

Parallel Syndromes: Two Dimensions of Narcissism and the Facets of Psychopathic Personality in Criminally Involved Individuals

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Little research has examined different dimensions of narcissism that may parallel psychopathy facets in criminally involved individuals. In this study, we examined the pattern of relationships between grandiose and vulnerable narcissism, assessed using the Narcissistic Personality Inventory–16 and the Hypersensitive Narcissism Scale, respectively, and the four facets of psychopathy (interpersonal, affective, lifestyle, and antisocial) assessed via the Psychopathy Checklist: Screening Version. As predicted, grandiose and vulnerable narcissism showed differential relationships to psychopathy facets, with grandiose narcissism relating positively to the interpersonal facet of psychopathy and vulnerable narcissism relating positively to the lifestyle facet of psychopathy. Paralleling existing psychopathy research, vulnerable narcissism showed stronger associations than grandiose narcissism to (a) other forms of psychopathology, including internalizing and substance use disorders, and (b) self- and other-directed aggression, measured with the Life History of Aggression and the Forms of Aggression Questionnaire. Grandiose narcissism was nonetheless associated with social dysfunction marked by a manipulative and deceitful interpersonal style and unprovoked aggression. Potentially important implications for uncovering etiological pathways and developing treatment interventions for these disorders in externalizing adults are discussed.

Keywords: grandiose narcissism, vulnerable narcissism, psychopathy, forensic, aggression

In its original Greek form, *narcissism* reflected a perception and presentation of oneself as superior and worthy of admiration and special treatment. Current conceptualizations of and research regarding narcissism, however, have suggested that not all individuals with narcissism solely display a grandiose sense of self (American Psychiatric Association [APA], 2000). Rather, two fairly distinct dimensions of narcissism seem to exist: grandiose narcissism and vulnerable narcissism (e.g., Wink, 1991). *Grandiose narcissism* refers to the openly arrogant and superior presentation, whereas *vulnerable narcissism* is characterized by conflict between a grandiose and an inferior sense of self

(e.g., Kernberg, 1975). Thus, individuals scoring high on grandiose narcissism are poised, self-confident, and exhibitionistic (Wink, 1991). In contrast, those scoring high on vulnerable narcissism can be exploitative and entitled, but the hallmark symptoms involve hypersensitivity to criticism, fear of rejection, and a fragile self-esteem (Akhtar & Thomson, 1982; Wink, 1991).

Both narcissism dimensions are currently embedded in narcissistic personality disorder as a single syndrome (APA, 2000). However, conflating the grandiose and vulnerable dimensions is potentially problematic for clinicians because these dimensions may have very distinct functional impairments that require different treatment interventions. The empirical evidence on the two dimensions of narcissism is scarce, making it difficult to ascertain the clinical significance of the grandiose and vulnerable manifestations of the disorder. Moreover, the research that has been conducted on narcissism is relatively limited in scope in that it has relied primarily on convenience samples without severe functional impairments (e.g., undergraduate samples) and measures of narcissism that mostly assess grandiose traits (e.g., the Narcis-

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sistic Personality Inventory; Bushman et al., 2009; Pincus et al., 2009). Although these studies provide preliminary data, more research aimed at delineating the nomological networks of the grandiose and vulnerable dimensions is needed to begin to understand the clinical relevance of these constructs.

This distinction between grandiose and vulnerable narcissism to some extent parallels research on primary and secondary variants of psychopathy, which have a rich theoretical and empirical literature (e.g., Blackburn, 1975; Karpman, 1941; Lykken, 1995; Skeem, Johanson, Andershed, Kerr, & Loudon, 2007). Primary psychopathy is theorized to stem from a core set of manipulative interpersonal traits and deficits in empathy, whereas secondary psychopathy is theorized to develop out of an impulsive-aggressive lifestyle and deficits in emotion regulation (e.g., Hare, 1991). Given the potential parallels between the narcissism dimensions and psychopathy variants, applying an established psychopathy framework in the study and understanding of grandiose and vulnerable narcissism may be useful. Thus, we sought to expand current conceptualizations of grandiose and vulnerable narcissism by drawing on the extensive research literature on psychopathy to form and test hypotheses about the narcissism dimensions as they manifest in criminally involved individuals. Narcissism and psychopathy have been linked in the literature already, as evidenced by research on the "dark triad" (i.e., narcissism, psychopathy, and Machiavellianism; e.g., Paulhus & Williams, 2002). In addition, psychopathy was selected as a theoretical framework for examining narcissism in an externalizing sample because of symptom overlap among the disorders and their respective associations with heightened risk for aggression and engagement in illegal behavior (Bushman & Baumeister, 1998; Hare, 2003; Edens, Hart, Johnson, Johnson, & Oliver, 2000; Jones & Paulhus, 2010). Thus, we sought to determine whether using psychopathy as a framework for understanding narcissism dimensions, particularly among criminally involved individuals, is fruitful.

