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Conceptions of Narcissism and the *DSM-5* Pathological Personality Traits

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Abstract

The *Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition* (*DSM-5*) features two conceptions of Narcissistic Personality Disorder (NPD), one based on the retained *DSM-IV*'s categorical diagnosis and the other based on a model that blends impairments in personality *functioning* with a specific *trait* profile intended to recapture *DSM-IV* NPD. Nevertheless, the broader literature contains a richer array of potential conceptualizations of narcissism, including distinguishable perspectives from psychiatric nosology, clinical observation and theory, and social/personality psychology. This raises questions about the most advantageous pattern of traits to use to reflect various conceptions of narcissistic pathology via the *Personality Inventory for the DSM-5* (PID-5). In this study, we examine the associations of the *Personality Disorder Questionnaire–Narcissistic Personality Disorder* scale, *Narcissistic Personality Inventory–16*, and the *Pathological Narcissism Inventory* and the PID-5 dimensions and facets in a large sample (N = 1,653) of undergraduate student participants. Results point to strong associations with PID-5 Antagonism scales across narcissism measures, consistent with the *DSM-5*'s proposed representation of NPD. However, additional notable associations emerged with PID-5 Negative Affectivity and Psychoticism scales when considering more clinically relevant narcissism measures.

Keywords

Personality Inventory for the *DSM-5*, narcissism, narcissistic grandiosity, narcissistic vulnerability, Pathological Narcissism Inventory, Narcissistic Personality Inventory, narcissistic personality disorder

The construct of narcissism, broadly defined, has received increased scientific interest in recent years, leading to a rapidly expanding theoretical, empirical, and clinical literature (e.g., Ogrudniczuk, 2013; Pincus & Lukowitsky, 2010; Roche, Pincus, Conroy, Hyde, & Ram, in press). However, along with this renewed interest have come controversies related to how best to define the construct, leaving the field on fertile but shifting scientific ground (Ackerman et al., 2011; Cain, Pincus, & Ansell, 2008; Miller, Gaughan, Pryor, Kamen, & Campbell, 2009). In the middle of this renaissance and reformation, major revisions were proposed to the manner in which the *Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition* (*DSM-5*) would define personality pathology and personality disorders (PDs) generally and narcissistic personality disorder (NPD) specifically. A major component of this proposal is a pathological personality trait model (Krueger, Eaton, Clark, et al., 2011; Krueger, Eaton, Derringer, et al., 2011), which has been instantiated in the *Personality Inventory for the DSM-5* (PID-5; Krueger, Derringer, Markon, Watson, & Skodol, 2012). The present research was undertaken with the primary purpose of evaluating the ways in which narcissism might be represented in future editions of the *DSM*, by examining the associations between the PID-5 scales and (a) the *Personality Disorder Questionnaire–Narcissistic Personality Disorder* scale (PDQ-NPD; Hyler, 1994), a measure based on the diagnostic criteria of the *DSM-IV*; (b) the *Narcissistic Personality Inventory–16* (NPI-16; Ames, Rose, & Anderson, 2006), a short form of the narcissism measure used in the majority of social/personality research; and (c) the *Pathological Narcissism Inventory* (PNI; Pincus et al., 2009) scales, which were designed to measure key components of pathological narcissism as defined by clinical observation and theory. Additionally, we use the *DSM-5*

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trait model as an organizing framework to further understand points of convergence and divergence in popular articulations of narcissism.

Conceptions of Narcissism

The literature on narcissism has a long history rooted in the intellectual climate at the turn of the last century (Ellis, 1898; Freud, 1914/1957). Unlike many psychological constructs from that era, narcissism remains a source of vibrant intellectual and scientific inquiry (Miller, Campbell, & Widiger, 2010). Contemporary conceptions of narcissism draw from the related, but relatively independent literatures based on clinical observation/theory, formal psychiatric nosology, and social/personality psychology (Cain et al., 2008; Miller & Campbell, 2008; Morf & Rhodewalt, 2001; Pincus & Lukowitsky, 2010). Yet differences in the conceptualization of the construct across disciplines have led to differences in the assessment measures employed and, ultimately, have served to obscure an already complex theoretical picture.

Central to the clinical description of pathological narcissism is a core dysfunction related to managing intense needs for validation and admiration (Pincus, 2013). When individuals fail or struggle to effectively manage these needs, due to either extreme or rigid behavior or impaired regulatory capacities, it often results in a number of negative psychological consequences that may be characteristically grandiose or vulnerable in nature (Pincus & Roche, 2011). This is borne out in the quantitative research on NPD. For instance, NPD has been shown to be associated with an array of traits and behaviors that can be understood as manifestations of, or closely related to, narcissistic grandiosity, such as psychopathy, impulsivity, violence, aggression, homicidal ideation, and sexual aggression (Pincus et al., 2009; Ronningstam, 2005a, 2005b). However, NPD is also associated with more vulnerable forms of dysregulation such as anxiety and depressive disorders (Clemence, Perry, & Plakun, 2009; Stinson et al., 2008), as well as functional impairments, interpersonal distress, and even suicidal behavior (e.g., Ansell et al., 2013; Miller, Campbell, & Pilkonis, 2007; Ronningstam, 2005b, 2011).

