean ratings ≥ 2.50 were considered extremely descriptive. For example, *DSM-IV* narcissistic PD was described primarily by the traits of narcissism and callousness. The experts' ratings

were also compared to the assignments by the Work Group. These assigned traits were marked with an "H" in Table 5. As with the *DSM-5* types, all traits rated by our experts as extremely descriptive for each *DSM-IV* PD were, in fact, assigned by the Work Group. In the case of histrionic PD, both assigned traits (e.g., histrionism and emotional lability) were endorsed by our experts' ratings. However, the Work Group also assigned traits that were not rated as extremely descriptive by our experts. For instance, the traits of manipulateness and histrionism were assigned to narcissistic PD by the Work Group, but achieved mean ratings below 2.50. Kappa statistics were 1.00 for histrionic, .87 for schizoid, .78 for dependent, and .64 for both paranoid and narcissistic PDs.

When considering the lowered threshold of moderately descriptive, the agreement was perfect for schizoid PD, as the assignments for all five traits within the domain of introversion were supported. The kappa values for narcissistic and dependent were both .84. However, agreement for histrionic PD was lowered appreciably ($\kappa = .54$), as the traits of narcissism, impulsivity, and manipulateness were rated as moderately descriptive by our experts. Finally, agreement was lowest for paranoid PD ($\kappa = .37$), for which our experts failed to support the assignment of unusual beliefs, but also went beyond the Work Group to include the traits of social withdrawal, rigidity, social detachment, oppositionality, restricted affectivity, and pessimism.

Supplementary Analyses Concerning 25 Traits

As noted above, there appears to be a possibility that 12 of the traits within the original proposal could be discarded based on the results of a factor analysis of a self-report measure (Krueger et al., in press). This revised trait model would include 25 traits that are reorganized into five hierarchical domains. Because these 25 are a subset of the 37 collected in the present study, we investigated whether the agreement between our experts and the *DSM-5* work group would be altered with such a reduction. However, there did not appear to be any appreciable change. For the *DSM-5* types using the 2.50 (i.e., extremely descriptive) threshold, the kappa values were 1.00 for antisocial/

Table 5
Expert Ratings of The DSM-IV PDs in Terms of the Proposed DSM-5 Trait Ratings

