ARE PATHOLOGICAL NARCISSISM AND PSYCHOPATHY DIFFERENT CONSTRUCTS OR DIFFERENT NAMES FOR THE SAME THING? A STUDY BASED ON ITALIAN NONCLINICAL ADULT PARTICIPANTS

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To understand the similarities and differences in personality traits and moral disengagement associated with pathological narcissism and psychopathy, 740 Italian active community members who voluntarily participated in the study were administered the Italian versions of the Pathological Narcissism Inventory, the Levenson Self-Report Psychopathy Scale, the HEXACO Personality Inventory, and the Moral Disengagement Scale. Hierarchical regression analyses showed that low Honesty-Humility and Antagonism (i.e., low Agreeableness) were personality traits common to both pathological narcissism and psychopathy, whereas low Conscientiousness was only related to psychopathy. Different associations with the HEXACO-PI scales and facets were observed for narcissistic grandiosity and narcissistic vulnerability, as well as for primary psychopathy and secondary psychopathy. Moral disengagement represented a common feature of pathological narcissism and psychopathy that was related to narcissistic vulnerability and to primary and secondary psychopathy, but not to narcissistic grandiosity.

Narcissism and psychopathy are long-standing and relevant clinical constructs that developed in different contexts. Narcissism is derived from psychodynamic theory and practice (Ronningstam, 2011), and narcissistic traits are also studied widely in social-personality psychology (Tamborski & Brown, 2011). In contrast, psychopathy was developed within the field of clinical and forensic psychiatry/psychology (e.g., Cleckley, 1976; Hare,

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1991). Unlike the categorical distinctions between antisocial and narcissistic personality disorders in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association [APA], 2013), a number of clinical scholars theorize that psychopathy and (pathological) narcissism may represent two different points on a shared personality continuum (Hart & Hare, 1998; Kernberg, 1998; Kernberg & Caligor, 2005; Ronningstam, 2005b). Although narcissism and psychopathy share a number features, including an antagonistic attitude with grandiose behavioral tendencies, lack of empathy, and interpersonal manipulation and exploitativeness (Hart & Hare, 1998; Paulhus & Williams, 2002), the fact that each construct is multidimensional (i.e., narcissistic grandiosity and vulnerability; primary and secondary psychopathy) further complicates a full understanding of their convergence and divergence. Clarifying these associations is important clinically in order to advance the classification of personality pathology, develop more accurate etiological models, and improve treatments. It is also important for clinical assessment and research in order to avoid making unnecessary distinctions between redundant personality constructs.

Despite a dearth of clinical studies on the continuities between the two constructs, behavior genetics research suggests similar heritability rates for dimensionally assessed narcissistic and psychopathic traits such as callousness (Livesley, Jang, Jackson, & Vernon, 1993). Most of the empirical evidence on the relationship between psychopathy and narcissism comes from social-personality psychology research, in particular from studies of the so-called "Dark Triad" of personality traits (Machiavellianism, narcissism, psychopathy; Paulhus & Williams, 2002). Across multiple studies (e.g., Jonason, Li, Webster, & Schmitt, 2009; Lee & Ashton, 2005; Paulhus & Williams, 2002), narcissism and psychopathy are consistently correlated (average r = .39; Miller et al., 2010). However, up to now no conclusive explanation of this association has been proposed. For instance, Jonason and colleagues (2009) demonstrated that the Dark Triad traits are part of a unitary latent dimension characterized by an exploitative social style; however, both Paulhus and Williams (2002) and Jonason and Tost (2010) found support for the hypothesis that narcissism and psychopathy are overlapping but distinct constructs.

One difficulty in examining these constructs is that the existing literature suggests broad variation in the phenotypic expression of both narcissism (Pincus & Lukowitsky, 2010) and psychopathy (Cooke & Michie, 2001; Hare, 2003; Harpur, Hakstian, & Hare, 1988; Lilienfeld, 1994, 1998). Both clinical and social-personality psychology research consistently highlight the existence of grandiose and vulnerable features in the phenotypic description of narcissism (Cain, Pincus, & Ansell, 2008; Pincus & Roche, 2011). There is now a body of empirical research demonstrating that the two phenotypic expressions of narcissistic pathology have divergent relationships, with a variety of constructs supporting the

validity of this distinction (e.g., Dickinson & Pincus, 2003; Ellison, Levy, Cain, Ansell, & Pincus, 2013; Krizan & Johar, 2012; Russ, Shedler, Bradley, & Westen, 2008; Zeigler-Hill, Green, Arnau, Sisemore, & Myers, 2011).

Like pathological narcissism, psychopathy is also described as having substantial variation in its phenotypic expression. Although three-factor (Cooke & Michie, 2001) and four-factor (Hare, 2003) models were proposed for the Psychopathy Checklist-Revised items (PCL-R; Hare, 1991), a two-factor structure of psychopathic features has been consistently replicated using both the PCL-R and other measures (Hare, 1991; Harpur et al., 1988; Harpur, Hare, & Hakstian, 1989; Kosson, Smith, & Newman, 1990; Livesley, 1998; Levenson, Kiehl, & Fitzpatrick, 1995; Salekin, Rogers, & Sewell, 1996). Factor 1 includes interpersonal and affective features that are considered central to the construct of psychopathy, whereas Factor 2 reflects a lifestyle featuring chronic instability, antisociality, and social deviance (Hare, 1991). This two-factor model of psychopathy resembled at least to some extent Karpman's (1941, 1948) theory of primary and secondary psychopathy (Lynam, Whiteside, & Jones, 1999; Miller, Lynam, Widiger, & Leukefeld, 2001).

Notwithstanding their clinical and scientific relevance, multidimensional models of narcissism and psychopathy do not come without problems. For example, are individuals who exhibit high scores on one factor (e.g., Grandiosity, Primary Psychopathy) but not the other (e.g., Vulnerability, Secondary Psychopathy) similar or different from those who exhibit high scores on both dimensions (Miller et al., 2001; Roche, Pincus, Conroy, Hyde, & Ram, 2013)? Moreover, despite evidence supporting their divergent validity, psychopathy and narcissism factors are often positively and substantially intercorrelated (Cooke & Michie, 2001; Miller et al., 2001; Wright, Lukowitsky, Pincus, & Conroy, 2010). Given the variation in conceptions of psychopathy and narcissism across theory, research, and treatment, we sought to clarify the convergent and divergent associations of narcissistic grandiosity, narcissistic vulnerability, primary psychopathy, and secondary psychopathy.