Using Psychopathy as a Theoretical Framework

Narcissism and psychopathy in forensic samples show both conceptual and empirical overlap,

suggesting that these disorders may share underlying vulnerabilities for personality pathology. For instance, psychopathy is marked by a constellation of interpersonal (e.g., grandiosity, deceitfulness, superficial charm), affective (e.g., shallow affect, callousness, remorselessness), lifestyle (e.g., risk taking, irresponsibility, aggressiveness, unrealistic goals), and antisocial (e.g., criminal versatility, repeated incarcerations) traits that, like narcissism, increase risk for engagement in antisocial behavior (e.g., Bushman & Baumeister, 1998; Cleckley, 1976). Moreover, narcissism and psychopathy converge at the trait level of personality in that both disorders are marked by grandiosity, manipulateness, and callousness (APA, 2000; Hare, 2003) and with the five-factor model dimensions of low agreeableness and high extraversion (e.g., Lynam, 2001; Samuel & Widiger, 2008). Finally, as described earlier, research has suggested that psychopathy is also multidimensional (Cooke & Michie, 2001; Hare, 2003; Hill, Neumann, & Rogers, 2004), with the primary and secondary variants of psychopathy representing separable etiological pathways to the disorder. Unlike with narcissism, however, extensive research has been conducted to delineate the nomological networks associated with the primary and secondary dimensions of psychopathy, making the psychopathy literature a potentially informative framework for examining distinctions between grandiose and vulnerable narcissism.

Empirical investigations of the external correlates of the primary and secondary dimensions validate their theoretical distinctions. For instance, research has indicated that individuals with primary psychopathic traits exhibit lower levels of anxiety, social withdrawal (Skeem et al., 2007), and emotional reactivity (Blair, 2005; Kiehl, 2006; Patrick, Bradley, & Lang, 1993) than those with secondary psychopathic traits. In contrast, secondary psychopathy is associated with emotional and behavioral dysregulation, including increased risk for suicidality, alcohol and substance use disorders, and impulsivity (Lorber, 2004; Patrick, Hicks, Krueger, & Lang, 2005; Sellbom & Verona, 2007; Smith & Newman, 1990; Vanman, Mejia, Dawson, Schell, & Raine, 2003; Verona, Hicks, & Patrick, 2005; Verona, Patrick, & Joiner, 2001). In terms of violence, both primary and secondary dimensions of psychopathy have been found to predict reactive violence and aggression (Hart, 1998; Walsh

& Kosson, 2008). However, individuals with primary psychopathic traits are more likely to engage in unprovoked, instrumental forms of aggression than those with secondary psychopathic traits (Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003; Williamson, Hare, & Wong, 1987; Woodworth & Porter, 2002). In sum, the extant literature has indicated that primary psychopathy is related to emotional stability, lack of anxiety, and unprovoked-instrumental aggression, whereas secondary psychopathic traits are associated with psychopathological dysfunction marked by emotional and behavioral dysregulation.

Narcissism–Psychopathy Parallels

Preliminary research on the association of narcissism with psychopathy has produced mixed results. Although several studies have indicated that narcissism is associated with primary psychopathy (e.g., Benning, Patrick, Blonigen, Hicks, & Iacono, 2005; Cale & Lilienfeld, 2002; Hart & Hare, 1989; McHoskey, Worzal, & Szyarto, 1998; Rutherford, Alterman, Cacciola, & McKay, 1996), the association of narcissism with secondary psychopathy is less consistent. For instance, although some studies have found comparable relationships between narcissism and primary and secondary psychopathy (e.g., Rutherford et al., 1996), several studies have reported relatively weaker (Benning et al., 2005, Study 1; McHoskey et al., 1998; Miller, Dir, Gentile, Wilson, Pryor, & Campbell, 2010) or nonexistent relationships between narcissism and secondary psychopathy (Benning et al., 2005, Study 2; Hart & Hare, 1989). The mixed findings across studies may be because the grandiose and vulnerable dimensions of narcissism were not differentiated. Indeed, with a few exceptions (e.g., Miller et al., 2010), existing research has focused on grandiose narcissism without giving sufficient attention to vulnerable narcissism.

Another way to examine parallels between psychopathy and narcissism dimensions is to investigate whether grandiose and vulnerable narcissism show similar relationships to external correlates as primary and secondary psychopathy, respectively. Epidemiological research has indicated that narcissistic personality disorder evidences high comorbidity with internalizing disorders (20.6%, major depressive disorder; 54.7%, anxiety disorders) and exter-

nalizing disorders (64.2%, substance use disorder overall; 30.6%, alcohol dependence; 25%, antisocial personality disorder; Gunderson, Ronningstam, & Smith, 1991; Stinson et al., 2008; Widiger & Corbitt, 1993). However, given that narcissistic personality disorder combines grandiose and vulnerable features, which aspects of narcissism account for comorbidity with internalizing and externalizing disorders is unclear. A few studies have examined narcissism dimensionally, and at least one study found a positive relationship between depression and vulnerable narcissistic traits in clinical samples ($r = .57$; Watson, Sawrie, Greene, & Arredondo, 2002). Moreover, a small literature has suggested that vulnerable, but not grandiose, narcissism shows a positive relationship with shame (e.g., Cheek & Hendin, 1996; Gramzow & Tangney, 1992; Hibbard, 1992), which is ubiquitous in internalizing psychopathology (e.g., Tangney & Dearing, 2002). These findings suggest that, as with secondary psychopathy, vulnerable narcissism, but not grandiose narcissism, represents risk for internalizing psychopathology.