	Paranoid		Schizoid		Histrionic		Narcissistic		Dependent	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Negative Emotionality	1.07	(.40)	.53	(.34)	1.04	(.46)	.71	(.46)	1.66	(.52)
Emotional lability	.78	(.97)	.15	(.55)	2.59	(.62)	H 1.28	(.96)	1.15	(.93)
Anxiousness	1.33	(.87)	.85	(.69)	1.24	(.83)	.83	(.80)	2.20	(.70)
Submissiveness	.11	(.33)	.38	(.77)	1.12	(1.05)	.14	(.35)	2.80	(.41)
Separation insecurity	.33	(.50)	.08	(.28)	1.76	(.75)	.62	(.78)	2.70	(.57)
Pessimism	2.00	(.50)	1.00	(.71)	.18	(.39)	.66	(.67)	1.20	(1.01)
Low self-esteem	1.00	(1.00)	.69	(.63)	.82	(.81)	.62	(.94)	2.20	(.89)
Guilt/shame	.56	(1.01)	.08	(.28)	.41	(.71)	.75	(1.08)	1.37	(1.12)
Self-harm	.22	(.44)	.08	(.28)	.94	(.75)	.10	(.41)	.65	(.75)
Depressivity	1.33	(.87)	.77	(.73)	.76	(.75)	.62	(.68)	1.75	(1.07)
Suspiciousness	3.00	(.00)	H 1.23	(.60)	.59	(.94)	1.45	(.83)	.60	(.94)
Introversion	2.00	(.50)	2.75	(.22)	.23	(.35)	.63	(.58)	.38	(.56)
Social withdrawal	2.33	(.71)	2.92	(.28)	H .06	(.24)	.17	(.38)	.58	(.96)
Social detachment	2.11	(.60)	2.85	(.55)	H .00	(.00)	.55	(.69)	.37	(.83)
Intimacy avoidance	2.00	(.50)	H 2.77	(.44)	H .75	(1.00)	1.14	(.92)	.32	(.82)
Restricted affectivity	2.00	(.87)	2.85	(.38)	H .24	(.56)	.86	(1.06)	.26	(.45)
Anhedonia	1.56	(.88)	2.38	(.51)	H .12	(.49)	.41	(.78)	.37	(.50)
Antagonism	1.54	(.62)	.35	(.34)	1.57	(.21)	2.04	(.47)	.44	(.42)
Callousness	1.89	(.78)	1.08	(.95)	1.41	(.94)	2.52	(.63)	H .11	(.32)
Manipulativeness	1.11	(.78)	.00	(.00)	2.06	(.85)	2.38	(.82)	H .74	(.73)
Narcissism	1.44	(1.01)	.46	(.66)	2.06	(.66)	3.00	(.00)	H .42	(.69)
Histrionism	.11	(.33)	.00	(.00)	2.82	(.39)	H 1.83	(.71)	H .95	(.91)
Hostility	2.67	(.50)	H .54	(.97)	1.00	(.71)	1.97	(.63)	.53	(.61)
Aggression	1.89	(.93)	.23	(.44)	.76	(.66)	1.62	(.90)	.17	(.38)
Oppositionality	2.11	(1.05)	.38	(.65)	.80	(.77)	1.41	(.95)	.21	(.42)
Deceitfulness	1.11	(.78)	.08	(.28)	1.65	(.93)	1.59	(.91)	.42	(.61)
Disinhibition	.36	(.45)	.23	(.28)	1.81	(.67)	.70	(.52)	.41	(.69)
Impulsivity	.22	(.44)	.15	(.55)	2.18	(.81)	.93	(.88)	.53	(.77)
Distractibility	.33	(.50)	.54	(.66)	1.94	(.83)	.17	(.47)	.53	(.84)
Recklessness	.22	(.44)	.00	(.00)	1.53	(.72)	.83	(.80)	.37	(.76)
Irresponsibility	.67	(.87)	.23	(.60)	1.59	(.87)	.86	(.88)	.24	(.56)
Compulsivity	1.47	(.77)	.92	(.49)	.24	(.38)	.60	(.52)	.75	(.60)
Perfectionism	1.56	(1.24)	.62	(.51)	.41	(.71)	1.41	(1.09)	.67	(.84)
Perseveration	1.33	(1.00)	.77	(.73)	.24	(.56)	.38	(.62)	.50	(.92)
Rigidity	2.33	(.71)	1.38	(.77)	.24	(.56)	.69	(.76)	.65	(.79)
Orderliness	1.11	(.60)	.77	(.73)	.18	(.39)	.38	(.62)	.44	(.62)
Risk aversion	1.00	(1.00)	1.08	(.76)	.12	(.33)	.14	(.35)	1.50	(.86)
Schizotypy	.84	(.58)	1.09	(.55)	.93	(.72)	.14	(.26)	.19	(.31)
Unusual perceptions	.56	(.73)	.92	(.95)	.53	(.80)	.03	(.19)	.12	(.33)
Unusual beliefs	1.22	(.83)	H 1.31	(.75)	.71	(.92)	.24	(.51)	.17	(.38)
Eccentricity	.78	(.83)	1.38	(1.04)	1.06	(1.20)	.21	(.49)	.06	(.24)
Cognitive dysregulation	1.33	(.71)	1.23	(.60)	1.00	(.87)	.14	(.44)	.13	(.50)
Dissociation proneness	.33	(.50)	.62	(.51)	1.35	(.93)	.07	(.26)	.50	(.79)

Note. All ratings on a 4-point Likert-type Scale where 0 = *very little or not at all*, 1 = *mildly descriptive*, 2 = *moderately descriptive*, and 3 = *extremely descriptive*. The capital "H" indicates those facets that were assigned to each personality disorder by the *DSM-5* Personality and Personality Disorders Work Group (2010).

psychopathic, .69 for schizotypal, .43 for borderline, .36 for obsessive–compulsive, and .23 for avoidant. When using the 2.00 (i.e., moderately descriptive) cutoff, these kappa values were 1.00 for antisocial/psychopathic, .80 for schizotypal, .63 for obsessive–compulsive, .60 for borderline, and .34 for the avoidant type.