ASSESSING PATHOLOGICAL NARCISSISM AND PSYCHOPATHY

A number of semistructured interviews, observer ratings, and self-report measures are available to assess pathological variants of narcissism (Pincus & Lukowitsky, 2010); however, prevailing measures of narcissism are somewhat limited because they are often based on *DSM* narcissistic personality disorder, which is limited to grandiose symptoms. Thus, the majority of these measures do not comprehensively assess all of the clinically meaningful lower-order characteristics of pathological narcissism spanning its grandiose and vulnerable expressions (Wright et al., 2010). Starting from these considerations, Pincus and colleagues (Pincus et al., 2009;

Roche, Pincus, Lukowitsky, Ménard, & Conroy, 2013) asserted that pathological narcissism involves regulatory deficits and maladaptive strategies to cope with self-enhancement failures and threats to a positive self-image (Ronningstam, 2005b). Interestingly, they also hypothesized that pathological narcissism can include oscillating or chronic conscious awareness of vulnerable affects and aspects of the self, and they developed a new measure, the Pathological Narcissistic Inventory (PNI; Pincus, 2013; Pincus et al., 2009), explicitly designed to assess both grandiose and vulnerable features of pathological narcissism. The PNI showed adequate reliability (subscale alpha values ranged from .78 to .93) and correlated with external variables in a pattern consistent with theoretical predictions (Pincus et al., 2009). A subsequent confirmatory factor analysis of the PNI supported a two-factor (Grandiosity, Vulnerability) hierarchical structure (Wright et al., 2010), although the two factors were highly correlated at the latent level (r = .81).

Although the PCL-R (Hare, 1991, 2003) is regarded as the most influential instrument in psychopathy assessment (Hare & Neumann, 2008), it is a clinician rating scale based on an interview and a review of corrections file information. These characteristics may limit the utility of the PCL-R outside forensic settings and in large sample studies. In response, a number of self-report scales have been developed, and they generally evince predicted relationships to offending, aggression, other personality disorders, and putative underlying mechanisms (Lynam, Gaughan, Miller, Mullins-Sweatt, & Widiger, 2011). Some of these scales, like the Self-Report Psychopathy Scale (Hare, 1985) were designed to assess psychopathy as operationalized in the PCL-R. Other measures, such as the Psychopathic Personality Inventory (Lilienfeld, 1990; Lilienfeld & Widows, 2005) and the Levenson Self-Report Psychopathy Scale (LSRPS; Levenson et al., 1995), were based on distinct operationalizations of psychopathy. The latter was developed to assess Karpman's (1941, 1948) primary and secondary psychopathy in noninstitutionalized samples.

PATHOLOGICAL NARCISSISM, PSYCHOPATHY, AND GENERAL MODELS OF PERSONALITY STRUCTURE

Dimensional assessment of narcissism and psychopathy did not simply result in the development of additional measures of the two constructs, it also helped to link these pathological personality constructs with general personality trait models. Describing personality disorders within the dimensional framework of personality is useful in understanding the covariation between personality disorders in terms of shared personality traits (e.g., Lynam & Widiger, 2001; Ruiz, Pincus, & Schinka, 2008). Saulsman and Page (2004, 2005) conducted meta-analyses reviewing the relationships between each of the Five-Factor Model personality dimensions and each of the 10 *DSM-IV* personality disorders from 15 independent studies. The authors reported that *DSM-IV* NPD was characterized

mainly by low Agreeableness and high Extraversion, with a marginal positive contribution of Openness to Experience and a trivial relationship with low Conscientiousness. Low Agreeableness also characterized DSM-IV antisocial personality disorder (ASPD)—a construct somewhat related to psychopathy (Miller et al., 2001). However, unlike NPD, ASPD showed a substantial negative association with Conscientiousness (Saulsman & Page, 2004, 2005). Another recent meta-analysis also confirms that Psychopathy and ASPD exhibit highly convergent Five-Factor Model profiles (Ruiz et al., 2008). Samuel and Widiger (2008) extended the meta-analytic evidence by summarizing 18 additional independent studies on the relationships between the Five-Factor Model and DSM-IV-TR (APA, 2000) personality disorders. They confirmed the negative association between Agreeableness and NPD, but not the association with high Extraversion. Thus, the association with low Conscientiousness was the main distinction between NPD and ASPD. However, the differences between the two disorders became amplified at facet-level.

Additional social-personality research using nonclinical samples also finds that low Agreeableness and high Extraversion are common to both narcissism and psychopathy, whereas low Conscientiousness is related mainly with psychopathy (Lee & Ashton, 2005; Miller et al., 2010; Paulhus & Williams, 2002). Interestingly, Miller and colleagues (2010) reported that narcissistic vulnerability (at least as measured by the Hypersensitive Narcissism Scale; Hendin & Cheek, 1997) was characterized by significant correlations with high Neuroticism, low Extraversion, low Agreeableness, and low Conscientiousness. The authors concluded that the Five-Factor Model profile of vulnerable narcissism differed markedly from the profile of grandiose narcissism and was moderately similar to the personality profile of Factor 2 psychopathy.

Based on their reviews of lexical studies of personality structure across several European and Asian languages, Ashton and colleagues suggested that there are six broad personality factors (Ashton & Lee, 2001; Ashton et al., 2004) representing variants of the Big Five factors plus an additional factor named Honesty-Humility. The HEXACO model subsumes six dimensions known as Honesty-Humility (H), Emotionality (E), eXtraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). The Emotionality and Agreeableness factors of this model correspond roughly to rotated variants of the Big Five Agreeableness and Emotional Stability dimensions, and the Extraversion, Conscientiousness, and Openness to Experience factors are very similar to their Five-Factor Model counterparts (Lee & Ashton, 2005). Using the HEXACO framework to understand the relationship between narcissism and psychopathy, Lee and Ashton (2005) reported that these traits were moderately intercorrelated and both exhibited significant negative correlations with Honesty-Humility. Interestingly, the pattern of the correlations with the HEXACO dimensions adequately reproduced the observed correlations between narcissism and psychopathy; in other words, narcissism and psychopathy were related because they share a common HEXACO profile. However, when narcissistic grandiosity and narcissistic vulnerability are distinguished, the former is negatively associated with H and positively associated with X and C and the latter is negatively associated with X, A, and C and positively associated with E (Bresin & Gordon, 2011).