Research in undergraduates has shown that narcissistic traits may also increase risk for aggression (e.g., Jones & Paulhus, 2010; Locke, 2009; Paulhus, Robins, Trzesniewski, & Tracy, 2004), and theory has suggested that aggressive tendencies influence the degree to which narcissism is pathological (Kernberg & Caligor, 2005). For instance, Bushman, Baumeister, and colleagues (e.g., Bushman et al., 2009; Bushman & Baumeister, 1998) have provided evidence that the grandiose features of narcissism can promote aggression, especially when an individual's self-esteem is threatened. The empirical evidence on the relationship between vulnerable narcissism and aggression is very limited, but preliminary data from the Pathological Narcissism Inventory have indicated that vulnerable narcissism is associated with homicidal ideation and self-directed violence, including suicide attempts (Pincus et al., 2009). More systematic research is needed to determine whether vulnerable narcissism, like secondary psychopathy, relates to reactive forms of aggression and self-harm, whereas grandiose narcissism, like primary psychopathy, is associated with mostly unprovoked acts of violence.

Present Study

Given the similarities between the narcissism and psychopathy constructs and the lack of systematic research on the narcissism dimensions, we were interested in further delineating the relationships between grandiose and vulnerable narcissism and the facets of psychopathy. In our effort to examine the parallels between narcissism and psychopathy, we investigated not only whether the facets of psychopathy were differentially associated with dimensions of narcissism but also whether the latter would show relationships to external criteria (e.g., psychological disorders, forms of aggression) that would be expected if grandiose and vulnerable narcissism paralleled primary and secondary psychopathy, respectively.

Research on narcissism to date has relied almost exclusively on a diagnosis of narcissism, which confounds grandiose and vulnerable narcissism, or on the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981), which measures only grandiose aspects of narcissism. We sought to remedy this limitation by assessing both grandiose and vulnerable narcissism using two separate measures designed specifically to assess these dimensions—the 16-item version of the NPI (NPI-16; Ames, Rose, & Anderson, 2006) and the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997), respectively. Another contribution of this study involves examining relationships between narcissism and psychopathy in a forensic sample recruited through legal and treatment agencies in the community, instead of relying on a convenience sample as has been typical in research on dimensions of narcissism. More important, a criminally involved sample should evidence greater variability in the symptoms and behaviors of interest (narcissism, psychopathy, aggression) than would a typical undergraduate sample.

We expected that the two dimensions of narcissism would be differentially associated with the facets of psychopathy, with grandiose narcissism showing relationships to the facets of primary psychopathy (interpersonal and affective) and vulnerable narcissism showing relationships to the facets of secondary psychopathy (lifestyle and antisocial). We further hypothesized that the two dimensions of narcissism would parallel research on psychopathy in terms of external correlates.

We expected grandiose narcissism to be associated with fewer psychopathology symptoms, particularly internalizing, and higher unprovoked aggression, whereas we expected vulnerable narcissism to be associated with heightened emotional problems, comorbid psychopathology, and reactive aggression.

Method

Participants and Procedures

Participants consisted of 343 men (67.3%) and women (32.7%) ranging in age from 18 to 61 ($M = 30.23$, $SD = 9.0$). To enhance recruitment of externalizing individuals, we recruited adults (a) incarcerated in county jails ($n = 140$; 40.8%), (b) in substance use treatment ($n = 27$; 7.9%), and (c) on parole or probation or with a history of legal conviction ($n = 176$; 51.3%). Despite the different recruitment sites, the three subsamples evidenced similar demographic characteristics and similar histories of violence and legal involvement.¹ About half of the participants were African American ($n = 186$, 54.2%), followed by Caucasian ($n = 131$, 38.2%), mixed ethnicity/other ($n = 17$, 5.0%), and Hispanic ($n = 9$, 2.6%). The sample was diverse in terms of education level, with approximately one third (35.6%) not completing high school ($n = 122$), 20.7% earning a high school diploma ($n = 71$), 33.8% completing some college ($n = 116$), 5.5% holding a bachelor's degree ($n = 19$), 4.1% currently in college ($n = 14$), and .3% obtaining a graduate-level degree ($n = 1$). Individuals with a lifetime diagnosis of a psychotic (non-substance induced), bipolar, or pervasive developmental disorder were ineligible

¹ Because regression analyses indicated that recruitment sample (county jail, probation or parole, substance use center) did not interact with the PCL: SV facets to predict grandiose ($|β| < .12$, $ps > .50$) or vulnerable ($|β| < .24$, $ps > .13$) narcissism, all analyses were collapsed across recruitment samples. We found no group differences on the main study variables between those recruited through the substance use treatment center and those recruited while on parole or probation. However, individuals recruited while in jail had mean levels on grandiose narcissism, as well as on the affective and antisocial facets of psychopathy, that were significantly higher than those of individuals recruited while on parole or probation or through substance use treatment centers ($ts = 2.1$ – 3.5 , all $ps < .05$). Jail inmates were also lower on vulnerable narcissism and the lifestyle facet of psychopathy relative to the substance use sample ($ts = 2.3$ and 2.3 , respectively, $ps < .05$).

to participate because the acute effects of these disorders can artificially inflate scores on measures of psychopathy (e.g., antisocial behavior during mania). Those who participated but were later found to have one of these exclusionary criteria were omitted from analysis (fewer than 3% of participants). In addition, due to missing data on some of our variables of interest, the number of participants available for the different analyses varied from $N = 320$ to 342 .

