

Characterizing Psychopathy Using DSM-5 Personality Traits

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Abstract

Despite its importance historically and contemporarily, psychopathy is not recognized in the current *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revised (*DSM-IV-TR*). Its closest counterpart, antisocial personality disorder, includes strong representation of behavioral deviance symptoms but weak representation of affective-interpersonal features considered central to psychopathy. The current study evaluated the extent to which psychopathy and its distinctive facets, indexed by the Triarchic Psychopathy Measure, can be assessed effectively using traits from the dimensional model of personality pathology developed for *DSM-5*, operationalized by the Personality Inventory for *DSM-5* (PID-5). Results indicate that (a) facets of psychopathy entailing impulsive externalization and callous aggression are well-represented by traits from the PID-5 considered relevant to antisocial personality disorder, and (b) the boldness facet of psychopathy can be effectively captured using additional PID-5 traits. These findings provide evidence that the dimensional model of personality pathology embodied in the PID-5 provides effective trait-based coverage of psychopathy and its facets.

Keywords

psychopathy, *DSM-5*, personality disorders, antisocial personality disorder, PID-5

The diagnosis of antisocial personality disorder (ASPD) has been intensely debated since release of the third and fourth editions of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III/IV)*; American Psychiatric Association, 1980, 2000). In particular, critics have argued that ASPD is a weak facsimile of the classic clinical construct of psychopathy, omitting core affective-interpersonal features central to the condition. A supplemental approach to diagnosing personality pathology that conceptualizes ASPD and other personality disorders (PDs) in terms of dimensional traits will be included in the upcoming fifth edition of the *DSM (DSM-5)* as an emerging model. The current study evaluated how effectively this new trait-based approach captures essential symptomatic facets of psychopathy specified by an integrative theoretic perspective, the Triarchic model (Patrick, Fowles, & Krueger, 2009), and in particular whether traits aside from those specified for the diagnosis of ASPD might be needed to capture psychopathy as defined in classic historic writings (e.g., Cleckley, 1976; Lykken, 1957, 1995).

PDs (Clark, 2007; Trull & Durrett, 2005; Widiger & Clark, 2000). For these reasons, many researchers favor a dimensional approach to characterizing personality pathology, arguing that PDs represent extremes along trait-dispositional continua, accompanied by diminished social/occupational functioning (Frances & Widiger, 2012; Livesley & Jang, 2000; Widiger & Mullins-Sweatt, 2009). With the aim of addressing these challenges, the PD section of the upcoming fifth edition of the *DSM (DSM-5)* will include an important extension of the existing *DSM-IV* framework. Along with inclusion of PDs as currently defined in *DSM-IV*, the *DSM-5* will include, in Section III, a new trait-based system for characterizing personality pathology, developed by the Personality and Personality Disorders (PPD) Work Group for *DSM-5*, as an emerging model for use in clinical research. This addition provides the foundation for moving from the existing categorical system for PDs toward an alternative dimensional framework in successive revisions of the *DSM*.

Diagnosis of Personality Pathology in DSM-5

The categorical system for diagnosing PDs in *DSM-IV* has been widely criticized on a number of grounds, including arbitrary symptom thresholds for diagnoses, low reliabilities for a number of the PDs, and high comorbidity among

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Table 1. Diagnostic Criteria for Antisocial Personality Disorder in *DSM-IV*, with (in parentheses) Corresponding Personality Trait Criteria within *DSM-5* Emerging Model.

1. Failure to conform to social norms with respect to lawful behaviors
2. Deceitfulness (**1b, ANT—Deceitfulness**)
3. Impulsivity or failure to plan ahead (**2b, DIS—Impulsivity**)
4. Irritability and aggressiveness (**1d, NEGAFF—Hostility**)
5. Reckless disregard for safety of self or others (**2c, DIS—Risk Taking**)
6. Consistent irresponsibility (**2a, DIS—Irresponsibility**)
7. Lack of remorse (**1c, ANT—Callousness**)

Note. Number/letter entries in parentheses reflect ordering of traits specified under Criterion B (personality trait indicators) for this diagnosis in *DSM-5*. Capitalized abbreviations in parentheses refer to broad domains in which specified traits are located (ANT = domain of Antagonism; DIS = Disinhibition; NEGAFF = Negative Affect); although identified conceptually with the domain of Antagonism in the PD trait model for *DSM-5*, the trait of Hostility is identified instead with the domain of Negative Affect in the Personality Inventory for *DSM-5* (PID-5; Krueger et al., 2012), based on preferential empirical convergence with this domain. The *DSM-5* trait-based definition omits *DSM-IV* Criterion 1 (not considered a personality disposition; R. F. Krueger, personal communication, July 25, 2012) and adds Criterion 1a, Manipulativeness, from the domain of Antagonism. In addition to these specified traits, the diagnosis of antisocial personality disorder in *DSM-5* requires characteristic impairments in self-functioning and interpersonal functioning (Criterion A).

This alternative trait-based model calls for PDs to be diagnosed on the basis of impairments in identity, self-direction, empathy, and/or intimacy, together with the presence of pathological personality traits. As a basis for operationalizing these dimensions, members of the *DSM-5* Work Group and their collaborators developed an instrument, the Personality Inventory for *DSM-5* (PID-5; Krueger, Derringer, Markon, Watson, & Skodol, 2012), for assessing lower-order facet traits that empirically delineate broad domains of personality pathology (Negative Affect, Detachment, Antagonism, Disinhibition, Psychoticism). Recent studies have linked the PID-5 domains to the existing Personality Psychology–Five (PSY-5) dimensions measured in the Minnesota Multiphasic Personality Inventory–2 Restructured Form (Anderson et al., 2013).