The fact that the agreement statistics did not change appreciably appears to be attributable to the fact that the reduction was unrelated to the trait assignments. Traits whose assignments were supported by the current study (e.g., low self-esteem for the avoidant type) were removed along with those where the assignments were not supported (e.g., oppositionality for the obsessive–compulsive type). It is notable in this regard that the construct coverage of certain types were impacted by this potential reduction more than others. For example, five of the nine traits assigned by the Work Group as descriptive of the obsessive–compulsive type were not among the 25 in the reduced model. Even more dramatic is that only two of the remaining four assignments for the obsessive–compulsive type (i.e., perfectionism and perseverance) were seen as at least moderately descriptive by our experts. This suggests that a potentially unintended consequence of a reduction in the trait model would be the unequal coverage of certain PD constructs.

As with the *DSM-5* types, the trait assignments for the deleted *DSM-IV* PDs also did not change considerably when the trait model was restricted to 25. The kappa values using the *extremely descriptive* cutoff were 1.00 for histrionic, .83 for schizoid, .78 for dependent, and .63 for both paranoid and narcissistic. Finally, when considering the 2.00 threshold for the ratings, the agreement was perfect for dependent and schizoid, .83 for narcissistic, .60 for paranoid, and .51 for histrionic. However, unlike the case of obsessive–compulsive, the reduced trait model did not have a notable impact on the coverage of the PDs slated for deletion as the trait of social detachment (for schizoid) was the only discarded trait that had been originally assigned for the diagnosis of these PDs.

Discussion

The present study sought to understand the changes to the PD nomenclature proposed by the *DSM-5* Personality and Personality Disor-

ders Work Group (2010). Specifically, expert researchers described each of the five types proposed by the Work Group, as well as the five *DSM-IV* PDs slated for removal, in terms of the trait model proposed for *DSM-5*. Response rates from a comprehensive group of PD experts were quite good, with all but one PD construct (*DSM-IV* paranoid PD) rated by at least 10 different experts, and comparable to previous studies of this population (e.g., Lynam & Widiger, 2001; Miller et al., 2001). In addition, agreement across the expert raters (as indexed by average interrater correlations, average corrected item total correlations, composite alpha coefficients, and within group correlations) was moderately high, although some constructs (e.g., borderline) obtained more modest values than in previous studies (e.g., Lynam & Widiger, 2001). Nonetheless, this level of agreement indicates that the experts shared common perceptions of the PD constructs and applied the proposed trait model consistently. This latter point supports the interrater reliability and perceived relevance of the dimensional trait models, in general, and affirms the Work Group's conceptual decision to pursue such a model, although the proposed trait content is still being debated.

Trait Descriptions of the Proposed *DSM-5* Types

A primary aim of the present study was to compare these empirically derived expert trait ratings to the specific traits assigned to each PD by the Work Group. For several of the proposed *DSM-5* types, the agreement between our experts and the Work Group was quite good. This was particularly true for the antisocial/psychopathic type as all nine traits assigned by the Work Group were also rated as extremely descriptive by our expert researchers, yielding a kappa of 1.00. However, kappa statistics were much lower for the borderline, avoidant, and obsessive–compulsive types, even when the threshold for expert ratings was relaxed to the moderately descriptive level. Further, supplemental analyses indicated that the potential reduction to a 25-trait model did not have a notable impact on the agreement between our experts and the Work Group. However, the results of our study do suggest that the specific reduction proposed by Krueger et al. (in press)

might limit the coverage of certain *DSM-5* types, such as obsessive–compulsive, to only a couple of traits. This illustrates the potential complexities of developing a comprehensive trait model as the Work Group must carefully balance basic psychometric issues and the factorial structure of the model against matters of clinical utility and construct coverage.