Participants were administered questionnaires to measure narcissistic personality features, a semistructured diagnostic interview to assess for Axis I disorders, and a separate life history interview to assess psychopathy, antisocial personality disorder, conduct disorder, and lifetime history of aggression and violence. The interviews and self-report questionnaires were administered during one session that lasted approximately 2–4 hr. Participants provided informed consent, and the study was approved by the university's Institutional Review Board before data collection.

Independent Measures of the Narcissism Dimensions

The NPI–16 (Ames, et al., 2006) was created from the longer 40-item NPI (Raskin & Terry, 1988) to index the grandiose narcissism domains of self-ascribed authority, superiority, entitlement, and self-absorption (Ames et al., 2006). Ames et al. (2006) found that the NPI–16 had good face, predictive, and discriminant validity and is thus a good alternative to the NPI for use in a long assessment protocol such as the one conducted for this study. As would be expected, the NPI shows positive relationships to measures of narcissistic personality, such as the scales from the Schedule for Nonadaptive and Adaptive Personality ($r = .52$), the Minnesota Multiphasic Inventory–2 ($r = .62$), the Millon Clinical Multiaxial Inventory–III ($r = .58$), and the Personality Diagnostic Questionnaire–4 ($r = .29$ [Samuel & Widiger, 2008] and $r_s = .20$ and $.43$ [Miller & Campbell, 2008]). For each item on the NPI, participants were asked to read two statements and choose the one that best described them. One choice represents a narcissistic response (“I know that I am good, because everybody keeps telling me so”) and the other a non-narcissistic response (“When people compliment me, I sometimes get embarrassed”).

The number of narcissistic responses endorsed was summed to create a NPI–16 total score. We obtained a Cronbach's alpha of .72 for the total score in the present sample, which is comparable to that of the validation studies ($\alpha_s = .65$ –.78; Ames et al., 2006).

The HSNS (Hendin & Cheek, 1997) consists of 10 items that were specifically selected to assess vulnerable or covert forms of narcissism. We used the HSNS in this study because items on this scale related more to hypersensitivity to rejection (“My feelings are easily hurt by ridicule or the slighting remarks of others”) than to self-centeredness or grandiosity. In fact, the HSNS is expected to be generally uncorrelated with measures of grandiose narcissism, and this lack of correlation has been found in previous work (e.g., $r = .02$, Hendin & Cheek, 1997). For the HSNS, participants were asked to indicate how often they generally experience these feelings on a scale ranging from 1 (*very uncharacteristic or very strongly disagree*) to 5 (*very characteristic or very strongly agree*). Responses were summed to create a HSNS total score ($\alpha = .75$).

Psychopathy Facets

The Psychopathy Checklist: Screening Version (PCL:SV; Hart, Cox, & Hare, 1995) is a measure designed to index psychopathic traits in samples without access to institutional files, such as prison records. Although we conducted a review of public criminal records, use of the PCL:SV (rather than the full Psychopathy Checklist—Revised) was necessary because the information gathered from these sources was limited. Information about psychopathic traits was collected from a semistructured interview and used to rate participants on 12 psychopathic traits. Criminal history information provided by the participant was verified from the public criminal records review (online county, state, and federal criminal records), which were unavailable for 11.4% of the sample.² Each trait

² We examined whether the absence of collateral information in the form of public records affected the relationship of the PCL:SV facets and narcissism dimensions. Regression analyses indicated that access to public record information did not interact with the PCL:SV facets to predict grandiose ($|\beta| < .25$, $ps > .32$) or vulnerable ($|\beta| < .22$, $ps > .25$) narcissism.

on the PCL:SV was rated on a 3-point scale ranging from 0 (*not at all characteristic*) to 2 (*extremely characteristic*) by trained doctoral students or doctoral-level raters. We calculated a total PCL:SV psychopathy score by summing across ratings for these 12 traits. Because research (e.g., Hill et al., 2004) has indicated that the PCL:SV has as many as four facets, with the interpersonal and affective facets representing aspects of primary psychopathy and the lifestyle and antisocial facets representing aspects of secondary psychopathy, we calculated separate scores for the interpersonal, affective, lifestyle, and antisocial facets. The interpersonal facet score included ratings for superficial charm, grandiosity, and deceitfulness/conning. The affective facet included lack of remorse, lack of empathy/shallow affect, and failure to assume responsibility for antisocial behavior. The lifestyle facet included impulsivity/need for stimulation, irresponsibility, and lack of reasonable goals. Finally, the antisocial facet included lack of behavioral control and antisocial behaviors during adolescence and adulthood. Interrater reliability was available for 20% of interviews, which resulted in an intraclass correlation of .98 for PCL:SV total score and of .95, .94, .85, and .97 for the interpersonal, affective, lifestyle, and antisocial facets, respectively.

Antisocial personality disorder (APD) and conduct disorder (CD) were also assessed using interview data, and threshold symptom counts (i.e., the number of symptoms endorsed at threshold levels) of adult antisocial behavior (AAB) and CD were coded separately. Interrater reliability was available for 20% of interviews. Intraclass correlations in the sample for AAB and CD symptom counts (our primary measures) were .93 and .96, respectively. APD and CD were reliably diagnosed, as evidenced in the diagnostic concordance rates of 96% for APD and 98% for CD across raters. As would be expected in a largely forensic sample, of the 335 participants with complete data on these measures, 174 individuals (53.4%) met criteria for past CD and 164 (51.3%) met criteria for APD.