In contrast to the clinical and quantitative literature indicating that NPD is associated with both grandiose *and* vulnerable forms of dysregulation, the nosological definition has been criticized for lack of adequate content coverage (Pincus et al., 2009; Ronningstam, 2009; Russ, Shedler, Bradley, & Westen, 2008). Narcissistic pathology was initially formalized as a PD diagnosis and operationalized with diagnostic criteria in the *DSM-III* (American Psychiatric Association [APA], 1980). Consistent with the aims of *DSM-III* (APA, 1980), *DSM-III-R* (APA, 1987), *DSM-IV* (APA, 1994), and *DSM-IV-TR* (APA, 2000), the successive revisions of the diagnosis (a) focused on the putative behavioral and observable manifestations of narcissism, eschewing the more inferential aspects of the construct (e.g., Kernberg, 1975; Kohut, 1971, 1977) and (b) prioritized reliability and discriminant validity. This approach narrowed the scope of the diagnostic criteria to features of narcissistic grandiosity (e.g., arrogance, entitlement) eliminating many of the clinically meaningful characteristics associated with functioning (e.g., shameful reactivity or humiliation in response to narcissistic injury, alternating states of idealization and devaluation). These are now only described in the "Associated Features and Disorders" section where clinicians are also cautioned that patients may not outwardly exhibit such vulnerable characteristics. The overly narrow construct definition of *DSM-IV* NPD fails to capture the clinical phenomena that practitioners encounter and label as narcissism (e.g., Doidge et al., 2002; Kernberg, 2007; Ogrudniczuk, 2013; Pincus, 2013) and creates a fundamental criterion problem for research on the validity and clinical utility of the diagnosis (Pincus, 2011). This is particularly problematic for NPD because it appears that grandiosity is associated with reduced treatment utilization and diagnosticians are more likely to evaluate narcissistic patients when they are in more vulnerable, distressed, and symptomatic states (Ellison, Levy, Cain, Ansell, & Pincus, in press).

Consistent with the majority of the PD research, NPD is most often measured with some form of self-report inventory (Bornstein, 2003, 2011). Measures vary in the degree to which they directly represent the criteria as articulated in the *DSM-IV*, although given the progression of the definition described above, most focus on the grandiose features of the construct (Samuel & Widiger, 2008a, 2008b). For the current study, we have selected the PDQ-NPD scale to represent narcissism from the view of psychiatric nosology because it offers a direct representation of the *DSM* criteria and it is frequently used in psychiatric research (Hopwood, Donnellan, et al., in press).

Complicating the theoretical picture is the large literature in social/personality psychology, which conceptualizes narcissism as a normative personality trait, focusing on both adaptive and maladaptive aspects (Miller & Campbell, 2010; Tamborski & Brown, 2011). Although there are those who have articulated and studied narcissistic vulnerability in social/personality psychology (e.g., Morf & Rhodewalt, 2001; Wink, 1991), the preponderance of the research in this area has focused on grandiose aspects of the construct, heavily relying on the *Narcissistic Personality Inventory* (NPI; Raskin & Hall, 1981). Narcissism operationalized using the NPI predicts a number of deleterious aspects of functioning, such as aggression proneness, domineering interpersonal problems, resistance to negative feedback, and manipulativeness (e.g., Bushman & Baumeister, 1998; Locke, 2009; Morf, 2006; Raskin, Novacek, & Hogan, 1991), but it is also positively associated with multiple indices of self-esteem,

psychological health, and well-being (Brown, Budzek, & Tamborski, 2009; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Zeigler-Hill, 2006). This has led some to conclude that the NPI primarily captures normal or adaptive narcissism (Roche, Pincus, Lukowitsky, Ménard, & Conroy, in press; Watson, Trumpeter, O'Leary, Morris, & Culhane, 2005-2006; Watson, Varnell, & Morris, 1999-2000).

Although it is clear is that the NPI contains a mixture of content, distinguishing among these aspects is difficult due to a varying factor structure (proposed solutions range from 2 to 7 factors; see Ackerman et al., 2011, for a review). Furthermore, the reliability of proposed subscales tends to be low (del Rosario & White, 2005). Accordingly, despite the complex meaning of the total score, researchers frequently adopt a single summary for the measure (Miller & Campbell, 2008). An additional consideration is that the utility of the NPI as a clinical tool is questionable given that scores have been shown to be lower in patient samples as compared with students (Miller et al., 2009), and there is no difference in scores between community participants and patients diagnosed with NPD (Vater et al., in press). Despite these concerns, because the NPI so dominates the study of narcissism in social/personality psychology, it is important to consider it in any comprehensive review of potential conceptions of the construct. Here we employ the briefer NPI-16, which not only was constructed so as to retain the breadth of content of the NPI but also correlates at $r = .90$ with the full-length measure (Ames et al., 2006).

To address the lack of clinically relevant vulnerable content in existing self-report measures (both the NPI and *DSM*-based NPD scales), Pincus et al. (2009) developed the PNI as a comprehensive clinical tool for the assessment of pathological narcissism. Research shows that the PNI's seven primary scales load on two higher order factors of narcissistic grandiosity (Exploitativeness, Self-Sacrificing Self-Enhancement, and Grandiose Fantasy) and narcissistic vulnerability (Contingent Self-Esteem, Devaluing, Hiding the Self, and Entitlement Rage; Wright, Lukowitsky, Pincus, & Conroy, 2010). A large body of experimental (e.g., Fetterman & Robinson, 2010), clinical (e.g., Ellison et al., in press), experience sampling (e.g., Roche, Pincus, Conroy, et al., in press), and correlational (e.g., Thomas, Wright, Lukowitsky, Donnellan, & Hopwood, 2012) research supports the validity of the PNI. We use the PNI to represent the more elaborated conception of pathological narcissism as described in the clinical literature.

Narcissism in the Context of the DSM-5.0 *and Beyond*

At this juncture, there is an opportunity to directly influence the manner in which narcissism is represented in psychiatric nosology given the state of the *DSM* PDs. The Personality and Personality Disorders Work Group for the *DSM-5* proposed a clear shift in the approach to conceptualizing personality pathology in the new edition of the diagnostic manual in an effort to address the numerous well-known shortcomings of the existing approach (Krueger, Eaton, Clark, et al., 2011; Krueger, Eaton, Derringer, et al., 2011; Widiger & Trull, 2007). The APA *DSM-5* Task Force endorsed the proposal from the *DSM-5* PD Workgroup, but the APA Board of Trustees did not, and the result is that *DSM-5* reprints the *DSM-IV* PD chapter in "*DSM-5.0* Section II" (*Essential Elements: Diagnostic Criteria and Codes*; i.e., categorical mental disorders), while also presenting the Work Group's model in "*DSM-5.0* Section III" (*Emerging Measures and Models*). Given that the *DSM-5.0* is intended to be a "living document" with more frequent revisions than its predecessors, the potential exists for migrating parts of the Section III model to Section II as evidence accumulates. This outcome places the onus on researchers to further evaluate aspects of the proposed model to potentially find support for, or identify areas necessary of further revisions prior to, implementation in the Section II of future editions of the *DSM*.