It is clear that the Work Group attempted to be inclusive when assigning traits to the proposed *DSM-5* types, as they identified between nine and 11 traits that would be relevant to each. The current findings suggest they were actually overinclusive as most disagreements were instances in which our experts did not rate the traits assigned by the Work Group highly. In fact, over half of the traits assigned by the Work Group for the borderline, avoidant, and obsessive–compulsive types were not rated as at least moderately descriptive by our experts; explaining the rather low kappa values for these types.

In several cases, the assignments provided by the *DSM-5* Work Group appeared to expand the traditional boundaries of the PD constructs slated for deletion. In fact, nine of the 13 traits that the Work Group indicated would characterize one of the PDs, but did not according to our experts, were for the paranoid, schizoid, and dependent PDs. For example, the traits of anhedonia and restricted affectivity were assigned to the avoidant type by the Work Group, although these traits appear most clearly indicative of *DSM-IV* schizoid PD (Bernstein, Arntz, & Travaglini, 2009). In fact, a primary differential diagnosis between the *DSM-IV* conceptualizations of these two disorders is that “individuals with Avoidant Personality Disorder want to have relationships with others and *feel their loneliness deeply* [emphasis added], whereas those with Schizoid . . . may be content with and even prefer their social isolation” (APA, 2000, p. 664). One might explain the assignment of these traits to the avoidant type as reflecting changes in how it will be described in *DSM-5* (Personality & Personality Disorder Work Group, 2010). However, there is no reference to these traits within the narrative description of the *DSM-5* avoidant prototype.

Similar concerns could be raised for other trait assignments, such as including guilt/shame, restricted affectivity, and pessimism for the diagnosis of the obsessive–compulsive type. Our experts did not consider these traits to be

descriptive of this type and they were not included within the *DSM-IV-TR* description of this PD. It is possible that there exists some clinical or theoretical literature supporting this conceptualization, but the basis for the assignments is not currently specified (Skodol et al., 2011).

The current findings suggest that the *DSM-5* Work Group included considerably more traits for each type (with the exception of antisocial/psychopathic) than would be recommended based on descriptions provided by expert researchers. This suggests one of two possible actions might improve the proposed model. First, the committee might reconsider their trait assignments and generally reduce the number of traits seen as descriptive of each type. Second, they might also rewrite the narrative descriptions of each type in order to accommodate the traits specified.

Trait Descriptions of the *DSM-IV* PDs Targeted for Deletion Within the *DSM-5* Proposal

In contrast to the Work Group’s overinclusive trait assignments for the *DSM-5* types, the assignments for the five *DSM-IV* PDs slated for deletion were more restrictive. Whereas the Work Group assigned an average of 10 traits to each of the five retained types, the *DSM-IV* PDs to be excluded had only two (histrionic) to five (schizoid) traits. The Work Group does not provide a rationale for such a striking disparity. Thus, it is unclear whether they considered these five PDs conceptually simpler or more homogenous in content, such that fewer traits were needed to capture them fully. Two of the disorders are now diagnosed by scales that refer explicitly to the constructs themselves (i.e., histrionic and narcissistic PDs). Many experts in the field regard these as highly complex, multidimensional constructs (e.g., Pincus, & Lukowitsky, 2010). It is unclear why narcissism and histrionism were not dismantled into their component parts, which has typically been one of the major goals and advantages of a dimensional model of PD classification (Clark, 1993; Widiger & Simonsen, 2005).

The inclusion of trait scales that refer to the entire PD construct is not the only reason, though, for the inclusion of so many fewer trait scales to diagnose the PDs slated for deletion.