Antisocial Personality Disorder Versus Psychopathy

One key variant of personality pathology represented in the emerging dimensional model for *DSM-5* is ASPD. As a counterpart to the criterion-based definition that exists currently in *DSM-IV*, the PPD Work Group proposed a trait-based definition encompassing traits from PD-relevant domains of Disinhibition and Antagonism. Specifically, as shown in Table 1, *DSM-IV* ASPD criteria of impulsivity, reckless disregard, and irresponsibility are represented by traits of Impulsivity, Risk Taking, and Irresponsibility (Disinhibition domain), and criteria of deceitfulness, aggressiveness, and lack of remorse are represented by traits of Deceitfulness, Manipulativeness, Hostility, and Callousness (domain of Antagonism). Thus, the dimensional PD framework for *DSM-5* provides for continuity in the diagnosis of ASPD as specified in *DSM-IV*, but with a shift from stand-alone criteria within a categorical diagnostic framework to dimensional traits within a comprehensive model of personality pathology.

Beyond this, it is important to evaluate how effectively the *DSM-5* trait-based model can capture features of psychopathy not well represented in *DSM-IV* ASPD (Driscoll, Arsal, & Patrick, 2013; Lynam & Vachon, 2012). The Disinhibition and Antagonism domains of the PID-5 appear to cover much of the same thematic terrain as the disinhibition and meanness components of the Triarchic model. However, ASPD as defined in the PD trait model for *DSM-5* (consistent with its characterization in *DSM-IV*) does not include elements of interpersonal efficacy, emotional resiliency, and fearless temperament (i.e., prototypical elements of boldness), which are considered by many to be defining features of psychopathy (for contrasting views on this issue, see: Lilienfeld et al., 2012; Marcus, Fulton, & Edens, 2012; Miller & Lynam, 2012; Patrick, Venables, & Driscoll, 2013). Indeed, features such as glibness/superficial charm and grandiose sense of self-worth, reflecting high levels of boldness, appear to be crucial for distinguishing psychopathy from ASPD (Patrick et al., 2013; Patrick, Hicks, Nichol, & Krueger, 2007; Skeem, Polaschek, Patrick, & Lilienfeld, 2011). An important question, therefore, is whether the boldness component of psychopathy can be effectively captured by PD traits included in the trait model for *DSM-5*—as a basis for defining a classically psychopathic variant of ASPD marked by social efficacy, emotional stability, and fearlessness.

The ability to distinguish psychopathy from ASPD would be valuable in both clinical and research contexts, as substantial evidence indicates that antisocial individuals who exhibit the core affective-interpersonal features of psychopathy differ in important ways from those who lack these traits. For example, individuals with psychopathy tend to display more chronic and violent patterns of antisocial behavior (Neumann & Hare, 2008) and differ markedly from individuals with ASPD who lack core psychopathic traits in patterns of behavioral and physiological responding within affective or cognitive processing

tasks (Blair, Mitchell, & Blair, 2005; Drislane, Vaidyanathan, & Patrick, 2013; Newman & Lorenz, 2003; Patrick, 2007; Vaidyanathan, Hall, Patrick, & Bernat, 2011). As such, a central aim of the current study was to identify traits included in the *DSM-5* PD model that effectively capture core affective-interpersonal features of psychopathy that can serve to demarcate a variant of ASPD reflecting classic conceptions of “primary” psychopathy (Cleckley, 1976; Karpman, 1948; Lykken, 1957).

Current Study

The current study evaluated the effectiveness of PD traits comprising the trait-based definition of ASPD in *DSM-5*, operationalized using the PID-5, in predicting scores on the Triarchic Psychopathy Measure (TriPM; Patrick, 2010), a self-report inventory that assesses psychopathy in terms of the distinct phenotypic facets described in the Triarchic model (Patrick et al., 2009). Total scores on the TriPM correlate highly with scores on other well-established adult psychopathy inventories (Drislane, Patrick, & Arsal, 2013), including the widely used Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996; PPI-Revised; Lilienfeld & Widows, 2005) and the Self-Report Psychopathy Scale (SRP-III; Williams, Paulhus, & Hare, 2007)—with the Boldness, Meanness, and Disinhibition subscales of the TriPM each contributing uniquely and substantially to prediction. Furthermore, the three subscales of the TriPM show conceptually meaningful relations with distinct facets of psychopathy indexed by these and other such inventories, and with personality traits known to be related to psychopathy. Scores on the Boldness subscale are associated with socially adaptive characteristics, including dominance, persuasiveness, stress immunity, and well-being, along with maladaptive tendencies, such as grandiosity, manipulateness, dishonesty, risk taking, and emotional insensitivity (Drislane et al., 2013; Marion et al., 2012; Sellbom & Phillips, 2013; Stanley, Wygant, & Sellbom, 2012). TriPM Meanness, in contrast, indexes tendencies toward callousness, aggressiveness, Machiavellianism, and remorselessness, whereas Disinhibition is most strongly related to traits of impulsivity, alienation, irresponsibility, carelessness, and antisocial/rule-breaking tendencies (Drislane et al., 2013; Marion et al., 2012; Sellbom & Phillips, 2013; Stanley et al., 2012).