The approach proposed in Section III characterizes PD through core impairments in personality *functioning* and dimensional pathological personality *traits*. In this framework, the diagnosis of PD requires, first, the presence of impairments in personality *functioning* of at least moderate severity (Criterion A) and, second, establishing which *traits* are present and elevated (Criterion B). Criterion A is defined in terms of impairments in self (identity and self-direction) and interpersonal (empathy and intimacy) functioning, whereas a suite of 25 primary pathological personality traits (see Table 1) that mark the five higher order dimensions of Negative Affectivity, Detachment, Antagonism, Disconstraint, and Psychoticism are provided for evaluating Criterion B. As noted above, the PID-5 has been developed as a psychometric instrument to aid in the evaluation of these traits via either self- (Krueger et al., 2012) or other-report (Markon, Quilty, Bagby, & Krueger, 2013). By combining personality dysfunction with the trait model, patients can be diagnosed either with an individually tailored PD-Trait Specified (PD-TS) diagnosis, or in the event the present traits are consistent with extant PD constructs, the diagnoses of Antisocial, Avoidant, Borderline, Narcissistic, Obsessive-Compulsive, and Schizotypal PDs can be assigned by name.

Most relevant to the current research are the pathological personality traits proposed for the revised description of NPD, which are two of the Antagonistic traits: *Grandiosity* (e.g., entitlement; self-centeredness; superiority) and *Attention Seeking* (e.g., efforts to attract and be the focus of the attention of others; admiration seeking). To date only two published studies have explored the relationship between narcissism and the *DSM-5* trait model. In the first of these studies, Hopwood, Thomas, Markon, Wright, and

Table 1. Associations Between PID-5 Facets and Factors and Narcissism Domains.

Scale	PNI Grandiosity	PNI Vulnerability	NPI-16	PDQ-NPD
PID-5 facets				
Submissiveness	.24	**.42**	−.15	.05
Depressivity	.18	**.53**	−.09	.20
Separation Insecurity	**.30**	**.54**	−.01	.18
Anxiousness	.29	**.58**	−.12	.16
Emotional Liability	.29	**.54**	.03	.23
Suspiciousness	.28	**.54**	.11	**.35**
Restricted Affectivity	.10	.18	.07	.17
Withdrawal	.09	**.39**	−.06	.24
Intimacy Avoidance	.04	.21	−.02	.16
Anhedonia	.10	**.47**	−.10	.20
Manipulativeness	**.48**	**.31**	**.53**	**.39**
Deceitfulness	**.43**	**.46**	**.42**	**.44**
Hostility	**.30**	**.50**	.26	**.38**
Callousness	.15	**.30**	**.40**	**.44**
Attention Seeking	**.48**	**.38**	**.52**	**.36**
Grandiosity	**.35**	.23	**.60**	**.52**
Irresponsibility	.16	**.39**	.20	**.34**
Impulsivity	.22	.25	.20	.21
Distractibility	.25	**.47**	−.02	.21
Perseveration	**.35**	**.60**	.01	.27
Rigid Perfectionism	.29	**.37**	.11	.20
Risk Taking	.17	.01	**.30**	.11
Eccentricity	**.32**	**.43**	.09	.24
Perceptual Dysregulation	**.34**	**.52**	.13	**.35**
Unusual Beliefs	**.32**	**.34**	.23	**.32**

	PNI Grandiosity		PNI Vulnerability		NPI-16		PDQ-NPD	
Scale	*r*	β	*r*	β	*r*	β	*r*	β
PID-5 factors								
Negative Affect	**.35**	.28	**.66**	**.52**	−.04	−.11	.23	.08
Detachment	.09	−.17	**.44**	.15	−.07	−.20	.24	.07
Antagonism	**.50**	**.44**	**.39**	.21	**.61**	**.68**	**.53**	**.47**
Disconstraint	.26	−.09	**.45**	.03	.15	−.03	**.30**	−.01
Psychoticism	**.37**	.19	**.49**	.07	.17	.04	**.34**	.07
R^2		**.35**		**.54**		**.44**		**.30**

Note. N = 1,653. All $r > |.05|$ significant at $p < .05$. Values >.30 bolded. PNI = Pathological Narcissism Inventory; NPI = Narcissistic Personality Inventory; PDQ = Personality Disorder Questionnaire; NPD = Narcissistic Personality Disorder; PID-5 = Personality Inventor for the *DSM-5*.

Krueger (2012) found strong associations between the PDQ-NPD and PID-5 Grandiosity (r = .54) and Attention Seeking (r = .51) consistent with the *DSM-5* Section III model. However, many more traits also demonstrated considerable associations. For example, Deceitfulness, Manipulativeness, Hostility, Callousness, Suspiciousness, and Perceptual Dysregulation all correlated >.40 with PDQ-NPD, and the 23 traits not assigned to NPD significantly incremented Grandiosity and Attention-Seeking for predicting the PDQ-NPD score in hierarchical regressions. These initial results suggest that recovering *DSM-IV* NPD may require a broader trait profile than the one proposed. Miller, Gentile, Wilson, & Campbell (2012) examined the associations between the PID-5 and factor scores consistent with narcissistic grandiosity and narcissistic vulnerability. They found that although the grandiosity dimension was well summarized by the two proposed traits, vulnerability was poorly represented, and had moderate to strong associations with a variety of traits across the domains of Negative Affectivity, Detachment, Disinhibition, and Psychoticism.

Although both these studies provide an important initial glimpse at narcissism as it is represented in the PID-5, they each were limited by focusing on higher order conceptualizations of narcissistic pathology and did not include lower

order scales derived from contemporary clinical descriptions of the construct (Pincus & Lukowitsky, 2010). Furthermore, the selection of measures by Miller et al. (2012) resulted in narrow conceptualizations of grandiosity and vulnerability (e.g., vulnerability was mostly marked by item parcels of a short vulnerability scale) limiting the conclusions that can be drawn by their study.