NARCISSISM, PSYCHOPATHY, AND MORALITY

Both moral philosophers and clinicians view psychopathy as a personality disorder characterized by a tendency to defy moral norms despite cognitive knowledge about right and wrong (Glenn, Iyer, Graham, Koleva, & Haidt, 2009). Interestingly, Kernberg (1993) hypothesized that dysfunctions in the moral system are central to both pathological (malignant) narcissism and psychopathy; thus, according to Kernberg's model, pathological narcissism and psychopathy may be conceptualized as different points on a continuum of severity in the dysfunction of the moral system and aggression more generally (Kernberg & Caligor, 2005). Kernberg described malignant narcissism as a syndrome characterized by a narcissistic personality disorder, antisocial features, paranoid traits, and egosyntonic aggression. Individuals who suffer from malignant narcissism may direct egosyntonic aggression toward others via a conscious ideology of assertiveness, intimidation, or violence; and they can also direct this aggression toward the self in egosyntonic suicide attempts. Paranoid traits are evident in how these individuals perceive others as idols, enemies, or stupid people. Malignant narcissists, in contrast to psychopaths, are also said to be capable of developing "some identification with other powerful idealized figures as part of a cohesive 'gang' . . . which permits at least some loyalty and good object relations to be internalized" (Kernberg, 2004, pp. 132-133). Pincus et al. (2009) found that pathological narcissism was significantly positively associated with the Low Morals (weak superego) scale of the Inventory of Personality Organization (Lenzenweger, Clarkin, Kernberg, & Foelsch, 2001), a measure of Kernberg's model of borderline personality organization. Despite the scientific and clinical relevance of this topic, concurrent data on moral dysfunction, psychopathy, and pathological narcissism are sparse.

Blair (2007) suggested that psychopathy may be associated with care-based morality—that is, lack of concern for the well-being of others; in particular, psychopaths show deficits in moral judgments involving harm to others, whereas other types of morality seem to be intact. Blair proposed that this specificity of moral impairment may result from dysfunctions of the amygdala and ventromedial prefrontal cortex. Previously, Blair (1995) reported that psychopathic inmates do not distinguish between transgressions that are harmful to others and conventional transgressions, which violate social norms. Recently, Glenn and colleagues (2009) reported that in a large sample of nonclinical participants, high scores on a self-report measure of psychopathy correlated negatively with harm and

fairness subscales of a measure of moral concern, but showed no relationship with the authority subscale and very small associations with ingroup and purity subscales. In this study, when an option for a monetary reward was present, participants scoring high on psychopathy indicated that they would accept a lesser amount of money to violate a moral principle regardless of the domain.

Psychological theories of moral agency have focused primarily on moral thought rather than moral conduct (Bandura, Caprara, Barbaranelli, & Pastorelli, 1996). In response to the neglect of moral conduct, Bandura and colleagues (1996) developed a theory of moral disengagement to explain ways in which people justify their actions and commit behaviors that violate social and moral norms. In particular, Bandura (1999) proposed that the reason that most people refrain from transgressing most of the time is that they have internalized society's standards of conduct. Therefore, acts of wrongdoing risk not only external sanctions (e.g., disapproval, exclusion, arrest, punishment) but also internal sanctions (e.g., shame, remorse, damage to one's self-concept). Bandura's (1986, 1999) socialcognitive theory of moral agency argues that to avoid internal sanctions, people construct justifications for behaviors that violate moral standards, a process called moral disengagement. Repeated instances of moral disengagement may lead to routinization of this process (Bandura, 1991). That is, individuals who frequently rationalize misbehavior may develop stable morally disengaged attitudes, characterized by general tolerance for moral violations or a neglecting or rejecting attitude toward societal norms (Hyde, Shaw, & Moilanen, 2010). Typically, such individuals perceive some types of antisocial behavior as reasonable or justified (Shulman, Cauffman, Piquero, & Fagan, 2011) and are more likely to engage in gambling (Barnes, Welte, Hoffman, & Dintcheff, 2005), commit violence toward animals (Vollum, Buffinton-Vollum, & Longmire, 2004), and hold positive attitudes about execution (Osofsky, Bandura, & Zimbardo, 2005). In studies of children and adolescents, moral disengagement has been associated with aggression (Bandura et al., 1996; Pelton, Gound, Forehand, & Brody, 2004), bullying (Gini, 2006; Hymel, Rocke-Henderson, & Bonanno, 2005), and delinquency (Bandura et al., 1996; Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001; Pelton et al., 2004). Recently, Roche et al. (2013) found that scores on the PNI were positively associated with rationalizations in support of academic cheating referred to as "neutralizations" (Haines, Diekhoff, LaBeff, & Clark, 1986). Notwithstanding these promising findings, no research has concurrently examined links between moral disengagement and dimensions of pathological narcissism and psychopathy.

THE CURRENT STUDY

The current study aimed to examine the convergence and divergence of dimensions of pathological narcissism and psychopathy. We employed the HEXACO personality traits and the concept of moral disengagement to identify a common core across the different phenotypic expressions of pathological narcissism and psychopathy and to identify features that discriminate them. We examined associations with the higher-order constructs of pathological narcissism and psychopathy, as well as with narcissistic grandiosity, narcissistic vulnerability, Factor 1 psychopathy, and Factor 2 psychopathy, respectively. In particular, based on previous findings (Bresin & Gordon, 2011; Lee & Ashton, 2005; Miller et al., 2010), we expected that low Honesty-Humility would characterize both narcissistic grandiosity and Factor 1 Psychopathy, whereas low Agreeableness was expected to be particularly associated with narcissistic vulnerability and both psychopathy dimensions. We also hypothesized that high Emotionality should characterize narcissistic vulnerability, whereas both Factor 1 psychopathy and narcissistic grandiosity were expected to show negative relationships with Emotionality. Finally, Conscientiousness was expected to show a negative relationship with Factor 2 psychopathy. In the current study, we also aimed to identify the facet-level HEXACO profiles that underlie the domain-level associations. Finally, we hypothesized that moral disengagement may differentiate psychopathy from pathological narcissism quantitatively, rather than qualitatively. In other words, we expected that moral disengagement correlates positively and significantly with all narcissism and psychopathy dimensions, but with different effect sizes.