Symptoms of Psychopathology

We used the Structured Clinical Interview for DSM-IV-TR Axis I Disorders (First, Spitzer, Gibbon, & Williams, 2002) to assess for the

psychological disorders of major depressive disorder (MDD), generalized anxiety disorder (GAD), lifetime alcohol dependence (AD), and lifetime drug dependence (DD) as described in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text revision, or *DSM-IV-TR*; APA, 2000). Interviews were conducted by trained doctoral students or doctoral-level raters. Interrater reliability was available for 26% of interviews, which resulted in the following intraclass correlations for symptom counts: MDD = .94, GAD = .91, AD = .98, and DD = .98. For the analyses in this study, we used symptom counts for these Axis I disorders and AAB and CD (described earlier) to create two composite psychopathology scores—an internalizing symptom composite and an externalizing symptom composite. The internalizing symptom composite consisted of symptom counts for (a) current MDD, ranging from 0 to 9, and (b) current GAD, ranging from 0 to 3. The externalizing symptom composite consists of symptom counts for AD, DD, and AAB, all ranging from 0 to 7, as well as past CD, ranging from 0 to 15. To ensure that all of these disorders received equal weight in the calculation of their respective composite scores, we transformed the symptom counts to *z* scores before summing.

Of the participants in this sample for whom we had complete data on these measures ($N = 321$), 24 (7.5%) met criteria for current MDD, and 22 (6.9%) met criteria for current GAD. As would be expected from a sample of individuals with a criminal history, seeking substance use treatment, or both, a substantial number of participants met criteria for substance use disorders. In this sample, 141 (43.9%) met criteria for lifetime AD, and 192 (59.8%) met criteria for lifetime DD.

Other- and Self-Directed Aggression

Forms of Aggression Questionnaire (FOA; Verona, Sadeh, Case, Reed, & Bhattacharjee, 2008). The FOA consists of 40 items that measure engagement in various forms of reactive aggression, including physical aggression (“I start fights”; $\alpha = .92$), verbal aggression (“I curse them out”; $\alpha = .89$), relational aggression (“I ruin their friendships with other people”; $\alpha = .85$), passive-rational aggression (“I take my time doing things they want me to do, just to show them”;

$\alpha = .85$), and aggression directed toward property (“I start a fire that causes damage”; $\alpha = .83$). Participants rated each item on a 5-point scale ranging from *almost never* to *always* to convey how frequently they act aggressively when they are upset or angry. Participants in this study endorsed range of severity on the FOA subscales; for example, scores on the Physical Aggression subscale ranged from 6 to 38 (out of a possible 40). Research has indicated that the FOA shows convergent validity with other measure of aggression, including the Aggression Questionnaire (Buss & Warren, 2000; $r = .65$ with FOA total score), and taps into personality traits related to low agreeableness, low conscientiousness, and high neuroticism (Verona et al., 2008). Thus, this measure assesses mostly hostile or reactive aggression that is manifested in various forms (e.g., physical, verbal, relational).

Life History of Aggression (LHA; Coccaro, Berman, & Kavoussi, 1997). The LHA was developed as an interview-based measure of trait aggressive behavior, with research showing that it predicts overt aggression and personality disorders characterized by suicidality and violence (Coccaro et al., 1997). In this study, the LHA was used to assess unprovoked (nonreactive) violence against others, self-harm, and suicide attempts, constructs not explicitly assessed with the preceding measures of psychopathology or aggression. Items were

rated by a diagnostic interviewer on a scale ranging from 0 to 5 according to how frequently the individual had engaged in that type of behavior since the age of 13 (ranging from *never* to *too many times to count*). Participants were asked to report the number of times they (a) attacked another person without provocation (e.g., “jumping” someone); (b) injured themselves on purpose without the intention of killing themselves (e.g., burning, cutting); and (c) attempted to kill themselves (whether or not it occurred during a depressive episode). Many of the participants in the present sample reported engaging in these behaviors frequently; for example, 49.6% reported engaging in unprovoked assaults, 18.3% reported self-harming, and 21.5% reported attempting suicide.

Results

We examined the relationships among the dimensions of narcissism and the four facets of psychopathy to begin to assess convergence among these constructs. Zero-order correlations, and descriptive statistics for these variables, can be found in Table 1. Grandiose and vulnerable narcissism were not significantly associated with each other ($r = .08$, *ns*), consistent with previous research using these two measures (Hendin & Cheek, 1997) and suggesting they tap into independent dimensions of narcissism. These dimensions also showed differ-

Table 1
Descriptive Statistics and Correlations Between Narcissism Dimensions and Psychopathy Facets

Variables	Narcissism		PCL:SV Facets				
	Grandiose	Vulnerable	Interpersonal	Affective	Lifestyle	Antisocial	Total
Narcissism							
Grandiose	—	.08	.21**	.14**	.06	.16*	.19**
Vulnerable		—	-.04	.10	.27**	.09	.14*
PCL: SV facets							
Interpersonal			—	.49**	.30**	.33**	.71**
Affective				—	.40**	.56**	.81**
Lifestyle					—	.42**	.68**
Antisocial						—	.79**
Total							—
<i>M</i>	4.5	27.1	2.2	2.6	3.5	3.5	11.8
<i>SD</i>	3.1	7.4	1.7	1.5	1.5	1.8	4.8
Minimum	0	10	0	0	0	0	1
Maximum	14	50	6	6	6	6	22

Note. $N = 340$. PCL:SV = Psychopathy Checklist: Screening Version.