The Present Study

To further evaluate the ways in which narcissism might be represented in future editions of the *DSM*, we examined the associations between the PID-5 primary scales and higher order domains with (a) the PDQ-NPD as a direct instantiation of the diagnostic criteria of the *DSM-IV*; (b) the NPI-16 (Ames et al., 2006), to capture narcissism as studied in social/personality research; and (c) the PNI (Pincus et al., 2009) scales to operationalize the construct derived from clinical observation and theory. We examine these associations in a number of ways. First, we calculated the zero-order correlations between the narcissism scales and the PID-5 facets and domains. Second, because pathological traits generally exhibit modest to moderate associations with each other, we examine the unique associations of the domains with narcissism using multiple regression. Finally, we compare the incremental validity of the additional traits beyond Grandiosity and Attention Seeking in predicting each construct.

Method

Participants and Procedure

This study was conducted in the psychology department of a large public university in which 1,927 undergraduates completed self-report questionnaires online for course credit. Of these, 1,653 returned data with fewer than 10% missing items and scores less than 2.5 standard deviations higher than the community average on a measure of random or careless responding (*Personality Assessment Inventory* Infrequency Scale; Morey, 1991). This subsample was retained for the current analyses. The average age was 18.84 years (*SD* = 1.75, range = 18-56); 66% were women; and 87% were Caucasian, 6% African American, and 6% Asian. Six percent also identified as being Hispanic. All participants consented to participate in this institutional review board–approved research study.

Measures

The *Personality Inventory for DSM-5* (PID-5; Krueger et al., 2012), a 220-item questionnaire with a four-point response scale, was used to measure the proposed *DSM-5* traits. This instrument was created for assessing the personality trait model in *DSM-5*. It has 25 primary scales that load onto 5 higher order dimensions (Krueger et al., 2012), and this structure is replicable (Wright, Thomas, et al., 2012). Krueger et al. (2012) provide psychometric details in large treatment-seeking and representative community samples. Descriptive statistics and factor structure from the current sample have previously been reported (Wright, Thomas, et al., 2012). Internal consistencies of the scales were adequate to high in the current sample (*Mdn* α = .86; range = .73-.95). As an initial step, we created scores for the higher order PID-5 dimensions. Past structural research on the PID-5 has shown that a number of the 25 primary scales load on to multiple higher order dimensions (e.g., Hostility, Depressivity; Krueger et al., 2012; Wright, Thomas, et al., 2012), consistent with their roles as markers of clinical phenomena that are associated with more than one higher order domain of personality (e.g., depressivity is a mix of Positive Affect and Negative Affect; Clark & Watson, 1991). As a result, the final recommendation for scoring the PID-5 higher order dimensions in practice is to average the scores from a subset of scales that primarily index only one factor. The scales comprising each dimension score are as follows: *Negative Affectivity*—Anxiousness, Emotional Lability, Separation Insecurity; *Detachment*—Withdrawal, Anhedonia, Intimacy Avoidance; *Antagonism*—Manipulativeness, Deceitfulness, Grandiosity; *Disinhibition*—Irresponsibility, Impulsivity, Distractibility; *Psychoticism*—Unusual Beliefs and Experiences, Eccentricity, Perceptual Dysregulation. In the current study, we followed these scoring rules as this is the recommended scoring approach for practicing clinicians.

The *Personality Disorder Questionnaire–Narcissistic Personality Disorder Scale* (PDQ-NPD; Hyler, 1994) is a 9-item true-false questionnaire with one item pertaining to each *DSM-IV* NPD criterion. Internal consistency for the PDQ-NPD was adequate (α = .70).

The *Narcissistic Personality Inventory–16* (NPI-16; Ames et al., 2006) is an abbreviated version (16-items) of the full length *Narcissistic Personality Inventory* (40-items; Raskin & Hall, 1981) that uses a forced-choice response format. Respondents choose between two statements, one of which is coded as narcissistic (e.g., *I will usually show off if I get the chance* vs. *I try not to be a show off*). Internal consistency for the NPI-16 in this sample was acceptable (α = .75).

The *Pathological Narcissism Inventory* (PNI; Pincus et al., 2009) consists of 52 items answered on a 6-point Likert-type scale ranging from (0) *Not at All Like Me* to (5) *Very Much Like Me*. The seven primary scales of the PNI, Exploitativeness, Grandiose Fantasy, Self-Sacrificing Self-Enhancement, Contingent Self-Esteem, Hiding the Self, Devaluing, and Entitlement Rage, load on two higher order domains of Narcissistic Grandiosity and Narcissistic Vulnerability (Wright et al., 2010). In the current sample,

the internal consistencies of the primary (*Mdn* α = .86; range = .77-.94) and higher order (NG α = .88; NV α = .95) scales were adequate.

Results

We first calculated correlations between the PID-5 facets and the two higher order scales of the PNI (i.e., narcissistic grandiosity and vulnerability), the NPI-16 total score, and the PDQ-NPD total score. Table 1 summarizes these associations. Due to the large sample size, correlations above |.05| are significant at $p < .05$, and therefore we focus on coefficients of at least a moderate effect size (i.e., .30 or greater). Focusing first on the far right column of Table 1 and the *DSM*-based PDQ-NPD, we found that the PID-5 scales with the highest correlations were those based on antagonistic content, with the highest value associated with the Grandiosity scale, followed by Deceitfulness and Callousness. Additional moderate correlations were found with Manipulativeness, Hostility, Attention Seeking, Suspiciousness, Irresponsibility, Perceptual Dysregulation, and Unusual Beliefs. This pattern of associations is consistent with the mixture of grandiose and vulnerable content that has been found in the PDQ-NPD scale in prior work (Hopwood, Donnellan, et al., in press).

The largest NPI-16 correlations were more focally antagonistic in nature, with little in the way of other correlations rising above the .30 cutoff. Notably, correlations between the NPI-16 and the Negative Affectivity scales were quite modest but mostly negative. Somewhat consistent with PDQ-NPD and NPI-16, the PNI Grandiosity domain's strongest correlations were with the PID-5's Antagonism facets, with additional modest to moderate associations with the Negative Affect, Disconstraint, and Psychoticism scales. In contrast to the other three scales, the PNI's Vulnerability domain demonstrated the highest correlations with scales with affective content, followed by antagonistic and psychoticism related scales. The majority of the correlations with PNI Vulnerability were above .30. We note that measures of narcissism that are more pathological in content consistently exhibited moderate associations with the facets from the PID-5's Psychoticism domain.