METHOD

PARTICIPANTS

Participants were 740 nonclinical adult volunteers who lived in Milan or in the Milan suburban area. All participants were White. All had been born and were living in Italy. Of the 740 participants, 277 (37.4%) were male, and 463 (62.6%) were female; their mean age was 36.52 years (SD = 12.87years; min. = 18 years, max. = 65 years). One hundred thirty-one (17.7%) had a junior high school degree, 390 (52.7%) had a high school degree, 45 (6.1%) had a bachelor's degree, and 161 (21.8%) had a higher university degree (MSc, PhD, etc.); 13 (1.8%) participants did not report their school degree. Three hundred eighty-four (51.9%) participants were unmarried, 310 (41.9%) were married, 37 (5.0%) were divorced, and 2 (0.2%) were widowed; 7 participants (0.9%) did not report their civil status. Three hundred forty-nine (47.2%) participants were white collar workers, 151 (20.4%) were freelancers, 102 (13.8%) were university students, 64 (8.6%) were blue collar workers, and 51 (6.9%) had other professions (e.g., manager, housekeeper, craftsman); 23 participants (3.1%) did not report their profession. Participants were enrolled by advertisements in large industrial facilities and on websites. All participants signed a written informed consent after a detailed presentation of the study.

MEASURES

Pathological Narcissism Inventory (PNI). The PNI (Pincus, 2013; Pincus et al., 2009) is a 52-item multidimensional self-report measure of pathological narcissism that assesses overt and covert characteristics of grandiose and vulnerable narcissism. The PNI yields seven scales—Contingent Self-Esteem (CSE), Exploitativeness (EXP), Self-Sacrificing Self-Enhancement (SSSE), Hiding the Self (HS), Grandiose Fantasy (GF), Devaluing (DEV), Entitlement Rage (ER)—as well as a scores for narcissistic grandiosity, narcissistic vulnerability, and a total score measuring the overall level of pathological narcissism (for scales descriptions, see Pincus, 2013). PNI item responses range from 0 (not at all like me) to 5 (very much like me). Because of the variability in scale length, mean scores are used instead of sums for easy comparison across scales. EXP, SSE, and GF may be summed and averaged to obtain a measure of narcissistic grandiosity; CSE, HS, DEV, and ER may be summed and averaged to obtain a measure of narcissistic vulnerability (Wright et al., 2010). In the present study, the PNI first-order scales exhibited Cronbach alpha values ranging from .73 (EXP) to .89 (CSE) and .95 for the total score. A large body of experimental (e.g., Fetterman & Robinson, 2010), clinical (e.g., Ellison et al., 2013), longitudinal (e.g., Roche et al., in press), and correlational (e.g., Thomas, Wright, Lukowitsky, Donnellan, & Hopwood, 2012) research supports the validity of the PNI.

Levenson Self-Report Psychopathy Scale (LSRPS). The LSRPS (Levenson et al., 1995) is a self-report measure designed for noninstitutional samples used to measure the presence of psychopathic traits. The primary (or Factor 1) psychopathy scale detects interpersonal and affective psychopathic traits, while the secondary (or Factor 2) psychopathy scale detects impulsive/antisocial lifestyle features. The scales consist of 26 items in a 1-4 (disagree strongly to agree strongly) Likert-type format. Sixteen items measure primary psychopathy, and the other 10 items measure secondary psychopathy. In addition, the LSRPS yields a total score measuring the overall level of psychopathy. Past research has demonstrated both the reliability (Brinkley, Schmitt, Smith, & Newman, 2001)—although the secondary psychopathy scale consistently showed lower reliability estimates than the primary psychopathy scale—and the divergent validity of the LSRPS (McHoskey, Worzel, & Szyarto, 1998). In the current study, Cronbach's alpha values were .81 for primary psychopathy, .60 for secondary psychopathy scales, and .80 for the total score. The reliability for the secondary psychopathy scale is lower than desirable, and results for this dimension should be considered with caution.

HEXACO-60 Personality Inventory (HEXACO-60). We used the HEXACO-60 (Ashton & Lee, 2009) to assess the general dimensions of personality. Each item is rated from 1 (strongly disagree) to 5 (strongly agree). HEXACO-60 scales yield scores for Honesty-Humility (H), Emotionality (E), eXtraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). In the present study, the HEXACO-60 first-order scales

showed Cronbach alpha values ranging from .60 (Openness to Experience) to .75 (Honesty-Humility). (The Cronbach alpha values for HEXACO-60 facets are listed in Table 2.)

Moral Disengagement Scale (MDS). The MDS (Bandura et al., 1996; Caprara, Bandura, Barbaranelli, & Vicino, 1996) assesses proneness to moral disengagement from different forms of detrimental conduct in diverse contexts and interpersonal relationships. The full set of 32 items taps the eight different mechanisms by which moral self-sanctions can be disengaged from their transgressions as hypothesized by Bandura (1990, 1999) and also yields a total score indicating the overall level of moral disengagement. For each of the 32 items, participants rated their degree of acceptance of moral exonerations for such conduct from 1 (agree not at all) to 5 (completely agree). In the present study, the Cronbach's alpha total score for the MDS was .90.

Self-Report of Delinquency (SRDS). Participants were asked to retrospectively report eventful deviant behaviors that occurred during adolescence using the SRDS (Elliott & Ageton, 1980). In its latest version, the SRDS assesses the participant's self-reports of 40 illegal juvenile acts developed from a list of all offenses reported in the U.S. Federal Bureau of Investigation's Uniform Crime Report with a juvenile base rate of greater 1% (Elliott & Huizinga, 1984). Each SRDS item is measured on a 6-point ordinal scale (Thornberry, Krohn, Lizotte, Smith & Tobin, 2003). Consistent with prior studies (Krueger et al., 1994), a composite was created by summing the scores of all SRDS items. Cronbach's alpha for the SRDS composite in the current study was .91.