The current study used the TriPM in conjunction with the PID-5 to evaluate the extent to which traits included in the trait-based diagnosis of ASPD in *DSM-5* provide effective coverage of distinguishable facets of psychopathy specified in the Triarchic model and to examine whether coverage might be improved by inclusion of additional traits. Based on aforementioned findings regarding the empirical correlates of boldness, meanness, and disinhibition as indexed by the TriPM, we hypothesized that the

traits identified as relevant to ASPD in *DSM-5* would provide effective coverage of the meanness and disinhibition facets of psychopathy, but not the boldness facet. In evaluating this hypothesis, we sought to address long-standing questions concerning overlap and distinctiveness in diagnostic conceptions of psychopathy versus ASPD (Hare, 1983; Hare, Hart, & Harpur, 1991; Patrick et al., 2007; Patrick et al., 2013; Skeem et al., 2011). Specifically, we hypothesized that TriPM Disinhibition would be effectively predicted by PID-5 traits of Impulsivity and Irresponsibility from the domain of Disinhibition (Hypothesis 1), and that TriPM Meanness would be predicted effectively by PID-5 traits of Callousness, Manipulativeness, and Deceitfulness from the domain of Antagonism (Hypothesis 2). We further hypothesized that PID-5 traits Anxiousness (–), Submissiveness (–), Withdrawal (–), and Attention Seeking (from domains of Negative Affect, Detachment, and Antagonism) would capture elements of boldness not covered by traits specified for the proposed diagnosis of ASPD (Hypothesis 3). In evaluating this hypothesis, we sought to determine whether PD traits aside from those designated as relevant to ASPD would improve coverage of boldness and thereby serve as a basis for designating a more classically psychopathic variant of ASPD.

Method

Participants

Participants were 188 adults (98 female; M age = 22.9, SD = 7.3), consisting of 139 individuals from the community (74 female) recruited through Craigslist advertisements and 49 undergraduate psychology students (24 female) recruited through campus advertisements. All the undergraduate participants and a portion of the community participants completed an in-person lab-testing session. Gender was unknown for five participants, and age data were unavailable for 13 participants.¹ Community participants were older on average, M s = 24.4 and 18.9 years, respectively; $t(173) = 4.61$, $p < .001$, and spanned a broader age range (i.e., 18–57 years vs. 18–24 years), than undergraduates.

Procedure

All participants provided written informed consent. Undergraduate participants were recruited for participation in an in-person laboratory testing session based on scores on the Disinhibition and Boldness scales of the TriPM, which were administered as part of a mass screening protocol. Individuals in the highest and lowest quartiles of the distribution of scores on TriPM Disinhibition and Boldness were targeted for participation in the study, with some representation also of individuals in the mid-range (25% to 75%) of scores. These participants completed the TriPM as a whole and the PID-5

during the laboratory test session, for which they received research participation credit, a payment of \$15, or a combination of the two. Community participants completed the TriPM and PID-5 electronically, through a secure online administration system, as part of a larger questionnaire protocol for which they received compensation (\$15) by mail. A portion of this community sample ($n = 21$) participated in the laboratory protocol. The priority given to selection of individuals with extreme levels of disinhibition and boldness in the recruitment process helped to ensure strong representation of participants with salient personality pathology in the study sample. For example, within the subset of individuals who participated in the laboratory protocol ($n = 70$), 10.1% met full criteria for a diagnosis of *DSM-IV* ASPD, which far exceeds documented prevalence rates in the general population (i.e., ~2% across males and females; American Psychiatric Association, 2000).

Community and undergraduate participants did not differ in overall scores on the TriPM, $t(186) = 1.25, p > .21$, or in scores on the Meanness subscale, $t(186) = 1.45, p > .15$; however, community participants scored higher on TriPM Disinhibition, $t(186) = 3.96, p < .001$, whereas undergraduates scored higher on Boldness, $t(186) = -2.72, p < .01$. With regard to PID-5 scores, community and undergraduate subsamples did not differ on domains of Disinhibition or Antagonism, $t_s(184) = -.22$ and $1.93, p_s = .26$ and $.06$, but community participants did score higher than students on domains of Negative Affect, Detachment, and Psychoticism, $t_s(184/185) = 3.22, 2.98, \text{ and } 3.22$, respectively, $p_s < .003$.

Measures

Personality Inventory for DSM-5. The PID-5 (Krueger et al., 2012) is a 220-item self-report inventory developed to assess personality traits specified within the PD trait system for the *DSM-5*. The items comprising the PID-5 are available online as a supplement to Krueger et al. (2012). Per Table 2 of the current paper, the inventory measures 25 maladaptive personality traits organized within five broad domains: Negative Affect, Detachment, Antagonism, Disinhibition, and Psychoticism. Item responses are on a 4-point Likert-type scale: *Very False* or *Often False*, *Sometimes* or *Somewhat False*, *Sometimes* or *Somewhat True*, and *Very True* or *Often True*. Scores for facet-level scales are computed by averaging scores for all items coded in the keyed direction. Similarly, domain-level scale scores are computed by averaging constituent facet-level scores (see the factor solution reported by Krueger et al., 2012 for details regarding relations of the various facet traits with the five higher order domains). The PID-5 thus yields 25 facet scores, consisting of the average score (on a scale 0 to 3) for items included in each facet, and 5 domain scores, consisting of the average score for items included in each domain.²

In developing the PID-5, some modifications occurred in the specification of facet traits and in the organization of these traits into domains, based on empirical findings. Most notably for the current report, the trait of Hostility, located conceptually in the domain of Antagonism in the proposal for *DSM-5*, converged somewhat more strongly with the domain of Negative Affect in the PID-5 (Krueger et al., 2012). Thus, some traits (e.g., Hostility) can be viewed as spanning more than one domain. To simplify the presentation, we grouped traits into the domains they related most strongly to, empirically, within the PID-5 (Krueger et al., 2012).