At the bottom of Table 1 are the correlation coefficients for the four narcissism scales used in the preceding analyses with each of the PID-5 domains. To account for the associations among the PID-5 factors with the narcissism scales, we additionally regressed each of the narcissism scales on all five of the PID-5 factors simultaneously and present the resulting standardized regression coefficients alongside the zero-order correlations. The patterns of the zero-order correlations closely follow the pattern found in the facet scales, as would be expected. However, a different picture emerges when considering the multiple regression coefficients. In particular, across narcissism measures a marked reduction in the associations with Psychoticism can be observed when controlling for the other scales (range of *r* between Psychoticism and other domains = .45-.61). Similar reductions in the modest to moderate associations with Disconstraint were also observed (range of *r* between Disconstraint and other domains = .43-.61). These findings are consistent with the results reported in Anderson et al. (2013) of PID-5 Psychoticism associations with MMPI PSY-5 scales. Although the associations with Antagonism generally maintain their strengths, this is less the case for PNI Vulnerability where only Negative Affect remains a strong predictor. Antagonism remains a strong predictor of NPI-16, whereas the remaining scales are negatively associated, demonstrating modest suppression effects in some cases. PNI Grandiosity and PDQ-NPD maintain their strongest associations with Antagonism, whereas PNI Grandiosity and the NPI-16 each demonstrate modest but significant negative relationships with detachment. Given the general positive manifold of correlations among pathological personality trait scales like those in the PID-5 (range of *r* between any two domains = .20-.61), multiple regression provides a clearer picture of the specific associations between narcissism measures and the *DSM-5* traits. We did not examine the PID-5 scales in the same fashion because of the potential for a high degree of collinearity among scales leading to difficulties in interpretation (e.g., unexpected suppression effects).

To better understand the association between the *DSM-5* trait model and the component aspects of pathological narcissism, we replicated the above analyses using the seven PNI primary scales. The results of these analyses can be found in Table 2. Starting with the PID-5 facet correlations, we found that there are considerable points of convergence and divergence across the patterns of associations. Exploitativeness exhibits consistently moderate to strong associations across the Antagonism scales, with the strongest associations with Manipulativeness and Deceitfulness as expected. Alternatively, Self-Sacrificing Self-Enhancement and Grandiose Fantasy demonstrate relatively little in the way of marked associations with the PID-5 scales, suggesting that they are capturing aspects of the pathological narcissism phenomenology that remains somewhat outside the domains of pathological traits, or at least outside the PID-5's content domain. The PNI's Contingent Self-Esteem, Entitlement Rage, and Devaluing scales are less differentiated in their patterns of associations across the PID-5 scales of diverse content, exhibiting moderate to strong associations to scales with affective and antagonistic themes, but also impulsivity and aberrant perceptual content, and detachment in the case of Devaluing. Hiding the Self was most strongly associated with Negative Affectivity and Detachment scales, along with a number of other moderate correlations. On the whole, the PNI primary scales that form the higher order factor of PNI Vulnerability

Table 2. Associations Between PID-5 Domains and Facets and PNI First-Order Scales.

Scale	EXP	SSSE	GF	CSE	HS	DEV	ER
PID-5 facets							
Submissiveness	.03	.26	.25	**.46**	.25	**.32**	**.32**
Depressivity	.07	.10	.21	**.53**	**.39**	**.48**	**.31**
Separation Insecurity	.10	**.31**	.28	**.60**	.28	**.37**	**.44**
Anxiousness	.05	.26	**.32**	**.55**	**.44**	**.48**	**.44**
Emotional Lability	.14	.26	.26	**.54**	.28	**.44**	**.47**
Suspiciousness	.23	.17	.24	**.44**	**.40**	**.55**	**.44**
Restricted Affectivity	.21	−.05	.09	.06	**.35**	.22	.08
Withdrawal	.11	−.02	.11	.27	**.43**	**.45**	.24
Intimacy Avoidance	.08	−.04	.05	.12	.24	**.31**	.11
Anhedonia	.05	.02	.13	**.45**	**.37**	**.44**	.29
Manipulativeness	**.73**	.19	.28	.21	.22	.25	**.39**
Deceitfulness	**.57**	.18	**.30**	**.39**	.29	**.40**	**.49**
Hostility	**.35**	.13	.23	**.38**	**.35**	**.42**	**.56**
Callousness	**.39**	−.08	.08	.18	.20	**.35**	**.34**
Attention Seeking	**.44**	**.30**	**.40**	**.39**	.14	.22	**.44**
Grandiosity	**.47**	.13	.24	.13	.12	.23	**.36**
Irresponsibility	.26	.01	.13	**.36**	.19	**.42**	**.31**
Impulsivity	**.30**	.09	.14	.23	.14	.23	.24
Distractibility	.18	.17	.22	**.46**	**.33**	**.41**	**.36**
Perseveration	.20	.27	**.33**	**.55**	**.44**	**.53**	**.48**
Rigid Perfectionism	.16	.26	.26	.28	.29	**.35**	**.35**
Risk Taking	**.34**	.02	.09	−.02	.04	.01	.04
Eccentricity	.26	.17	**.30**	**.38**	**.37**	**.38**	**.31**
Perceptual Dysregulation	**.32**	.18	**.30**	**.45**	**.38**	**.51**	**.40**
Unusual Beliefs	**.38**	.14	.24	.25	.28	**.37**	.29

	EXP		SSSE		GF		CSE		HS		DEV		ER	
Scale	*r*	β	*r*	β	*r*	β	*r*	β	*r*	β	*r*	β	*r*	β
PID-5 factors														
Negative Affect	.11	−.04	**.33**	**.36**	**.34**	.29	**.68**	**.58**	**.40**	.25	**.52**	**.33**	**.54**	**.46**
Detachment	.10	−.12	−.02	−.21	.12	−.10	**.35**	.06	**.42**	.26	**.49**	.26	.26	.00
Antagonism	**.71**	**.69**	.20	.16	**.32**	.24	.28	.10	.24	.10	**.34**	.14	**.48**	**.39**
Disconstraint	**.30**	−.01	.12	−.08	.20	−.10	**.42**	.08	.27	−.09	**.42**	.04	**.37**	.00
Psychoticism	**.36**	.13	.19	.11	**.32**	.20	**.41**	.02	**.40**	.16	**.48**	.11	**.38**	−.01
R^2		**.51**		.17		.21		**.49**		.27		**.41**		**.44**