All questionnaires were administered in random order in individual and small-group sessions. The official Italian versions of the MDS (Bandura et al., 1996) and HEXACO-60 (Ashton & Lee, 2009) were provided directly from the respective authors; the PNI, LSRPS, and SRDS were translated into Italian by one of the authors (A.F.) and two independent clinical psychologists fluent in both English and Italian. A consensus translation was obtained and iteratively controlled through back translation by an English mother-tongue professional translator. Italian translations of the PNI, LSRPS, and SRDS were conducted with the permission of the original authors, who also consulted on the translations.

DATA ANALYSES

Cronbach alpha was used to assess the internal consistency of the measures; Bonferroni multiple t tests were used to evaluate the presence of significant gender differences on the PNI, LSRPS, ASQ, and MDS scale scores; point-biserial correlation coefficient was used as an effect size measure for gender comparisons. ANOVA and ANCOVA models with Bonferroni corrected nominal significance levels were used to evaluate the presence of a significant effect on the PNI and LSRPS scale scores of school level, civil status, and profession, respectively; eta-squared coefficient (η^2)

was used as an effect size measure in ANOVA/ANCOVA analyses. Significant ANOVAs/ANCOVAs were followed by post-hoc Bonferroni multiple contrasts. Pearson r was used to evaluate the associations among all continuous measures. r

Hierarchical multiple regressions were used to evaluate the predictive role of HEXACO-60 and MDS scale scores on the PNI and LSRPS scale scores, respectively. To control for significant differences in psychopathy across gender and age, in each regression equation these were entered in Step 1. In this model, the first variable or set of variables serves as a covariate for the second (Nunnally & Bernstein, 1994). To avoid capitalizing on chance, all predictors were entered in the regression equation and the nominal significance level of each standardized regression coefficient was adjusted according to the Bonferroni procedure. The variance inflation factor (VIF) was used to assess collinearity. VIF values of 1 indicate that the model terms are not linearly related, whereas a value in excess of 10 suggests that multicollinearity may be unduly influencing the leastsquares estimates. Because PNI Narcissistic Vulnerability (NV) scores were significantly correlated with PNI Narcissistic Grandiosity (NG) scores, residualized measures of NV and NG were created to assess the correlates of "pure" narcissistic vulnerability independent of narcissistic grandiosity and of "pure" narcissistic grandiosity independent of narcissistic vulnerability (see, e.g., Bresin & Gordon, 2011; Maxwell, Donnellan, Hopwood, & Ackerman, 2011). A similar procedure based on residualized scores was followed to compute "pure" LSRPS Factor 1 and "pure" LSRPS Factor 2, respectively.

RESULTS

DESCRIPTIVE STATISTICS

Descriptive statistics, internal consistency estimates (Cronbach alpha coefficients), correlation coefficients, and gender comparisons for the PNI and LSRPS scales are listed in Table 1. As expected, PNI NG and NV scales were substantially and significantly correlated but dissociable. Although the size of the correlation coefficient was smaller, a positive, significant correlation was also observed between LSRPS Primary Psychopathy (PP) and Secondary Psychopathy (SP) scales. The correlation between the PNI

^{1.} After controlling for participants' age, no significant effect of civil status and profession on the PNI total score was observed, min. F value = 2.07 (school level), max. F value = 2.45, (civil status), min. η^2 = .008 (school level), max η^2 (civil status) = .01, all ps > .05; rather, a trivial, albeit significant effect on the LSRPS was observed for civil status, η^2 = .01, p < .05, profession, η^2 = .05, p < .001, and school level, η^2 = .02, p < .01. These findings and Bonferroni post hoc constrasts suggested transforming into dichotomous variables civil status (1, "divorced," 0, "all other categories"), school level (1, "junior high school," 0, "all other categories"), and profession (1, "blue collar," 0, "all other categories"), and entering them in the first step of hierarchical regression models concerning LSRPS scores as control variables, in addition to participants' age and gender.

TABLE 1. Pathological Narcissism Inventory and Levenson Self-Report Psychopathy Scale Descriptive Statistics, Internal Consistency Coefficients (Main Diagonal), Correlations, and Gender Comparisons (N = 740)

Female

			Who	Whole Sample $(N = 740)$	ıple (A	1 = 740	<u> </u>		Participant $(n = 277)$	Participants $(n = 277)$	Participants $(n = 463)$	pants 163)	
	-	7	က	4	ເດ	9	M	SD	M	SD	M	SD	r_{pb}
PNI Scales													
1. Narcissistic Grandiosity	88.						3.10	0.74	3.17	0.77	3.05	0.72	80.
2. Narcissistic Vulnerability	.73	.94					2.81	0.73	2.75	0.72	2.85	0.74	07
3. PNI Total Score	.91	.95	.95				2.93	0.69	2.93	69.0	2.93	0.68	00.
LSRPS Scales													
4. Primary Psychopathy	.39	.38	.41	.81			25.60	89.9	27.25	6.81		6.41	.19*
5. Secondary Psychopathy	.29	.47	.42	.34	.60		20.54	4.29	20.30	4.22		4.33	04
6. LSRPS Total Score	.42	.50	.50	90	.72	.80	46.14	9.10	47.55	9.43	45.29	8.79	.12*
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Notes. PNI = Pathological Narcissism Inventory; LSRPS = Levenson Self-Report Psychopathy Scale; r_{pb} = point-biserial correlation; the significance level of the r_{pb} coefficients was based on the two-tailed significance of the corresponding Bonferroni multiple t tests for gender comparisons. Cronbach alpha values are listed on the diagonal of the PNI and LSRPS scale correlations matrix.

The nominal significance level (i.e., p < .05) for Pearson correlations among PNI and LSRPS scales was corrected according to the Bonferroni procedure and was set at p < .003. The nominal significance level (i.e., p < .05) for t tests and the correspond-

 \log_{p_b} coefficients was corrected according to the Bonferroni procedure and set at p<.008. All Pearson correlation coefficients displayed in Table 1 are significant at p<.001.

p < .008

and LSRPS total scores was substantial, positive, and highly significant. Consistent with this finding, both PNI scales showed significant correlations with both PP and SP scales. However, when we reanalyzed the relationships between PNI and LSRPS scales using residualized scores, "pure" NG scores correlated positively, albeit modestly, with "pure" PP scores, r (N = 740) = .19, p < .001, and negatively with "pure" SP scores, r (N = 740) = -.13, p < .001. "Pure" NV scores showed no association with "pure" PP scores, r (N = 740) = .02, p > .50; rather, NV selectively correlated with "pure" SP scores, r (N = 740) = .34, p < .001.