Triarchic Psychopathy Measure. The TriPM (Patrick, 2010) is a 58-item self-report measure designed to assess the three distinct components of psychopathy described in the Triarchic model (Patrick et al., 2009). Items are scored using a 4-point Likert-type scale: *False* = 0, *Somewhat False* = 1, *Somewhat True* = 2, and *True* = 3. The TriPM yields a total psychopathy score along with scores on subscales reflecting Boldness, Meanness, and Disinhibition. The source of items for the Disinhibition and Meanness scales (20 and 19 items, respectively) is the Externalizing Spectrum Inventory (ESI; Krueger, Markon, Patrick, Benning, & Kramer, 2007; Venables & Patrick, 2012). TriPM Disinhibition items are from subscales of the ESI that load primarily on the general disinhibition (“externalizing”) factor of the ESI structural model: Irresponsibility, Problematic Impulsivity, Theft, Alienation, Boredom Proneness, Impatient Urgency, Fraudulence, Dependability (reverse scored), and Planful Control (reverse scored). TriPM Meanness items are from ESI subscales that operate as indicators of the callous aggression subfactor of the ESI structural model: Empathy (reverse scored), Relational Aggression, Destructive Aggression, Physical Aggression, Honesty (reverse scored), and Excitement Seeking. The third TriPM subscale, Boldness, was designed as an efficient, item-based index of the “fearless dominance” construct of the PPI (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Benning, Patrick, Salekin, & Leistico, 2005). The TriPM Boldness Scale includes items indexing fearless tendencies in the realms of interpersonal interaction (i.e., dominance, persuasiveness, social assurance), emotional experience (i.e., self-confidence, emotional resiliency, optimism), and venturesome activity (i.e., intrepidity, courage, tolerance for uncertainty). TriPM Boldness scores correlate very highly ($r \sim .8$) with scores on the Fearless Dominance factor of the PPI (Driscoll et al., 2013; Sellbom et al., 2012).

In the present study, scores on the Meanness and Disinhibition subscales of the TriPM were moderately correlated ($r = .54$), owing to the fact these subscales consist of items from correlated facet scales of a common

Table 2. Descriptive Statistics for PID-5 Facet Traits, Grouped by Domain.

PID-5 domains/constituent facets	Number of items	α	Mean interitem correlation	Mean	SD	Valid N
Disinhibition	46	.92	.20	1.22	0.42	162
Distractibility	9	.91	.52	1.07	0.72	182
Impulsivity	6	.88	.55	0.93	0.71	182
Irresponsibility	7	.78	.33	0.54	0.53	183
Rigid Perfectionism	10	.90	.48	1.19	0.68	178
Risk taking	14	.91	.43	1.39	0.63	175
Antagonism	43	.93	.25	0.77	0.41	162
Attention Seeking	8	.86	.44	1.21	0.65	183
Callousness	14	.89	.41	0.44	0.45	176
Deceitfulness	10	.87	.40	0.76	0.57	183
Grandiosity	6	.71	.30	0.83	0.53	182
Manipulativeness	5	.80	.45	1.15	0.70	182
Negative Affect	53	.92	.18	1.15	0.40	162
Anxiousness	9	.90	.49	1.17	0.75	180
Emotional Lability	7	.86	.46	1.02	0.69	184
Hostility	10	.85	.37	0.88	0.58	182
Perseveration	9	.81	.32	1.03	0.56	180
Restricted Affectivity	7	.78	.34	0.98	0.60	182
Separation Insecurity	7	.85	.44	1.01	0.70	181
Submissiveness	4	.72	.39	1.22	0.61	183
Detachment	45	.95	.31	0.74	0.49	169
Anhedonia	8	.89	.49	0.81	0.64	182
Depressivity	14	.93	.51	0.58	0.61	181
Intimacy Avoidance	6	.81	.43	0.62	0.61	185
Suspiciousness	7	.73	.28	0.94	0.55	178
Withdrawal	10	.89	.45	0.88	0.62	184
Psychoticism	33	.96	.40	0.95	0.63	169
Eccentricity	13	.96	.65	1.18	0.83	177
Perceptual Dysregulation	12	.87	.36	0.80	0.60	180
Unusual Beliefs and Experiences	8	.85	.40	0.85	0.67	184

Note. PID-5 = Personality Inventory for the Fifth Edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*.

measurement instrument, the ESI. By contrast, the TriPM Boldness scale correlated negligibly with the TriPM Disinhibition scale ($r = -.05$) and only modestly with the TriPM Meanness scale ($r = .17$).

Data Analyses

Analyses were performed using SPSS. The internal consistencies of the PID-5 domain- and facet-level scales were evaluated in terms of Cronbach's alpha and interitem correlations. Pearson correlations were computed as an initial basis for evaluating the effectiveness of statistical prediction from trait and broad domain scores of the PID-5 to the facets of psychopathy assessed by the TriPM. To further evaluate the distinctive contributions of the PID-5 domain-level scores to the statistical prediction of TriPM psychopathy facet scores, the five PID-5 domain scores were included together as predictors in separate regression models in

which TriPM facet scores (Boldness, Meanness, Disinhibition) served as criterion variables. Likewise, to evaluate the independent contributions of each facet-level PID-5 trait to statistical prediction of distinctive facets of psychopathy, separate regression models were computed in which scores on constituent traits within each PID-5 domain were included together as predictors of each TriPM facet score (i.e., 5 domains \times 3 TriPM scales = 15 models total).

Separate regression models were specified to test our three primary hypotheses. To test Hypotheses 1 and 2, the facet-level traits from the domains of Disinhibition and Antagonism identified as diagnostic of ASPD in the PD trait model for *DSM-5* were entered into multiple regression models predicting TriPM Disinhibition and Meanness. To test Hypothesis 3, the PID-5 traits hypothesized as relevant were entered into a model predicting Boldness. As a supplement to these main analyses, the trait of Risk Taking (Disinhibition domain) was evaluated as an indicator of

Table 3. TriPM Scale and Total Scores Predicted From PID-5 Domain Scores.