There are also only four traits to assess paranoid, five to assess schizoid, and three to assess dependent PDs. One might have expected more trait scales for the disorders slated for deletion, as there is no other basis for their description. The fact that there are only 2–5 traits diagnosing the PDs slated for deletion in comparison to 9–11 for those being retained could reflect, in part, how the 37 traits were originally selected (although how the traits were selected is unclear; Simms et al., in press). In the cases of paranoid and dependent PDs, this restrictive strategy was contradicted by the experts in this study who identified additional traits that were relevant. For example, six additional traits (i.e., pessimism, social withdrawal, social detachment, restricted affectivity, oppositionality, and rigidity) were rated as moderately descriptive by experts in paranoid PD. Nevertheless, even with the more restrictive approach, there were instances in which our experts did not support the Work Group assignments. For example, the Work Group assigned the trait of unusual beliefs for the diagnosis of *DSM-IV* paranoid PD. In contrast, the experts did not rate this trait highly and instead suggested that traits such as rigidity or social withdrawal would be more useful for diagnosis. An additional point of disagreement was the Work Group's inclusion of histrionism for the diagnosis of narcissistic PD. The differential diagnosis of the histrionic and narcissistic personality disorders has been a longstanding problem (Gunderson, Ronningstam, & Smith, 1995; Pfohl, 1996), and the inclusion of histrionism in the diagnosis of narcissism would appear to exacerbate this problem.

An additional issue for the trait description of narcissism might also be the failure to recognize the current interest in differentiating between grandiose and vulnerable narcissism (Cain, Pincus, & Ansell, 2008; Morf & Rhodewalt, 2001; Pincus & Lukowitsky, 2010). A burgeoning area of active research is distinguishing between grandiose and vulnerable factors subsumed under the common label of narcissism (e.g., Miller et al., 2010; Wright et al., 2010). The definition of the narcissism trait proposed by the Work Group appears focused on entitlement and grandiosity and an initial draft list of the traits included the label grandiosity rather than narcissism (Skodol, 2009). Updates to the website in January 2011 again reflect this title. Without a

separate trait concerning vulnerability, the trait model might have difficulty comprehensively capturing the construct of narcissism (Ronningstam, in press).

In general, however, the less inclusive strategy for the excluded PDs was supported by our experts, at least when considering traits rated as extremely descriptive. For example, the Work Group identified only two traits (i.e., histrionism and emotional lability) that are necessary to diagnose *DSM-IV* histrionic PD and the experts rated both as extremely descriptive, yielding a perfect kappa value. Of course, the ability for there to be disagreement between our expert researchers and the Work Group members was perhaps reduced by their inclusion of fewer traits (e.g., the dimensional proposal includes considerably more obsessive–compulsive and borderline traits than it includes dependent or narcissistic traits). It might be of interest in future research to consider additional traits not included among the list of 37 within the proposal for *DSM-5*.

Finally, our supplementary analyses concerning the potential 25-trait model indicated that this reduction did little to improve the convergence between our experts and the *DSM-5* Work Group's assignments for the *DSM-IV* PDs slated for elimination. This is perhaps not surprising as the motivation for the reduction was primarily predicated on the reliability and factor structure of the model, rather than an effort to provide the most valid and comprehensive coverage of the proposed types or the *DSM-IV* PDs.

Implications and Recommendations

The current findings represented the consensus opinion of a large group of researchers with specific expertise on these constructs and provided the first empirical data on the changes proposed for *DSM-5*. The current results suggest how the two relatively distinct components of the proposed model (types/disorders and traits) relate to one another. Our results also raise questions for consideration by the Work Group about their proposed exclusion of *DSM-IV* PDs from the *DSM-5* types as well as their conceptualization of certain types and traits. We hope that our current study and analyses might be helpful in guiding revisions to the traits ultimately assigned to diagnose each de-

leted PD and rated for the *DSM-5* types. Field trials investigating the proposed system are currently ongoing and will yield data that also bear on these questions. The results from the field trial will likely take the form of correlations between ratings of the types and traits. We believe that our expert consensus approach provides a useful complement for such correlational data and that convergence across these two approaches should ultimately inform the final decisions.