No gender differences were observed for the PNI NG, NV, and total scores. Male participants scored significantly higher than female participants on the LSRPS PP scale and total score, although the effect sizes for these differences were modest. However, when residualized scores were taken into account, male participants scored significantly higher than female participants on NG, t (738) = -5.25, p < .001, r_{pb} = -19, and female participants scored significantly higher than male participants on NV, t (738) = 5.07, p < .001, r_{pb} = .18. Participants' age correlated negatively with NG, NV, and PNI total score at -.37, -24, and -32, respectively (all ps < .001), and PP, SP, and LSRPS total score at -23 (p < .001), -10 (p < .01), and -21 (p < .001), respectively.

CORRELATIONS WITH SRDS

The SRDS total score (M = 49.69, SD = 11.68) correlated significantly with both PNI, r (N = 740) = .29, p < .001, and LSRPS, r (N = 740) = .48, p < .001, total scores; however, when the effect of the LSRPS was covariated out, the correlation between the SRDS and PNI total scores dropped to nonsignificance, partial r (N = 740) = .07, p > .05. The correlation between the LSRPS total score and the SRDS total score remained significant even when the effect of the PNI total score was held constant, partial r (N = 740) = .41, p < .001. Interestingly, NG residualized scores were significantly associated with SRDS scores, r (N = 740) = .19, p < .001, whereas NV residualized scores were independent from SRDS scores, r (N = 740) = .04, p > .20. The correlation between NG and SRDS remained significant even when the effect of the LSRPS was held constant, partial r (N = 740) = .16, p < .001. Finally, both LSRPS PP, r (N = 740) = .38, p < .001, and SP, r (N = 740) = .16, p < .001, residualized scores were significantly correlated with the SRDS total score.

HEXACO-60 REGRESSION ANALYSIS

Hierarchical regression results predicting PNI and LSRPS scale and total scores by the HEXACO general factors and facets are summarized in Table 2. Within each multiple regression the Bonferroni corrected significance level was set at p < .008 for regression models involving HEXACO general factors (i.e., Honesty-Humility, Emotionality, Extraversion, Agree-

TABLE 2. HEXACO-60 Personality Inventory General Factors and Specific Facets as Predictors of Pathological Narcissism Inventory and Levenson Self-Report Psychopathy Scale Dimensions: Hierarchical Analysis Summary Table (N = 740)

INDVACO Descenditor Inventory College	PNI	NG	NV 0	LSRPS	PP	SP
HEXACO Personality Inventory Scales	В	В	β	В	β	β
Honesty/Humility (.75)	33	11	14	52	55	
Sincerity (.60)			14	11	18	
Fairness (.67)				24	26	
Greed-Avoidance (.61)	16			16	19	
Modesty (.51)	31	16		20	14	
Emotionality (.73)	.19		.10	12	23	.13
Fearfulness (.53)	.12					
Anxiety (.40)						
Dependence (.55)						
Sentimentality (.55)				16	21	
Extraversion (.75)		.39	42		.08	14
Expressiveness (.50)	15		20		.13	18
Social Boldness (.60)		.23	17			.10
Sociability (.44)						
Liveliness (.50)		.21	21			20
Agreeableness (.72)	11	.16	24	21		19
Forgiveness (.71)			16	11		
Gentleness (.50)				12		
Flexibility (.40)	13		15			
Patience (.55)		.13				15
Conscientiousness (.76)				23	.13	45
Organization (.50)				10	.10	26
Diligence (.50)				11		
Perfectionism (.56)						
Prudence (.60)				15		26
Openness to Experience (.60)		.13			11	.09
Aesthetic Appreciation (.56)						
Inquisitiveness (.50)						
Creativity (.60)		.19	12			
Unconventionality (.40)						
Step 1 $R^2_{adjusted}$.10	.11	.03	.08	.09	.03
Step 2 $R^2_{adjusted}$ (HEXACO-PI general factors)	.17	.21	.33	.46	.36	.28
Step 2 R ² adjusted (HEXACO-PI facets)	.20	.23	.34	.48	.36	.33

Notes. PNI = Pathological Narcissism Inventory total score; NG = PNI Narcissistic Grandiosity scale residualized score; NV = PNI Narcissistic Vulnerability scale residualized score; LSRPS = Levenson Self-Report Psychopathy Scale total score; PP = LSRPS Primary Psychopathy scale residualized score; SP = LSRPS Secondary Psychopathy scale residualized score; Cronbach alpha values for HEXACO-60 scales are in parentheses. In each regression equation, Step 2 R^2 adjusted indicates the proportion of variance (corrected for the number of predictors) in the dependent variable accounted for by the HEXACO-PI scales, whereas Step 1 R^2 adjusted indicates the proportion of variance accounted for by the covariates. Step 1 covariates were participants' age and gender for analyses involving PNI scales and total score, and participants' age, gender, civil status, school level, and profession for analyses involving LSRPS scales and total score. Within each regression equation, the nominal significance level for standardized regression coefficients was corrected according to the Bonferroni procedure and set at p < .008 for HEAXACO-PI general factors and at p < .002 for HEXACO-PI facets. For ease of presentation, only significant β coefficients are displayed.

ableness, Conscientiousness, and Openness to Experience) and at p < .002 for facet-level analyses. For ease of presentation, only significant standardized regression (β) coefficients are displayed. VIF values were smaller than 1.5 for all predictors in all regression equations, suggesting no collinearity problems. Both PNI and LSRPS total scores were associated with low scores on HEXACO-PI Honesty-Humility and Agreeableness;

however, they exhibited opposite relationships with Emotionality, which positively predicted the PNI total score and negatively predicted the LSRPS score. Conscientiousness negatively predicted the LSRPS score.

NG and NV residualized scores showed a similar relationship only with (low) Honesty-Humility. NG was characterized by positive significant associations with Extraversion, Openness to Experience, and Agreeableness, whereas NV was significantly associated with low Extraversion and Agreeableness, and with high Emotionality. PP and SP residualized scores showed sharply different associations with the HEXACO-PI general factors. PP was characterized by low Honesty-Humility, Emotionality, and Openness to Experience, and by high Conscientiousness, whereas SP was negatively related to Conscientiousness, Agreeableness, and Extraversion, and positively related to Emotionality and, to a lesser degree, Openness to Experience.