TriPM Score	PID-5 domains					Multiple R
	Disinhibition (<i>r</i> / β)	Antagonism (<i>r</i> / β)	Negative Affect (<i>r</i> / β)	Detachment (<i>r</i> / β)	Psychoticism (<i>r</i> / β)	
Disinhibition	.62*/.48*	.61*/.25*	.46*/.21	.50*/.24*	.48*/-.14	.78*
Meanness	.48*/.18	.72*/.64*	.21/-.15	.38*/.21	.40*/-.09	.75*
Boldness	.27*/.09	.24/.48*	-.47*/-.48*	-.41*/-.44*	-.01/.18	.74*
Total	.66*/.37*	.75*/.65*	.09/-.20*	.22/-.01	.42*/-.02	.84*

Note. TriPM = Triarchic Psychopathy Measure; PID-5 = Personality Inventory for the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. Boldfaced *r*/ β values are significant at the $p < .01$ level. Entries marked with an asterisk are also significant at the $p < .001$ level.

both TriPM Disinhibition and of TriPM Boldness (vis-à-vis the venturesomeness element of this latter psychopathy facet; Patrick et al., 2009) and the trait of Hostility (Negative Affect domain) was evaluated as an indicator of both TriPM Meanness and of TriPM Disinhibition (vis-à-vis the angry/irritable element of this latter facet; Patrick et al., 2009).

Results

Descriptive Statistics for PID-5 Scores

Means and standard deviations for PID-5 domain and facet trait scores in the present study sample are shown in Table 2. Internal consistencies (Cronbach's alpha) and interitem correlations (Pearson's *r*) for domain and facet scales are also presented in Table 2. Internal consistencies achieved acceptable levels in all cases (alpha ranged from .92 to .96 at domain level; alpha ranged from .71 to .96 at facet level). Values of alpha were highest for PID-5 domain scales (reflecting higher overall number of items at the domain level), whereas mean interitem correlations were highest for facet scales (reflecting higher coherency of items at the facet level).

Predicting Psychopathy Scores From PID-5 Domain Scores

Zero-order correlations between TriPM scores and PID-5 domain-level scores are presented in Table 3, along with multiple *R*s and betas from regression models using scores for all PID-5 domains jointly to predict TriPM total and subscale scores. Within the omnibus regression model, total scores on the TriPM were predicted most strongly by PID-5 Antagonism ($\beta = .65$), followed by PID-5 Disinhibition ($\beta = .37$), with an additional modest negative contribution evident for Negative Affect ($\beta = -.20$). TriPM Disinhibition scores were predicted robustly by PID-5 Disinhibition domain scores ($\beta = .48$), and to a lesser (in each case, positive) extent by scores for Antagonism, Detachment, and Negative Affect domains (β s = .21–.25). Scores on the Meanness scale of the TriPM were predicted strongly and positively by PID-5 Antagonism ($\beta = .64$), with Detachment

also contributing positively, to a more modest degree ($\beta = .21$). TriPM Boldness was predicted to a moderate positive degree by PID-5 Antagonism ($\beta = .48$), and to moderate negative degrees by scores on PID-5 Negative Affect and Detachment domains (β s = $-.48$ and $-.44$, respectively).

Predicting Psychopathy Scores from PID-5 Trait Scores

Overall TriPM Psychopathy. Zero-order *r*s between TriPM scales and PID-5 facet-level traits (organized by PID-5 domain), along with multiple *R*s and betas for regression models using traits from each PID-5 domain to predict scores on the TriPM as a whole and its subscales, are shown in Table 4. TriPM total scores were predicted to a similar high degree (in all instances, positively) by traits from the domains of Disinhibition and Antagonism (*R*s = .77 and .78), and to a lesser (but still substantial) degree by traits from the domain of Negative Affect (with Anxiousness and Submissiveness predicting negatively, and Hostility, Restricted Affectivity, and Perseveration predicting positively).

TriPM Disinhibition Facet. Consistent with Hypothesis 1, TriPM Disinhibition was predicted most robustly by traits from the PID-5 domain of Disinhibition (*R* = .78; see Table 4), with traits of Irresponsibility, and to a lesser extent Impulsivity, contributing distinctively to prediction (β s = .50 and .20, respectively). The third Disinhibition trait specified in the DSM-5 criteria for ASPD, Risk Taking, did not contribute independently to prediction of TriPM Disinhibition ($\beta = .10, p = .09$). By contrast, Risk Taking did contribute to prediction of both Meanness and Boldness facets of TriPM psychopathy over and above other PID-5 traits from the Disinhibition domain; in the case of Boldness, Risk Taking was the only PID-5 Disinhibition trait that contributed positively to prediction, and its contribution was quite substantial ($\beta = .67, p < .001$). Inclusion of the trait of Hostility (from the domain of Negative Affect) in the model along with Irresponsibility and Impulsivity to predict TriPM Disinhibition resulted in a significant increase in *R*², from .58 to .61 (*F* change = 13.00, $p < .001$).

Table 4. TriPM Scale and Total Scores Predicted From PID-5 Facet Traits Within Each Domain.