* $p < .05$. ** $p < .01$.

ential relationships to psychopathic personality facets. The interpersonal, affective, and antisocial facets of psychopathy were all associated with grandiose narcissism at the zero-order level ($r_s = .21, .14, \text{ and } .16$, respectively, all $p_s < .01$), whereas the lifestyle facet was solely associated with vulnerable narcissism ($r = .27, p < .01$).

Psychopathy Facets Contribute to Narcissism Dimensions

To determine whether the four psychopathy facets would uniquely contribute to grandiose or vulnerable narcissism after taking demographic variables into account, we ran separate hierarchical multiple regressions for each of the narcissism dimensions. We entered age, gender, and recruitment sample in the first step and the four PCL:SV facets in the second step. Results are displayed in Table 2. Age was a significant predictor of grandiose narcissism, with younger participants scoring higher on the NPI-16. For vulnerable narcissism, both gender and recruitment sample were significant predictors. Women evidenced greater levels of vulnerable narcissism, and individuals recruited through the substance use treatment center evidenced greater vulnerable narcissism than did those recruited while in jail,

with the parole or probation sample not differing from the other two samples.

As for psychopathy effects, analyses revealed that the interpersonal facet was primarily responsible for the relationship between psychopathy and grandiose narcissism ($\beta = .24, p < .001$). Therefore, grandiose narcissism was, as expected, associated with psychopathic traits of charm, grandiosity, and duplicity. In contrast, elevations in vulnerable narcissism were positively associated with the lifestyle facet ($\beta = .24, p < .001$), indicating that vulnerable narcissism is characterized primarily by impulsivity, irresponsibility, and unrealistic goals. More important, we found a similar pattern of results across the three recruitment samples, although the results for the sample recruited through the substance use treatment center were all nonsignificant because of the small sample size ($N = 27$). In particular, grandiose narcissism showed a positive relationship to the interpersonal facet in all three samples ($\beta_s = .23\text{--}.25$). Overall, vulnerable narcissism tended to be positively associated with the lifestyle facet ($\beta_s = .34 \text{ and } .35$ for those on parole or probation and those in substance use treatment, respectively), although this association was somewhat weaker and nonsignificant for participants recruited while in jail ($\beta = .12$).

Psychopathology and Aggression Correlates of Grandiose and Vulnerable Narcissism

Correlations between internalizing and externalizing symptom composites and the two dimensions of narcissism are presented in Table 3. Also in Table 3 are the correlations between several forms of aggression, as measured by the LHA, the FOA, and the two narcissism dimensions. We determined whether the correlations for grandiose narcissism were significantly different from those for vulnerable narcissism, following Steiger (1980). Because of multiple testing and because these analyses were exploratory in nature, we applied a Bonferroni correction to the alpha level for the correlations depicted in Table 3. We used p values of .002 and .0003 (i.e., .05/32 and .01/32, respectively) for the zero-order correlations and .003 and .0006 (i.e., .05/16 and .01/16, respectively) for the comparisons of these correlations.

As shown in Table 3, only vulnerable narcissism was associated with the internalizing com-

Table 2
Summary of Hierarchical Multiple Regression Analyses With Psychopathy Facets Predicting Dimensions of Narcissism

Variable	Grandiose narcissism		Vulnerable narcissism	
	β	R^2 or ΔR^2	β	R^2 or ΔR^2
Step 1		.06**		.05**
Age	-.22**		-.06	
Gender	.10		-.17**	
Recruitment sample	.06		-.14**	
Step 2		.06**		.09**
Interpersonal facet	.24**		-.11	
Affective facet	-.01		.10	
Lifestyle facet	.01		.24**	
Antisocial facet	.03		.05	

Note. $N = 340$. Gender was coded as follows: female = 0, male = 1. Sampling group was coded as follows: recruited from local jails = 1, recruited while on parole or probation or with history of incarceration = 0, recruited through substance use treatment = -1.

* $p < .05$. ** $p < .001$.

Table 3
Psychopathology, Suicidality, and Violence Correlates of Grandiose and Vulnerable Narcissism

External Criterion Variables	Grandiose narcissism	Vulnerable narcissism	<i>t</i> (difference)
Internalizing symptoms	-.03	.40**	5.9**
Major depressive disorder	.01	.34**	4.8**
Generalized anxiety disorder	-.07	.32**	5.2**
Externalizing symptoms	.12*	.24**	1.6
Alcohol dependence	-.00	.24**	3.2*
Illicit drug dependence	-.02	.23**	3.3**
Conduct disorder	.20**	.02	2.4
Adult antisocial behavior	.14*	.16**	.27
Life history of aggression			
Assaults on self	.04	.19**	2.0
Suicide attempts	-.04	.20**	3.2*
Unprovoked assaults on others	.19**	.03	2.4
Forms of Aggression Questionnaire			
Verbal aggression	.10	.36**	3.5**
Relational aggression	.10	.38**	3.9**
Passive-rational aggression	.13*	.37**	3.3**
Aggression against property	.15**	.23**	1.5
Physical aggression	.25**	.21**	.40

Note. $N_s = 320-342$.