Facet-level analyses highlighted the differences in the association pattern between PNI and LSRPS total scores and subscales and personality traits. The PNI total score was significantly associated with low scores on Greed Avoidance, Modesty, Expressiveness, and Flexibility, and with high scores on Fearfulness; the LSRPS total score was predicted by low scores on all the Honesty-Humility facets, as well as on Sentimentality, Forgiveness, Gentleness, Organization, Diligence, and Prudence. NG residualized scores were predicted by low scores on Modesty and high scores on Social Boldness, Liveliness, Patience, and Creativity; in contrast, NV residualized scores were associated with low scores on Sincerity, Social Self-Esteem, Social Boldness, Liveliness, Forgiveness, Flexibility, and Creativity. PP residualized scores were significantly predicted by low scores on Sentimentality and on all the Honesty-Humility facets, and by high scores on Expressiveness and Organization, whereas SP residualized scores were significantly associated with low scores on Social Self-Esteem, Liveliness, Patience, Organization, and Prudence, and with high scores on Social Boldness.

MDS REGRESSION ANALYSIS RESULTS

Hierarchical regression results predicting PNI and LSRPS scale and total scores by the MDS total score are summarized in Table 3. After controlling for appropriate covariates (see Table 3 note), the MDS total score significantly predicted both PNI and LSRPS total scores, although the association was significantly stronger for LSRPS than for PNI, Steiger $z=5.47,\,p<.001.$ No significant association was observed between the MDS total score and the NG residualized score; rather, the NV residualized scores were significantly predicted by MDS scores. Both PP and SP residualized scores were significantly predicted by the MDS scores, although the association was stronger for PP than for SP, Steiger $z=4.37,\,p<.008.^2$

^{2.} When the HEXACO PI general factor scores were held constant, the MDS total score still significantly predicted the PNI total score, β = .30, p < .001, the NV residualized score, β = .14, p < .001, the LSRPS total score, β = .30, p < .001, the PP residualized score, β = .23, p < .001, and the SP residualized score, β = .10, p < .01.

TABLE 3. Moral Disengagement Scale Total Score as Predictor of Pathological Narcissism Inventory and Levenson Self-Report Psychopathy Scale Dimensions: Hierarchical Analysis Summary Table (N = 740)

	PNI	NG	NV	LSRPS	PP	SP
	β	\boldsymbol{B}	β	В	β	β
Moral Disengagement Scale Total Score (.90)	.39*	.01	.27*	.56*	.43*	.19*
Step 1 $R^{2}_{adjusted}$ Step 2 (MDS total score)change in $R^{2}_{adjusted}$ value		.11* .00	.03* .07*	.08* .29*	.09* .17*	.04* .03*

Notes. MDS = Moral Disengagement Scale; PNI = Pathological Narcissism Inventory total score; NG = PNI Narcissistic Grandiosity scale residualized score; NV = PNI Narcissistic Vulnerability scale residualized score; LSRPS = Levenson Self-Report Psychopathy Scale total score; PP = LSRPS Primary Psychopathy scale residualized score; SP = LSRPS Secondary Psychopathy scale residualized score; Cronbach alpha value for the Moral Disengagement Scale (MDS) total score is in parentheses. In each regression equation, Step 2 R^2 adjusted indicates the proportion of variance (corrected for the number of predictors) in the dependent variable accounted for by the MDS total score, whereas Step 1 R^2 adjusted indicates the proportion of variance accounted for by the covariates. Step 1 covariates were participants' age and gender for analyses involving PNI scales and total score, and participants' age, gender, civil status, school level, and profession for analyses involving LSRPS scales and total score. *p < .001

DISCUSSION

Overall, our results suggest that pathological narcissism and psychopathy share common features but are also distinct pathological personality constructs. Confirming and extending previous findings based on measures of grandiose aspects of narcissism (e.g., Jonason et al., 2009; Lee & Ashton, 2005; Miller et al., 2010; Paulhus & Williams, 2002), in the present study we observed that pathological narcissism and psychopathy were significantly and moderately correlated. This is in accordance with Kernberg's (2004) model in which malignant narcissism exists on a continuum of severity with psychopathy.

Hierarchical regression analysis results confirmed and extended previous findings on the relationships between HEXACO traits and pathological narcissism and psychopathy (Bresin & Gordon, 2011; Lee & Ashton, 2005). Low Honesty-Humility and Antagonism (i.e., low Agreeableness) are general personality traits underlying a common core of both pathological narcissism and psychopathy, at least as they are operationalized by the PNI and LSRPS total scores, respectively. Emotionality sharply differentiated pathological narcissism from psychopathy, showing opposite and significant relationships. Indeed, according to our results, pathological narcissism seems to be characterized by a certain degree of emotional instability (i.e., high Emotionality) consistent with theoretical views and previous research emphasizing impairments in self- and emotion regulation underlying pathological narcissism (Morf, Torchetti, & Schürch, 2011; Roche et al., 2013). In contrast, psychopathy seems to be associated with emotional coldness (i.e., low Emotionality), consistent with previous findings suggesting the relevance of emotional deficits in the clinical presentation of psychopathy (e.g., Cleckley, 1976; Cooke & Michie, 2001; Hare, 1991, 2003). Poor control capacity and ability to plan ahead (i.e., low Conscientiousness) were associated with the overall level of psychopathy, at

least as operationalized by the LSRPS total. These associations are consistent with meta-analytic results linking psychopathy with low Agreeableness and low Conscientiousness found across nine clinical and community samples (Ruiz et al., 2008).