In addition, we believe that one might also utilize the trait profiles generated in this study as a bridge for the diagnoses that will be eliminated in *DSM-5* (Miller, 2011). There is an established literature indicating that a statistical comparison indexing the similarity between an individual's trait profile and that of a PD prototype can reasonably approximate the properties of the diagnosis itself (Benning, Patrick, Blonigen, Hicks, & Iacono, 2003; Miller, Reynolds, & Pilkonis, 2004; Trull, Widiger, Lynam, & Costa, 2003). Clinicians or researchers could use similar techniques with the *DSM-5* trait model to approximate constructs, such as narcissistic PD, for diagnostic or research purposes. While we agree with Clark (2007) that ultimately a trait model should stand on its own validity rather than replicate imperfect categories, we also feel that the ability to recover the eliminated constructs will facilitate use and acceptance of the trait system. Indeed, this is the explicit proposal of Clark and Krueger (2010).

Considerations and Limitations

A reality of studying any proposal is that it is likely to change. It is possible, if not likely, that some of the traits included within the model will be altered and/or trait assignments will shift before the publication of *DSM-5*. However, this does not diminish the importance of studying such a proposal as it still holds utility for providing empirical data that could inform such revisions. In fact, this is the explicit intention and primary role of the ongoing field trials and our hope is that the results of the current study will also inform any such shifts.

The current study focused explicitly on researchers with expertise on the specific PD constructs. Although this strategy was successful in obtaining ratings from individuals knowledgeable about the issues it might have had its own

limitations. For example, the sample did not contain a large or representative sample of individuals with clinical expertise as the respondents spent less than 20% of the work hours providing clinical service. Future studies that replicate these findings using clinicians will be necessary to demonstrate that this multilevel diagnostic system can be used effectively in clinical practice. Surveying practicing clinicians rather than researchers might also yield a sample that more closely reflects the variety of individuals who use the diagnostic system. For example, fewer than 15% of our respondents were psychiatrists. Although we did not exclude those with an M.D., our results suggest that they represent a minority of individuals engaged in PD research.

Taken together, we would suggest that the current study represents a method that provides data that can usefully inform our understanding of PDs, particularly as the field undergoes a substantial shift. Future application of the expert consensus method among samples of practicing clinicians, including psychiatrists and social workers as well as psychologists, would be fruitful for understanding changes to the nomenclature. In addition, it might be useful in future research to consider additional traits that were not included within the Work Group's proposed list of 37.

Conclusions

The *DSM-5* Personality and Personality Disorders Work Group stands poised to take the historic step of significantly modifying the diagnosis of personality pathology by incorporating two somewhat distinct dimensional models. Specifically, they have proposed that five of the existing diagnostic categories should be reconceptualized as types that are diagnosed using narrative descriptions, while the other half will be eliminated and replaced with a dimensional trait model. There is evidence to support narrative descriptions (e.g., Shedler & Westen, 2007) and a trait model (e.g., Clark, 2007; Widiger & Trull, 2007) as well as studies indicating that the two models can be integrated (Lynam & Widiger, 2001). However, the current study provided the first empirical data on how the specific *DSM-5* types and traits can be integrated and relate to one another. In general, our experts' ratings supported the notion that there

is a meaningful crosswalk between these two systems. Additionally, the expert trait ratings demonstrated moderate agreement with the Work Group's assignments, but also suggested notable discrepancies between how these types are described by the Work Group and how they are perceived by other PD researchers. We believe that these results hold promise for improving the currently proposed system and will help inform researchers and clinicians who will use the *DSM-5* model.