TriPM score	Disinhibition					Multiple R
	Distractibility (r/β)	Impulsivity (r/β)	Irresponsibility (r/β)	Rigid Perfectionism (r/β)	Risk Taking (r/β)	
Disinhibition	.57 */.13	.61 */.20	.72 */.50*	.11/.05	.39 */.10	.78 *
Meanness	.33 */.02	.42 */.00	.49 */.36*	.12/.10	.48 */.37*	.61 *
Boldness	-.19 */-.23	.11/-.02	-.11/-.17	-.21 */-.10	.57 */.67*	.68 *
Total	.34 */-.04	.53 */.10	.53 */.33*	.00/.02	.69 */.54*	.77 *
TriPM score	Antagonism					Multiple R
	Attention Seeking (r/β)	Callousness (r/β)	Deceitfulness (r/β)	Grandiosity (r/β)	Manipulativeness (r/β)	
Disinhibition	.36 */.11	.54 */.28*	.57 */.32*	.33 */.02	.44 */.04	.63 *
Meanness	.38 */.09	.76 */.62*	.62 */.13	.36 */-.04	.48 */.11	.78 *
Boldness	.38 */.29*	.03/-.03	.11/-.31	.08/-.14	.40 */.55*	.54 *
Total	.54 */.24*	.62 */.40*	.62 */.06	.37 */-.08	.64 */.34*	.78 *
TriPM score	Negative Affect					Multiple R
	Anxiousness (r/β)	Emotional Lability (r/β)	Hostility (r/β)	Perseveration (r/β)	Restricted Affectivity (r/β)	
Disinhibition	.33 */-.11	.41 */.16	.52 */.26	.52 */.31*	.32 */.14	.30 */.04
Meanness	.08 */-.25	.11/-.14	.51 */.51*	.34 */.16	.45 */.23	.16/.12
Boldness	-.55 */-.57*	-.36 */-.02	-.19 */.08	-.28 */.06	.06/.11	-.27 */.06
Total	-.07 */-.45*	.07/.01	.39 */.39*	.28 */.26	.39 */.22	.09/.10
TriPM score	Detachment					Multiple R
	Anhedonia (r/β)	Depressivity (r/β)	Intimacy Avoidance (r/β)	Suspiciousness (r/β)	Withdrawal (r/β)	
Disinhibition	.38 */-.12	.49 */.41*	.25 */.04	.47 */.29*	.37 */.03	.57 *
Meanness	.28 */.02	.31 */.09	.34 */.22	.38 */.28	.27 */-.04	.44 *
Boldness	-.44 */-.34	-.40 */-.09	-.07/.15	-.20 */.11	-.38 */-.23	.49 *
Total	.10/-.23	.19/.21	.24 */.19	.31 */.32*	.12/-.12	.39 *
TriPM score	Psychoticism					Multiple R
	Eccentricity (r/β)	Perceptual Dysregulation (r/β)	Unusual Beliefs and Experiences (r/β)			
Disinhibition	.37 */.04	.52 */.49*	.45 */.09			.54*
Meanness	.31 */.03	.41 */.28	.38 */.14			.42 *
Boldness	-.01/.01	-.10/-.48*	.13 */.50*			.33 *
Total	.32 */-.01	.40 */.13	.46 */.35*			.45 *

Note. TriPM = Triarchic Psychopathy Measure; PID-5 = Personality Inventory for the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Boldfaced r/β values are significant at the $p < .01$ level. Entries marked with an asterisk are also significant at the $p < .001$ level.

TriPM Meanness Facet. Consistent with Hypothesis 2, TriPM Meanness was predicted effectively by traits from the PID-5 domain of Antagonism ($R = .78$; see Table 4), with Callousness contributing most to prediction ($\beta = .62, p < .001$). Other Antagonism traits specified as relevant to ASPD—Deceitfulness and Manipulativeness—did not contribute uniquely in this five-trait model, but a follow-up hierarchical model demonstrated a significant increase in R^2 (from .57 to .61; F change = 94.64, $p < .001$) when these two traits were added in Step 2 following entry of Callousness alone in Step 1—indicating a unique contribution for the variance in common between these traits. Including the fourth trait specified by the PPD Workgroup as indicative of ASPD (i.e., Hostility, from the domain of Negative Affect) in the regression model resulted in no additional increase in R^2 (F change = .53, $p = .47$).

TriPM Boldness Facet. As shown in Table 4, TriPM Boldness was predicted at high levels (model $R_s > .6$) by traits from the PID-5 domains of Disinhibition (Risk Taking [+], in particular) and Negative Affect (Anxiousness [-] and Submissiveness [-], in particular). TriPM Boldness was also, to more moderate degrees, predicted positively by traits from the domain of Antagonism (Manipulativeness, Attention Seeking) and negatively by traits from the domain of Detachment (Withdrawal and Anhedonia, in particular). Hypothesis 3 was tested using a regression model that included as predictors the four PID-5 traits posited to be relevant to boldness, but *not* proposed as trait-based criteria for ASPD: Anxiousness (-), Submissiveness (-), Attention Seeking (-), Withdrawal (-). As hypothesized, this cluster of traits predicted TriPM Boldness scores effectively (*Multiple R* = .73, $p < .001$), with Anxiousness, Submissiveness, and Attention Seeking each contributing distinctively ($\beta_s = -.48, -.24, \text{ and } .46, p_s < .001$; β for Withdrawal = $-.05, p = .38$).³ Notably, an additional key element of boldness emphasized in theoretical descriptions (Patrick et al., 2009; Skeem et al., 2011) that appears unrepresented in this trait cluster is venturesomeness, reflected in the PID-5 trait of Risk Taking. Inclusion of Risk Taking in a regression model along with the three uniquely predictive traits from the preceding model (Anxiousness, Submissiveness, Attention Seeking) resulted in a significant increase in R^2 (from .53 to .60; F change = 27.45, $p < .001$).

Given that two of the traits specified as relevant to ASPD in the proposal for *DSM-5*—Risk Taking (domain of Disinhibition) and Manipulation (domain of Antagonism)—appear as much or more relevant to the boldness facet of psychopathy as to the disinhibition or meanness facets, a question that arises is whether PID-5 traits of Anxiousness, Submissiveness, and Attention Seeking would contribute to prediction of TriPM Boldness scores over and above these two ASPD-specified traits. To address this question, an hierarchical regression analysis was conducted in which Risk Taking and Manipulation were entered as predictors of

TriPM Boldness in Step 1, and Anxiousness, Submissiveness, and Attention Seeking were entered together as predictors in Step 2. A substantial increase in R^2 was evident at Step 2 (from .34 to .62; F change = 59.69, $p < .001$), with Anxiousness, Submissiveness, and Attention Seeking each contributing distinctively to prediction at this second step ($B_s = -.49, -.15, \text{ and } .22, \text{ respectively, } p_s < .005$). This result demonstrates significant incremental prediction for these traits in accounting for scores on the boldness facet of psychopathy.