* $p < .002$ for zero-order correlations and .003 for differences in t . ** $p < .0003$ for zero-order correlations and .0006 for differences in t .

posite and MDD and GAD symptom counts, with all of these correlations being significantly different from those seen for grandiose narcissism. Vulnerable narcissism was also associated with the externalizing composite, specifically with lifetime alcohol and drug dependence. More important, the correlations between vulnerable narcissism and drug and alcohol use symptom counts were significantly greater than those for grandiose narcissism. Grandiose narcissism was instead associated with past CD, and this correlation did not differ between the two narcissism dimensions. Both grandiose and vulnerable narcissism were also significantly related to AAB symptom counts. In summation, vulnerable narcissism was more strongly associated with other psychopathology, both internalizing and substance use disorders, although grandiose narcissism was associated with childhood conduct problems and AAB. Moreover, the associations between vulnerable narcissism and internalizing and substance use disorders tended to be significantly greater than those between grandiose narcissism and internalizing and substance use disorders.

Finally, we examined the dimensions of narcissism in relation to both self- and other-directed aggression. As depicted in Table 3,

vulnerable narcissism was associated with acts of self-harm according to the LHA, in the form of both nonsuicidal self-injury and suicide attempts. Moreover, the correlation between suicide attempts and vulnerable narcissism was significantly greater than that for grandiose narcissism. As for other-directed aggression, vulnerable narcissism was associated with all forms of reactive aggression on the FOA, and its associations with verbal, relational, and passive-rational aggression were significantly greater than those seen for grandiose narcissism. In contrast, elevations in grandiose narcissism were associated with more frequent unprovoked assaults against other people on the LHA and physical aggression (against people and property) on the FOA.³ More important, even when psychopathy facets are taken into account, all but one of the grandiose and vulnerable narcissism relations to unprovoked attacks and reac-

³ We also considered whether age may be affecting the correlations between the narcissism dimensions and the aggression variables by separating our sample into two groups, individuals age 30 and younger ($N = 197$) and those older than age 30 ($N = 146$). Following Steiger (1980), a comparison of the narcissism-aggression correlations for younger and older adults revealed no significant differences.

tive aggression, respectively, remain. Only the very modest relationship between grandiose narcissism and passive–rational aggression is nonsignificant after taking psychopathy into account. Thus, vulnerable narcissism shows a stronger relationship with self-harm and aggressive traits, particularly those that are reactive in nature, even when psychopathy facets are accounted for. In contrast, although grandiose narcissism showed some association with reactive physical aggression, it was not associated with self-directed aggression and was instead associated with unprovoked assaults on others—a relationship not seen for vulnerable narcissism.

Discussion

This study is one of the first to examine the relations between dimensions of narcissism and facets of psychopathy in a forensic sample, in which these disorders are frequently diagnosed and cause impairments in functioning, especially in regard to illegal behavior. Consequently, the findings contribute to the literature by providing novel information regarding the extent to which narcissism and psychopathy converge in a high-risk sample, research that has implications for understanding the etiology of and designing treatments for these disorders. Our research supports studies that have found an association between grandiose narcissism and primary psychopathy (Benning et al., 2005; McHoskey et al., 1998) and advances knowledge of vulnerable narcissism by informing its parallels with secondary psychopathy, a relatively understudied area of research.

Implications for Personality Disorder Research

As predicted, the two forms of narcissism showed differential relationships to the psychopathy facets, with grandiose narcissism relating positively to the interpersonal facet and vulnerable narcissism relating positively to the lifestyle facet. The divergent findings for grandiose and vulnerable narcissism underscore the need to disentangle the heterogeneous nature of narcissistic personality disorder as manifested in externalizing individuals. Specifically, our results suggest that grandiose narcissism and primary psychopathy converge to the extent that

both are characterized by superficial charm, haughty arrogance, and interpersonal duplicity, whereas vulnerable narcissism and secondary psychopathy share traits related to impulsivity and irresponsibility in criminally involved adults. Although modest in size, these congruous associations between the narcissism dimensions and psychopathy facets suggest that the larger research literature on psychopathic personality disorder can serve to inform the distinctions between the grandiose and vulnerable narcissism dimensions in externalizing adults.

In particular, our results suggest that both narcissism and psychopathy share vulnerabilities that can be conceptualized in terms of broader theoretical constructs in the personality literature, including a recent theoretical formulation of antisocial/psychopathic tendencies by Patrick, Fowles and Krueger (2009). In their model, three phenotypic components associated with antisocial/psychopathic tendencies are advanced, including disinhibition (problematic impulse control), meanness (callousness, coldheartedness, antagonism), and boldness (social dominance and emotional resiliency). In this regard, grandiose narcissism appears to relate to the construct of boldness because we found that grandiose narcissism was associated with social dominance (e.g., charm and duplicity) and fewer problems in psychological functioning (i.e., internalizing symptoms, alcohol and drug problems, and self-directed violence) compared with vulnerable narcissism, which parallels research on the differential correlates of the psychopathy facets (Patrick et al., 2005; Verona et al., 2001, 2005). By contrast, vulnerable narcissism seems to be marked by high levels of disinhibition. Like secondary psychopathy (Hill et al., 2004; Skeem & Mulvey, 2001), vulnerable narcissism showed robust associations with outcomes generally associated with impulsivity, including reactive aggression and substance use. Both narcissism dimensions contain characteristics of meanness (e.g., callousness, coldheartedness, antagonism), with grandiose narcissism demonstrating more proactive (and perhaps more callous) forms and vulnerable narcissism showing more reactive forms of this trait. This type of conceptualization would be another step toward dimensional or spectrum models of personality to characterize the overlap across the personality disorder categories currently in the *DSM-IV-TR*. These results provide preliminary evidence that

narcissism and psychopathy share vulnerabilities potentially consistent with dimensional models of personality.