References

- American Psychiatric Association. (1952). *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: American Psychiatric Association.
- Benning, S. D., Patrick, C. J., Blonigen, D. M., Hicks, B. M., & Iacono, W. G. (2003). Estimating facets of psychopathy from normal personality traits: A step toward community epidemiological investigations. *Assessment, 12*, 3–18.
- Bernstein, D. P., Arntz, A., & Travaglini, L. (2009). Schizoid and avoidant personality disorders. In P. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (pp. 586–601). New York: Oxford University Press.
- Bornstein, R. F. (in press). Reconceptualizing personality pathology in *DSM-5*: Limitations in evidence for eliminating dependent personality disorder and other *DSM-IV* syndromes. *Journal of Personality Disorders*.
- Cain, N. M., Pincus, A. L., & Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review, 28*, 638–656.
- Clark, L. A. (1993). *Schedule for Nonadaptive and Adaptive Personality (SNAP)*. Minneapolis, MN: University of Minnesota Press.
- Clark, L. A. (2007). Assessment and diagnosis of personality disorder: Perennial issues and an emerging reconceptualization. *Annual Review of Psychology, 58*, 227–257.
- Clark, L. A., & Krueger, R. F. (2010, February 10). Rationale for a six-domain trait dimensional diagnostic system for personality disorder. Retrieved from <http://www.dsm5.org/ProposedRevisions/Pages/Rationale-foraSix-DomainTraitDimensionalDiagnosticSystemforPersonalityDisorder.aspx>
- DSM-5 Personality and Personality Disorders Work Group. (2010). *Personality and Personality Disorders*. Retrieved on October 29, 2010 from *DSM-5* website: <http://www.dsm5.org/ProposedRevisions/pp/proposedrevision.aspx?rid=470>
- Frances, A. J. (1993). Dimensional diagnosis of personality—Not whether, but when and which. *Psychological Inquiry, 4*, 110–111.
- Gunderson, J. G., Ronningstam, E., & Smith, L. (1995). Narcissistic personality disorder. In W. J. Livesley (Ed.), *The DSM-IV personality disorders* (pp. 201–212). New York: Guilford Press.
- James, L. R., Demaree, R. G., & Wolf, G. (1993). r_{wg} : An assessment of within-group interrater agreement. *Journal of Applied Psychology, 78*, 306–309.
- Krueger, R. F., Eaton, N. R., Derringer, J., Markon, K., Watson, D., & Skodol, A. E. (in press). Personality in *DSM-5*: Helping delineate personality disorder content and framing the meta-structure. *Journal of Personality Assessment*.
- Livesley, W. J. (2003). Diagnostic dilemmas in classifying personality disorder. In K. A. Phillips, M. B. First, & H. A. Pincus (Eds.), *Advancing DSM: Dilemmas in psychiatric diagnosis* (pp. 153–190). Washington, DC: American Psychiatric Association.
- Livesley, W. J. (2010). Confusion and incoherence in the classification of personality disorder: Commentary on the preliminary proposals for *DSM-5*. *Psychological Inquiry and Law, 3*, 304–313.
- Lynam, D. R., & Widiger, T. A. (2001). Using the five-factor model to represent the *DSM-IV* personality disorders: An expert consensus approach. *Journal of Abnormal Psychology, 110*, 401–412.
- McCrae, R. R., & Costa, P. T. (2008). The five factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality* (3rd ed., pp. 159–181). NY: Guilford Press.
- Miller, J. D. (2011). *Five-Factor Model personality disorder prototypes: A review of their development, validity, and implications for DSM-5*. Manuscript submitted for publication.
- Miller, J. D., Dir, A., Gentile, B., Wilson, L., Pryor, L. R., & Campbell, W. K. (2010). Searching for a vulnerable dark triad: Comparing factor 2 psychopathy, vulnerable narcissism, and borderline personality disorder. *Journal of Personality, 78*, 1529–1564.
- Miller, J. D., Lynam, D., Widiger, T., & Leukefeld, C. (2001). Personality disorders as an extreme variant of common personality dimensions: Can the five factor model represent psychopathy? *Journal of Personality, 69*, 253–276.