Discussion

The current study results demonstrate that the construct of psychopathy as operationalized through self-report can be effectively indexed using traits of the PID-5, an inventory developed to assess maladaptive traits relevant to personality pathology for the *DSM-5*. Using the TriPM as measure of psychopathy and its facets, PID-5 traits related to psychopathy were identified. Results indicate that traits specified by the *DSM-5* PPD Work Group as diagnostic of ASPD provide effective coverage of the disinhibition and meanness facets of psychopathy, whereas additional traits are needed to effectively capture the boldness facet.

Proposed Trait Criteria for ASPD in DSM-5: Relations With Psychopathy Facets

The proposed trait criteria for APSD in the *DSM-5* include three each from the domains of Disinhibition and Antagonism, and one (Hostility) from the domain of Negative Affect. The measure of psychopathy used in the current study, the TriPM, comprises three subscales, two of which—Disinhibition and Meanness—were designed to index broad factors from the ESI (Krueger et al., 2007; Patrick, 2010) that appear most relevant to antisocial-aggressive behavior problems. Research on the criterion-related validity of the ESI factors in criminal offenders exhibiting high rates of such behavior problems (Venables & Patrick, 2012) demonstrates that the disinhibition factor (viewed as indexing general proneness to externalizing problems) preferentially predicts (a) impulsive, irresponsible, and reckless tendencies among the adult criteria for *DSM-IV* ASPD (along with nonaggressive delinquent symptoms among the child criteria) and (b) impulsive-irresponsible features of psychopathy associated with Factor 2 of Hare's (2003) Psychopathy Checklist-Revised (PCL-R). In contrast, the Meanness (or "callous-aggression") factor of the ESI preferentially predicts (a) aggressive and remorseless tendencies among the adult criteria for APSD (along with aggressive behavioral symptoms among the child criteria) and (b) affective-interpersonal features associated with Factor 1 of the PCL-R, as well as antisocial behavior features associated with Factor 2.

Consistent with these findings, PID-5 traits from the domain of Disinhibition specified as relevant to ASPD by the *DSM-5* PPD Workgroup (Impulsivity, Irresponsibility, Risk Taking) showed significant relations with the Disinhibition facet of TriPM psychopathy—with Irresponsibility and Impulsivity each contributing distinctively to prediction. The trait of Risk Taking was related to TriPM Disinhibition only as a function of its overlap with Impulsivity and Irresponsibility, and, as discussed below, was related more distinctively to the Boldness facet than the Disinhibition facet of TriPM psychopathy. However, Hostility (from the domain of Negative Affect), reflecting tendencies toward anger, irritability, and vengefulness, did contribute over and above these other traits, such that an average-score composite of Irresponsibility, Impulsivity, and Hostility predicted scores on TriPM Disinhibition at a high enough level ($r = .74$) to serve as an effective index of this facet of psychopathy. Furthermore, in line with reported diagnostic correlates (e.g. ASPD, PCL-R) of the ESI callous-aggression factor (Venables & Patrick, 2012), PID-5 traits from the domain of Antagonism specified as relevant to ASPD (Cynicism, Manipulativeness, Deceitfulness) showed significant relations with TriPM Meanness, with Manipulativeness and Deceitfulness contributing incrementally (albeit redundantly) over Cynicism. An average-score composite of these traits predicted scores on the Meanness facet of TriPM psychopathy effectively enough ($r = .70$) to serve as a proxy for this psychopathy facet. The trait of Hostility correlated significantly with TriPM Meanness at a simple bivariate level but did not contribute over and above the foregoing traits, and thus can be used more effectively as an indicator of the disinhibition facet of psychopathy.

In sum, these findings indicate that the traits proposed for the diagnosis of ASPD in *DSM-5* provide effective coverage of the disinhibition and meanness facets of psychopathy, which appear to be represented also in the current *DSM-IV* criteria for ASPD (Kendler, Aggen, & Patrick, 2013; Tackett, Krueger, Iacono, & McGue, 2005; Venables & Patrick, 2012). In addition, as discussed in the following section, the PID-5 instantiations of traits designated as relevant to ASPD appear to provide some coverage of the boldness facet of psychopathy, although current results point to a need for additional traits to improve coverage.

Improving Coverage of the Boldness Facet of Psychopathy

Two traits in particular among those specified as relevant to ASPD were found to be predictive of the boldness facet of TriPM psychopathy: Risk Taking (domain of Disinhibition) and Manipulativeness (domain of Antagonism). Notably, these were the only traits from any of the PID-5 domains to be predicted distinctively by all facets of psychopathy in the same (positive) direction. From this perspective, these

traits, which have been emphasized strongly in historic accounts of psychopathy (cf. Blackburn, 2006; Skeem et al., 2011), can be considered “glue” elements tying distinguishable facets of psychopathy together. Or, from a somewhat different perspective, they can be viewed as behavioral tendencies to which separate dispositional aspects of psychopathy contribute in differing ways. For example, Risk Taking tendencies may alternatively (or perhaps synergistically) reflect impulsive present-centeredness (disinhibition facet), brash excitement seeking (meanness facet), or enjoyment of adventure (boldness). Similarly, tendencies toward immediate satisfaction of needs (disinhibition), callous exploitativeness (meanness), and interpersonal dominance (boldness) may all contribute to the expression of Manipulativeness. The finding that these traits operate as points of contact between the boldness facet of psychopathy and its disinhibition and meanness facets helps to account for why boldness-related features are included along with impulsive and callous-exploitative features in inventories designed to operationalize Cleckley’s (1976) classic conception of psychopathy (cf. Benning et al., 2003; Patrick, Hicks, Krueger, & Lang, 2005).