Note. N = 1,653. All $r > |.05|$ significant at $p < .05$. Values >.30 bolded. PNI = Pathological Narcissism Inventory; PID-5 = Personality Inventor for the *DSM-5*; EXP = Exploitativeness; SSSE = Self-Sacrificing Self-Enhancement; GF = Grandiose Fantasy; CSE = Contingent Self-Esteem; HS = Hiding the Self; DEV = Devaluing; ER = Entitlement Rage.

are less differentiated in terms of their PID-5 associations at the zero-order level.

Turning to the factor-level correlations and multiple regressions, a clearer picture emerges in a number of places. For example, across the constructs we observed the marked decrease in associations with Psychoticism when moving to a multiple-regression framework. Exploitativeness is quite focally antagonistic, whereas Self-Sacrificing Self-Enhancement demonstrates a modest negative association with Detachment capturing a key component of the construct, which is related to a more affiliative manifestation of narcissistic pathology. The Grandiose Fantasy and Hiding the Self coefficients are generally only modest in size, whereas Contingent Self-Esteem, Devaluing, and Entitlement Rage all maintain moderate to strong associations with Negative Affectivity. Antagonism remains a marked predictor of Entitlement Rage even when controlling for the other PID-5 factors.

Finally, to evaluate the proposed *DSM-5* NPD trait profile, we conducted hierarchical multiple regression models regressing each of the narcissism scales on the PID-5 Grandiosity and Attention Seeking scales in the first step,

Table 3. Variance Accounted for by Hierarchical Regression of Narcissism Scales on PID-5 Scales.

	DSM-5 Model		Additional Traits		
	R^2	*p*	R^2	ΔR^2	Δp
PNI Grandiosity	.26	<.001	.43	.17	<.001
PNI Vulnerability	.15	<.001	.61	.46	<.001
NPI-16	.45	<.001	.56	.11	<.001
PDQ NPD	.29	<.001	.38	.09	<.001
EXP	.29	<.001	.57	.28	<.001
SSSE	.09	<.001	.26	.17	<.001
GF	.17	<.001	.30	.13	<.001
CSE	.16	<.001	.60	.44	<.001
HS	.02	<.001	.38	.36	<.001
DEV	.07	<.001	.46	.39	<.001
ER	.22	<.001	.53	.31	<.001

Note. *N* = 1,653. PNI = Pathological Narcissism Inventory; NPI = Narcissistic Personality Inventory; PDQ = Personality Disorder Questionnaire; NPD = Narcissistic Personality Disorder; PID-5 = Personality Inventor for the *DSM-5*; EXP = Exploitativeness; SSSE = Self-Sacrificing Self-Enhancement; GF = Grandiose Fantasy; CSE = Contingent Self-Esteem; HS = Hiding the Self; DEV = Devaluing; ER = Entitlement Rage.

and adding the remaining PID-5 facet scales in the second step. Table 3 contains the R^2 values for each step of the model, and the change in R^2 (ΔR^2) between the two steps. As can be observed in Table 3, the proposed model best accounts for variance in the NPI-16 and to a lesser degree variance in the PDQ-NPD and PNI Grandiosity domains. Only a small minority of the variance in PNI Vulnerability is captured by the two trait facets from the *DSM-5* proposal for NPD. Conversely, adding the remainder of the scales leads to a large increase in the variance accounted for in PNI Vulnerability and modest increases for the other domains.

Discussion

Two complete models of PD are presented in the *DSM-5*. First, the *DSM-IV-TR* model is directly copied with little to no changes in Section II of the manual along with other categorical diagnoses, despite the well-documented problems with this system (e.g., Widiger & Trull, 2007). Second, the newly proposed model based on impairments in functioning specific to PD paired with pathological personality traits appears in Section III, along with a host of other clinical constructs (e.g., cross-cutting dimensions like suicidality; Narrow et al., 2013). The present study examined associations of distinct conceptions of narcissism from the *DSM-IV* (i.e., the PDQ-NPD), social/personality psychology (i.e., the NPI-16), and contemporary clinical theory (i.e., the PNI) with PID-5 (i.e., *DSM-5* Section III) traits. This work builds on and extends the results from two prior studies (Hopwood et al., 2012; Miller et al., 2012) and can inform the effort to test both the Section III PD model and evolving conceptions of narcissism.

In many respects, we found that the PID-5 performed as expected, insofar as it demonstrated distinct profiles of correlations and regression coefficients with these various articulations of narcissism. As would be predicted, and consistent with prior literature, the strongest and most consistent associations were with the Antagonism domain and the scales that comprise it. The noteworthy associations between the NPI-16 and the PID-5 were mostly limited to the antagonism domain, whereas there were a number of modest to moderate positive associations between the PDQ-NPD and the other domain scales. This is consistent with prior work that has found the PDQ-NPD scale to contain a modest amount of content associated with neuroticism, low extraversion, and low conscientiousness (Hopwood, Donnellan, et al., in press; Miller & Campbell, 2008). Unlike prior studies, however, we controlled for all domains using multiple regressions, and found that domains other than antagonism do not contribute meaningful incremental information to predicting PDQ-NPD. Additional modest negative associations emerged between the NPI-16 and Negative Affectivity and Detachment, which is also consistent with prior studies examining associations with normative traits (Miller & Campbell, 2008; Paulhus, 1998). We note that in contrast to the NPI's characteristic profile, the relationship between extraversion (i.e., conceptually opposite to Detachment) and pathological narcissism is controversial and is not borne out in meta-analyses (Samuel & Widiger, 2008a), whereas the negative association with Negative Affectivity is consistent with an interpretation of normal or adaptive narcissism.