Parsing the Etiology of Narcissism via Psychopathy

Extensive work has been done on the etiology of psychopathy, with research suggesting distinct etiological pathways for the primary and secondary manifestations of the disorder. For instance, primary psychopathy traits are theorized to result from deficits in the emotional circuitry of the brain postulated to modulate the experience of fear (e.g., amygdala, paralimbic system; Birbaumer et al., 2005; Blair, 2005; Kiehl, 2006), and the allocation of attentional resources to motivationally salient stimuli to the neglect of contextual stimuli (Newman, 1998; Sadeh & Verona, 2008). To the extent that the construct of grandiose narcissism measures similar pathology to that of primary psychopathy in criminally involved individuals, the same or similar etiological mechanisms may be at play for both diagnoses but result in different manifestations depending on other traits and developmental pathways. Future research can address this question by further examining whether the grandiose dimension of narcissism is associated with comparable behavioral and psychophysiological abnormalities as primary psychopathy, such as deficient aversive conditioning (Flor, Birbaumer, Hermann, Ziegler, & Patrick, 2002), anticipation of threat (Hare, 1965), attentional processing (Hiatt, Schmitt, & Newman, 2004; Sadeh & Verona, 2008), and startle reactivity to threatening cues (Levenston, Patrick, Bradley, & Lang, 2000; Patrick et al., 1993). Although preliminary research is being conducted with undergraduate samples on the psychophysiological correlates of grandiose narcissism versus antisocial traits (Kelsey, Ornduff, McCann, & Reiff, 2001; Kelsey, Ornduff, Reiff, & Arthur, 2002; Sylvers, Brubaker, Alden, Brennan, & Lilienfeld, 2008), additional research is needed to fully explicate these relationships in ecologically valid samples.

In contrast to the primary variant, research has indicated that secondary psychopathic traits are associated with deficits in executive functioning and cognitive control (Raine et al., 1998; Sellbom & Verona, 2007), potentially governed by the dorsolateral prefrontal cortex

(Dolan & Park, 2002; Morgan & Lilienfeld, 2000). Secondary psychopathy is theorized to be conceptually similar to the externalizing spectrum of psychopathology (Krueger et al., 2002; Patrick et al., 2005) and to share etiological vulnerabilities with disorders on this spectrum, including APD and substance use. Vulnerable narcissism may possibly be a related indicator of this latent externalizing dimension (e.g., Miller et al., 2010). A putative endophenotype of the externalizing spectrum is reduced P300 amplitude (Iacono, Malone, & McGue, 2003; Patrick et al., 2001), an event-related potential index of working memory functioning that is thought to have neural generators in the lateral prefrontal cortex (Nieuwenhuis, Aston-Jones, & Cohen, 2005) and anterior cingulate cortex (Dien, Spencer, & Donchin, 2003). One potential avenue for future research is to explore the extent to which individuals high on vulnerable narcissism evidence reduced P300 amplitude, which would shed light on the etiological overlap between vulnerable narcissism and externalizing disorders.

Strengths, Limitations, and Clinical Implications

This study has several strengths, including the investigation of narcissistic and psychopathic personality traits in a large sample of externalizing adults in whom extremes on these personality features are prevalent and have serious consequences for both the individual and society. Moreover, we were able to examine several external criteria in relation to the lesser studied narcissism dimensions, which provides insight into the nomological network associated with the constructs of grandiose and vulnerable dimensions.

As with any investigation, however, this study also has limitations. First, our sample included more men than women, which may have overrepresented the manifestation of narcissism and psychopathy in men. Although the number of men in this sample is disproportionate to the general population, our recruitment procedures oversampled women relative to their representation in the legal system (Federal Bureau of Investigation, 2008). Second, the use of self-report data for our measure of the narcissism dimensions is a limitation (e.g., Oltmanns & Strauss, 1998; Oltmanns & Turkheimer,

2009), and future research can include structured diagnostic assessments of narcissism symptoms. Our use of clinician-rated psychopathy and psychopathology assessments, however, helped limit the extent to which common method variance contributed to the associations between the narcissism dimensions and psychopathy facets.

Despite these limitations, this study's results provide important information about the extent to which narcissism and psychopathy converge and are potentially mutually informative in externalizing samples. Our findings also have implications for clinicians treating individuals with narcissistic traits. If, as the findings suggest, grandiose and vulnerable narcissism and primary and secondary psychopathy manifest similarly among externalizing individuals, clinicians attempting to treat grandiose narcissistic traits may want to emphasize building empathy for others and decreasing interpersonal exploitation. In contrast, those treating vulnerable narcissism may want to focus on controlling emotional outbursts and impulsive behavior, as well as the comorbid symptoms of depression that are often observed in those with vulnerable narcissism. A divergence in coping strategies used by vulnerable and grandiose narcissists could explain the differential risk for internalizing psychopathology, and this information on coping strategies can be incorporated in treatment interventions that decrease emotional distress in the former and increase emotional engagement in the latter. Thus, this study advances the literature by illuminating commonalities in the manifestation and potential treatment of personality pathology in externalizing adults and suggests that shared vulnerabilities may underlie narcissism and psychopathy in criminally involved individuals.

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