- Miller, J. D., Reynolds, S. K., & Pilkonis, P. A. (2004). The validity of the Five-Factor Model prototypes for personality disorders in two clinical samples. *Psychological Assessment, 16*, 310–322.
- Miller, J. D., Widiger, T. A., & Campbell, W. K. (2010). Narcissistic personality disorder and the DSM-V. *Journal of Abnormal Psychology, 119*, 640–649.
- Morey, L. C., Hopwood, C. J., Gunderson, J. G., Skodol, A. E., Shea, M. T., Yen, S., . . . McGlashan, T. H. (2007). Comparison of alternative models for personality disorders. *Psychological Medicine, 37*, 983–994.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry, 12*, 177–196.
- Pfohl, B. (1996). Histrionic personality disorder. In T. A. Widiger, A. J. Frances, H. A. Pincus, R. Ross, M. B. First, & W. W. Davis (Eds.), *DSM-IV sourcebook* (Vol. 2, pp. 733–744). Washington, DC: American Psychiatric Association.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology, 6*, 421–446.
- Qualtrics Labs Inc. (2010). Qualtrics Research Suite (version 15763). Provo, UT.
- Ronningstam, E. (in press). Narcissistic personality disorder in DSM V—in support of retaining a significant diagnosis. *Journal of Personality Disorders*.
- Samuel, D. B. (in press). Assessing personality in the DSM-5: The utility of bipolar constructs. *Journal of Personality Assessment*.
- Samuel, D. B., & Widiger, T. A. (2004). Clinicians' descriptions of prototypic personality disorders. *Journal of Personality Disorders, 18*, 286–308.
- Samuel, D. B., & Widiger, T. A. (2008). A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. *Clinical Psychology Review, 28*, 1326–1342.
- Shedler, J., & Westen, D. (2007). The Shedler-Westen Assessment Procedure (SWAP): Making personality diagnosis clinically meaningful. *Journal of Personality Assessment, 89*, 41–55.
- Simms, L. J., Goldberg, L. R., Roberts, J. E., Watson, D., Welte, J., & Rotterman, J. H. (in press). Computerized adaptive assessment of personality disorder: Introducing the CAT-PD project. *Journal of Personality Assessment*.
- Skodol, A. (2009, August). *Emerging DSM-V perspectives on personality disorders*. Plenary address presented at the Eleventh International ISSPD Congress, New York.
- Skodol, A. E., Bender, D. S., Morey, L. C., Clark, L. A., Oldham, J. M., Alarcon, R. D., & Siever, L. J. (in press). Personality disorder types proposed for DSM-5. *Journal of Personality Disorders*.
- Skodol, A. E., Clark, L. A., Bender, D. S., Krueger, R. F., Livesley, W. J., Verheul, R., & Bell, C. C. (2011). Proposed changes in personality and personality disorder assessment for DSM-5 Part I: Description and rationale. *Personality Disorders: Theory, Research, & Treatment, 2*, 4–22.
- Trull, T. J., & Durrett, C. A. (2005). Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology, Vol. 1*, 355–380.
- Trull, T. J., Widiger, T. A., Lynam, D. R., & Costa, P. T. (2003). Borderline personality disorder from the perspective of general personality functioning. *Journal of Abnormal Psychology, 112*, 193–202.
- Westen, D., & Shedler, J. (2000). A prototype matching approach to diagnosing personality disorders toward DSM-V. *Journal of Personality Disorders, 14*, 109–126.
- Widiger, T. A. (2005). Five factor model of personality disorder: Integrating science and practice. *Journal of Research in Personality, 39*, 67–83.
- Widiger, T. A. (in press). Integrating normal and abnormal personality disorder: A proposal for DSM-V. *Journal of Personality Disorders*.
- Widiger, T. A., & Mullins-Sweatt, S. N. (2009). Five-factor model of personality disorder: A proposal for DSM-5. *Annual Review of Clinical Psychology, 5*, 197–220.
- Widiger, T. A., & Simonsen, E. (2005). Alternative dimensional models of personality disorder: Finding a common ground. *Journal of Personality Disorders, 19*, 110–130.
- Widiger, T. A., & Trull, T. J. (2007). Plate tectonics in the classification of personality disorder: Shifting to a dimensional model. *American Psychologist, 62*, 71–83.
- Wright, A. G. C., Lukowitsky, M. R., Pincus, A. L., & Conroy, D. E. (2010). The higher order factor structure and gender invariance of the Pathological Narcissism Inventory. *Assessment, 17*, 467–483.