Much like the PDQ-NPD and NPI-16 scales, the PNI Grandiosity dimension demonstrated the strongest associations with Antagonism scales, followed by modest associations with the remaining domains, also like the PDQ-NPD. Yet when all dimensions were entered into a regression an interesting picture emerged in which the Antagonism effect was consistent with the PDQ-NPD profile, and there was a modest negative association with Detachment similar to the NPI-16, but additional modest to moderate associations with Psychoticism and Negative Affectivity remained. This is consistent with a more nuanced articulation of pathological grandiosity that goes beyond Antagonism to include additional features (Pincus, 2013).

The current proposed trait profile for NPD in the Section III *DSM-5* model is limited to Narcissistic Grandiosity; that much has been clear. What the current set of analyses demonstrates is that among grandiose conceptions, the proposed profile most represents the construct as articulated in the NPI. As reviewed in the introduction, the NPI has questionable utility as a clinical tool based on group differences

between NPD patients and nonpatients (Vater et al., in press), which raises questions about whether adopting this specific trait profile is advisable. More maladaptive variants of grandiosity have broader trait associations reflective of the complexity of the narcissism construct.

With few exceptions, the PNI Vulnerability dimension demonstrated at least moderate positive associations with most of the PID-5 primary scales and higher order domains. What is interesting about this relatively undifferentiated profile at the zero-order level is that the content comprising the PNI Vulnerability dimensions is conceptually most similar to the material described in the self and interpersonal impairments in the *DSM-5* Section III model (e.g., excessive reference to others for self-definition and self-esteem regulation; emotional regulation that mirrors fluctuations in self-esteem; goal-setting based on gaining approval; personal relationships largely superficial and exist to serve self-esteem regulation). For instance, the Contingent Self-Esteem scale describes a fragile and shifting self-esteem that is tethered to the vicissitudes of the environment (example item: *It's hard to feel good about myself unless I know other people admire me*), the Entitlement Rage scale captures a volatile angry reactivity when entitled expectations are not me (example item: *I typically get very angry when I'm unable to get what I want from others*), the Hiding the Self captures a defensive withdrawal (example item: *I can't stand relying on other people because it makes me feel weak*), and Devaluing taps a shameful disavowal of grandiose expectations (example item: *When others don't meet my expectations, I often feel ashamed about what I wanted*). Understandably, this type of impairment will demonstrate broad associations, but when controlling for all domains, Negative Affectivity remains a marked predictor, and to a lesser extent Antagonism.

In the associations between the PID-5 and the PNI's primary scales we can see that in some instances the lower order scales follow the pattern of the higher order dimensions. This is particularly the case for the scales that make-up PNI Vulnerability but less so for PNI Grandiosity. Exploitativeness appears to be well captured by antagonism, but Self-Sacrificing Self-Enhancement and Grandiose Fantasy are not well captured by the PID-5's content. These scales retain something distinct. In the case of Grandiose Fantasy, this is a very specific scale focused on fantasies of accomplishments and the accompanying recognition. Similarly, Self-Sacrificing Self-Enhancement is somewhat specific and may be relatively unique in its content associated with offering others pseudo-altruistic help in the hopes that it garners recognition and admiration for the sacrifice (see also Gebauer, Sedikides, Verplanken, & Maio, 2012). It is notable that past work (Wright, Thomas, et al., 2012) has demonstrated that the PID-5 contains less in the way of maladaptive interpersonal warmth, and the Self-Sacrificing Self-Enhancement scale is associated with maladaptive interpersonal affiliation (note the negative association with Detachment at the bottom of Table 2). Given the broad range the PID-5 currently covers with only 25 scales, it is perhaps understandable that these more specific scales are not entirely captured by the traits. It remains an open question whether the PID-5 merits expansion, and if so in what ways.

The fact that there is not yet a validated method to directly assess personality functioning as articulated in the *DSM-5* Section III model's Criterion A makes it difficult to examine the proposal in its entirety at this juncture (Hopwood, Wright, Ansell, & Pincus, in press). Regardless, a number of conclusions can be drawn about the suitability of the entire model by examining only the traits. For instance, it is clear that limiting the trait profile to Grandiosity and Attention Seeking provides a restricted view of narcissism; limited primarily to what is a fairly narrow articulation of narcissistic grandiosity. Indeed, only the variance in the NPI-16 is well captured by the two proposed traits, and this is the measure that is most controversial as a measure of pathological narcissism (Roche, Pincus, Lukowitsky, et al., in press). Moreover, measures based on clinical theory, especially those that capture aspects of narcissistic vulnerability, have considerably less of their variance accounted for by Grandiosity and Attention Seeking. The exception is the PNI Exploitativeness subscale, which is only one component of PNI Grandiosity.

As others have noted as well (Miller et al., 2012), many of the nuanced aspects of vulnerable content are contained within the functional impairments described in Criterion A for NPD. Although we are glad to see this included in the overall model, it is difficult to ignore the significant associations found here between vulnerable scales and the PID-5 traits which capture important variance in narcissistic vulnerability. This raises questions about the *DSM-5* Section III NPD model as currently articulated and how it should best be implemented in practice. For example, should the NPD trait profile be expanded to include Negative Affectivity scales? The effect of this decision on practice and diagnostic rates of NPD will depend greatly on whether the Section III model adheres to a monothetic as opposed to a polythetic approach to trait elevations. If it is to be a monothetic framework, extending the traits required for a disorder to accommodate a broader and more inclusive definition of narcissistic pathology would have the arguably paradoxical effect of narrowing the number of individuals who meet the diagnostic profile for narcissistic pathology. One potential solution is to include those Negative Affectivity traits as specifiers but with formal recognition in the text. As such we offer that in our experience, those individuals with narcissistic pathology who most frequently present for psychotherapy do so in vulnerable states marked by dysregulation and negative affect (Ellison et al., in press; Pincus, Cain, & Wright, 2013). Clinical utility could be

enhanced by cueing clinicians in to the type of patient that they are likely to encounter in the consulting room. In this regard, what is important is highlighting that the presence of negative and dysregulated affect in a patient does not preclude significant narcissistic pathology, which may in fact be the primary clinical problem.