Our finding that these two traits operate as predictors of boldness indicates that the trait-based conception of ASPD proposed for *DSM-5* may capture psychopathy somewhat more effectively than the current *DSM-IV* conception—which appears to provide limited coverage of boldness (Patrick et al., 2013). This suggests a shift in construct coverage of ASPD in the trait model for *DSM-5* as compared with *DSM-IV*. At the same time, however, our analyses revealed that additional traits were needed to capture the boldness facet of psychopathy at the same high level of effectiveness as the disinhibition and meanness facets. Specifically, we found that traits of Anxiousness, Submissiveness, and Attention Seeking each contributed incrementally to prediction of TriPM Boldness over and above Risk Taking and Manipulativeness. Using Risk Taking as an indicator of boldness (vs. disinhibition) while retaining Manipulativeness as an indicator of meanness, we found that an average-score composite of Risk Taking, Anxiousness (reversed), Submissiveness (reversed), and Attention Seeking predicted scores on the Boldness facet of TriPM psychopathy strongly enough ($r = .75$) to function as an effective index of this psychopathy facet. Scores computed in this manner could be applied as a specifier to the diagnosis of ASPD, to denote a classically fearless-dominant (Hicks, Iacono, & McGue, 2012; Hicks, Markon, Patrick, Krueger, & Newman, 2004) or “primary” (Karpman, 1948; Lykken, 1957, 1995; Skeem, Johansson, Andershed, Kerr, & Loudon, 2007) variant of psychopathy.

The effectiveness of this set of PID-5 traits for predicting boldness can be understood in terms of distinct elements of this component of psychopathy as described in the Triarchic model (Patrick et al., 2009). Reversed Anxiousness can be

seen as capturing the emotional resiliency element; Attention Seeking and Submissiveness can be seen as indexing positive and negative poles, respectively, of the social potency component; and Risk Taking can be seen as indexing the behavioral venturesomeness component. In turn, these elements can be conceptualized as alternative expressions of dispositional fearlessness in affective-experiential, interpersonal, and activity preference domains (Kramer, Patrick, Krueger, & Gasperi, 2012). Our finding that low scores on Anxiousness and Submissiveness were predictive of the boldness facet of psychopathy appears consistent with the suggestion of Widiger (2011) that some PID-5 trait scales may be indicative of nonnormative or maladaptive tendencies at both low and high poles; that is, some PID-5 trait scales may function as bipolar rather than as unipolar measures.

Limitations and Future Directions

A limitation of the current study is that assessments were based solely on self-report and participants consisted of a somewhat homogenous sample of adults from the community rather than offenders or clinic patients. Furthermore, given that full demographic data were unavailable for some portion of the sample, analyses could not be performed to test for moderating effects of race/ethnicity on observed results. For these reasons, follow-up research is needed to evaluate the generalizability of findings to clinical samples or community samples more diverse in terms of age, ethnicity, and socioeconomic status. Regarding reliance on self-report, while empirical findings generally support the effectiveness of self-report inventories for indexing antisocial/psychopathic tendencies and personality pathology more broadly (Hopwood et al., 2008; Lilienfeld & Fowler, 2006), alternative approaches may be advantageous in certain assessment contexts (e.g., evaluative contexts that encourage either positive or negative impression management). Further research will be needed to corroborate the current findings reported using alternative measurement methods such as face-to-face interview supplemented by archival file review. In particular, studies using patient or prisoner samples will be valuable for establishing the generalizability and clinical utility of the current findings.

Notwithstanding these limitations, the current work is important in that it provides an initial examination of the effectiveness of the PID-5, a new inventory developed to assess personality pathology according to the *DSM-5*, for indexing the clinical construct of psychopathy. Our findings indicate that the trait-based conception of ASPD proposed for *DSM-5* effectively captures separable disinhibition and meanness facets of psychopathy, which exhibit differing behavioral and physiological correlates (Frick & White, 2008; Patrick et al., 2009) and perhaps distinct etiologies

(Kendler et al., 2013; Kendler, Myers, & Keyes, 2011). In addition, our findings demonstrate that the boldness component of psychopathy can be also operationalized using traits from the PID-5, providing a basis for designating a classically psychopathic variant of ASPD marked by high social efficacy and a distinct absence of the hostile alienation and dysregulated affect exhibited by many impulsive-antisocial individuals. As such, current findings provide encouragement that the alternative approach to diagnosing personality pathology in the *DSM-5* may help to reconcile long-standing concerns about the representation of psychopathy in the official psychiatric nosology.

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Notes

1. Racial information was available only for participants who completed the in-person lab testing session ($n = 70$). The community portion of this subsample ($n = 21$) was more racially diverse (71.4% Caucasian, 23.8% African American, 4.8% Asian,) than the student portion (81.6% Caucasian, 6.1% African American, 6% Asian, 2% Biracial or Multiracial, 1% Other, and 2% declined to respond). Since the participants for whom racial information was unavailable ($n = 118$) consisted entirely of community participants, it might be inferred that the racial composition of the overall sample was closer to that for the community portion of the lab subsample than the student portion. However, community participants were not specifically queried as to student versus nonstudent status, so it is possible that some of these participants were also students.
2. In computing PID-5 (Personality Inventory for the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*) domain scores, the scoring of items from the Rigid Perfectionism and Restricted Affectivity domains is reversed, such that these scales are coded (along with other constituent scales) in directions of Disinhibition and Negative Affect, respectively. However, scores in Table 4 reflect directions of individual scale labels, as opposed to broad domain labels.
3. Although the trait of Withdrawal from the domain of Detachment did not contribute distinctively to prediction of TriPM (Triarchic Psychopathy Measure) Boldness in this model, the other detachment-related trait that appeared

predictive of Boldness in analyses of traits within domains (see Table 4)—Anhedonia—did contribute distinctively, $\beta = -.15, p < .02$. Although not considered a priori as an indicator of boldness, the items of the PID-5 Anhedonia scale tap tendencies toward disengagement and lack of energy that appear antithetical to this facet of psychopathy. Considering this, it may be useful in future research to further evaluate the utility of PID-5 Anhedonia as an additional low-pole indicator of boldness.

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