More broadly, what seems clear is that it will be difficult to distinguish between affective dysregulation that is attributable to "personality functioning," as opposed to trait-based affect dysregulation, at least during the relatively limited contact afforded by most contemporary evaluations. Distinguishing contextualized and transient negative affect (e.g., anger in the face of frustrated motives and entitled expectations) from a general tendency to experience a broader range of negative affects across contexts will require careful assessment. Indeed, it is worth considering whether there is a distinction to be made at all. From a pragmatic perspective, we question whether many clinicians would trouble themselves with the distinction, leading to potential problems if there are arbitrary rules about where affective dysregulation can be coded while still meeting the criteria for NPD (or other PDs). More programmatically, as research on the PID-5 and the rest of the proposed model accumulates, there is likely to emerge a number of areas of convergence and overlap between the content and descriptions contained with Criterion A and Criterion B that will need to be resolved.

An additional informative aspect about this study pertains to the significant associations between the PID-5's Psychoticism scales and most of the narcissism dimensions at the zero-order level. Although this may initially appear to be an unexpected outcome given that narcissism and thought disorder are not often studied in concert, prior findings provide some useful context for these results. Notably, features of nonaffective psychosis are understood to exist along a continuum (i.e., dimension; see van Os, Linscott, Myin-Germeys, Delespaul, & Krabbendam, 2009, for a review) and have been shown to covary with other forms of psychopathology in clinical and nonclinical samples (e.g., Kessler, Birnbaum, et al., 2005; van Os, Hanssen, Bijl, & Ravelli, 2000). These include significant relationships with Internalizing, Externalizing, and Antagonistic pathology in structural models (Kotov et al., 2011; Wright et al., 2013). Consistent with these findings, the associations between Psychoticism and narcissism scales were significantly reduced when controlling for other domains such as Negative Affectivity and Antagonism (see also Anderson et al., 2013) It is also worth noting that psychosis and personality pathology share similar nonspecific risk factors in the form of childhood adversity (e.g., Read, van Os, Morrison, & Ross, 2005), which may also explain why the NPI has the most modest association with the Psychoticism scales at the zero-order level. Nevertheless, given the novelty of the PID-5 these effects and the performance of the Psychoticism scales need to be further studied in clinical samples with moderate to severe psychopathology.

Limitations

There were a number of limitations with the current study that bear mentioning. First, the study was limited by its cross-sectional nature. As a result, all constructs were limited to assessment as dispositions. A number of theorists have noted that for many individuals, narcissistic grandiosity and vulnerability are likely wax and wane in complex dynamic processes (Pincus, 2011; Ronningstam, 2009), and emerging research suggests that this may indeed be the case (Roche, Pincus, Conroy, et al., in press). The current research is not able to speak directly to these types of dynamics. Research that can examine the dynamic nature of these constructs may be able to provide more clarity on the distinction between the content currently found in Criterion A as opposed to Criterion B. Future work should continue to study these constructs not only as dispositions, but as they play out over various time scales (e.g., days, social interactions, moment to moment).

In addition, the generalizability of these results is potentially limited by the use of self-report survey methodology. However, self-report based research is by far the most common method used in the study of personality pathology and therefore these results provide an important direct comparison to much of the existing research (Bornstein, 2003, 2011). Nevertheless, it will be important to understand whether the associations found here would replicate under informant and clinician rating conditions, especially as appropriately worded versions of these measures are developed (cf. Markon et al., 2013).

Another potential limitation of this research is that we used a primarily nonclinical sample and information on whether participants were being seen clinically was not available. However, a number of features and prior findings mitigate severe limitations with this strategy. For one, the sampling strategy may matter less when the focus of the analysis is on the covariation of dimensional constructs (see O'Connor, 2002) and in meta-analyses sample types do not emerge as significant moderators (Saulsman & Page, 2004). Furthermore, admission to college does not confer immunity to psychopathology, and significant rates of PD have been observed among undergraduates (Lenzenweger, 2008). Indeed, early adulthood is the developmental period in which psychopathology peaks generally (Kessler, Berglund, et al., 2005). All the same, it is possible that some of the most severely disordered individuals may be censored in a nonclinical sample such as this. A final limitation worth noting is that this sample lacks broad cultural and ethnic diversity, being composed primarily of non-Hispanic Whites.

Conclusion

The potential for a new PD model that addresses many of the limitations inherent in the categorical model of the *DSM-III* through *DSM-IV-TR* is compelling, but such a dramatic change is best made when there is sufficient empirical justification. By virtue of the proposed model's inclusion in Section III alongside the *DSM-IV-TR* PDs in Section II of the *DSM-5*, clinicians can begin to evaluate its utility in comparison to the status quo, and researchers can work to refine the proposal through data. Here our focus was on the manner in which narcissism might be represented. We drew from the distinct perspectives currently espoused in the clinical literature, social/personality research, and extant psychiatric nosology and found that the proposed trait model for NPD most closely represents the conception as usually represented in social/personality psychology. This is concerning given that pathological narcissism is broader than simply Antagonistic traits, as demonstrated by the more clinically oriented measures in this study. In particular, affective dysregulation would be advisable to include in the trait profile. This would have the added benefit of further differentiating the NPD profile from that of antisocial PD which shares an emphasis on the domain of Antagonism.

Finally, there are a number of important avenues for future research that will help clarify some of the issues raised by these results. Chief among them is the development of a validated measure of Section III PD Criterion A, and research that follows that assesses PD Criteria A and B within the same studies. As it pertains to NPD specifically, it appears that much of what is defined as narcissistic vulnerability has been couched only in Section III Criterion A material, but the suitability of this has not been evaluated. However, this will be crucial not only for pathological narcissism, but for all personality pathology. As has been demonstrated (Hopwood et al., 2012; Wright, Pincus, & Lenzenweger, 2012), traits related to Negative Affectivity, Disconstraint, and Antagonism are associated with general severity of PD. For the proposed Section III PD model to be most effective, the ability to disentangle *severity* from *style*, and *functioning* from *traits*, will be key issues moving forward. This will likely be challenging, but potentially highly illuminating work that serves to provide more integration in the PD field.

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