Hierarchical regression analysis findings point to the importance of assessing the different dimensions of pathological narcissism and psychopathy, rather than assessing only their general score, in order to get a clearer picture of the relationships between pathological narcissism, psychopathy, and HEXACO personality traits. Both residualized NG and NV were negatively associated with Honesty-Humility; however, NG exhibited positive associations with Extraversion, Agreeableness, and Openness, whereas NV exhibited negative associations with Extraversion and Agreeableness. SP was characterized mainly by poor ability to control and to pursue one's goals (i.e., low Conscientiousness), marked negative emotionality (i.e., high Emotionality) and antagonism (i.e., low Agreeableness), poor sociability and energy (i.e., low Extraversion), and originality (i.e., high Openness to Experience), at least to some degree. As a whole, these findings were consistent with previous studies suggesting that secondary psychopaths tend to report high trait anxiety (e.g., Swogger & Kosson, 2007; Vassileva, Kosson, Abramowitz, & Conrod, 2005) and are characterized by chronic instability (Hare, 1991). Consistent with previous descriptions of general psychopathy (e.g., Hare, 1991; Lynam et al., 1999; Miller et al., 2001), PP was characterized by low Honesty-Humility, as well as by lack of emotionality, organized behavior (driving a small positive association with conscientiousness), sociability and energy (high Extraversion), and conventionality (i.e., low Openness to Experience). Consistent with Samuel and Widiger's (2008) indications concerning the relevance of facet-level analyses to obtain a clearer picture of the relationships between the Five-Factor Model and DSM-IV-TR personality disorders, in our study HEXACO facets were highly useful in discriminating pathological narcissism from psychopathy (Table 2).

In our sample, moral disengagement significantly predicted both pathological narcissism and psychopathy, and this is largely consistent with Kernberg's (1993) clinical model of the continuity between pathological narcissism and psychopathy. According to our findings, the tendency to justify behaviors that violate moral standards seemed to represent a dispositional feature that is common to both pathological narcissism and psychopathy. Considering the well-known link between psychopathy and deviant behavior (e.g., Hare, 1991, 2003), and consistent with Kernberg's view that psychopathy is more severe than malignant narcissism, it was not surprising to observe in our sample that moral disengagement showed a stronger association with psychopathy than with pathological narcissism. Here, moral disengagement was linked positively to maladaptive personality traits (i.e., pathological narcissism and psychopathy) and negatively to general HEXACO personality traits, three of which (Honesty/ Humility, Agreeableness, and Conscientiousness) were found to be relevant for describing pathological narcissism and/or psychopathy.

The association between moral disengagement, and pathological narcissism and psychopathy remained significant even when the effect of the HEXACO personality traits was held constant. Although our sample was composed of active community members, these findings suggest that individuals who frequently rationalize misbehavior may indeed develop stable morally disengaged attitudes (Bandura, 1991; Hyde et al., 2010) that may become part of a broader personality dysfunction. The link that we observed between moral disengagement and psychopathy confirmed and extended the previous findings on the relationship between moral disengagement and juvenile delinquency (Bandura et al., 1996; Bandura et al., 2001; Pelton et al., 2004) and callous-unemotional traits in juvenile offenders (Shulman et al., 2011), as well as previous observations on moral dysfunctions in psychopathy (Glenn et al., 2009).

Our findings suggest that moral disengagement may also be relevant for understanding pathological narcissism, although NG and NV showed different associations with moral disengagement. In our study, only NV was significantly associated with moral disengagement. This is consistent with previous research indicating that envy (Krizan & Johar, 2012) and rejection sensitivity (Besser & Priel, 2010) are also uniquely associated with NV and not NG. Perhaps envy and social sensitivity associated with NV influence moral attitudes regarding less savory behavior. This finding is particularly interesting because only NG was significantly associated with selfreports of adolescent deviant behavior (see also Miller et al., 2010). In contrast to NV, perhaps the sense of being superior that characterizes NG may represent in itself an ego-syntonic justification of deviant behavior (e.g., "rules are for common people," or "special people lead the pack, ordinary people follow the rules,"), which may not require further strategies of moral disengagement. In any case, it should be observed that only one of the two dimensions of pathological narcissism—namely, NV—was significantly associated with moral disengagement, whereas both psychopathy dimensions were positively and significantly related to moral disengagement.

Both pathological narcissism and psychopathy showed a positive association with self-reports of illegal behavior during adolescence; interestingly, neither the PNI nor the LSRPS include items assessing illegal acts. The association with previous illegal acts was stronger for psychopathy than for pathological narcissism, at least when these traits were assessed using the LSRPS and the PNI, respectively. Data concerning the associations between the LSRPS and PNI scores with the SRDS also seemed to confirm the importance of assessing the subdimensions of pathological narcissism and psychopathy, rather than simply evaluating the overall level of these traits. Both PP and SP were significantly associated with illegal acts during adolescence, but this link was stronger for PP than for SP. Although both NG and NV showed positive correlations with psychopathy, only "pure" NG was significantly associated with self-reports of illegal behavior during adolescence.

As a whole, our results suggest that pathological narcissism and psy-

chopathy represent different personality constructs that share a common core of greed, immodesty, lack of sincerity, antagonism, a propensity to justify moral transgressions, and acts of delinquency in adolescence. Psychopathy exhibited stronger associations with these personality and moral disengagement features than pathological narcissism, and pathological narcissism and psychopathy also showed distinct associations with personality traits. For instance, psychopathy is uniquely characterized by poor capacity to control behavior and plan life (i.e., low Conscientiousness), whereas pathological narcissism is uniquely characterized by affective dysregulation (i.e., high Emotionality). Facet-level analyses elaborated these differences in personality functioning between pathological narcissism and psychopathy. For instance, among Emotionality facets, Fearfulness selectively characterized pathological narcissism, whereas low Sentimentality (i.e., coldness and aloofness) exclusively characterized psychopathy. In a sense, the finer the grain of the assessment of the components of pathological narcissism and psychopathy, and of the personality profile, the clearer the differences between the two domains.

In conclusion, our results are consistent with theorists like Otto Kernberg, who conceptualize narcissism and psychopathy as related constructs that differ on the severity of aggression and moral dysfunction. Both constructs were associated with Antagonism, low Honesty-Humility, and moral disengagement. Notably, associations with psychopathy were typically stronger, which is consistent with Kernberg's (2004) view that malignant narcissists retain some capacity for relatedness and principled behavior (albeit distorted). Additionally, our results also support contemporary views of pathological narcissism that include self- and affective dysregulation (i.e., vulnerability) in addition to grandiose attitudes and behaviors (e.g., Pincus & Lukowitsky, 2010; Roche et al., 2013; Ronningstam, 2005a). This distinguishes pathological narcissism from psychopathy, as does the increased impulsivity that is uniquely associated with psychopathy but not pathological narcissism. Both pathological narcissism and psychopathy appear to share a norm-rejecting, exploitative, antagonistic core that can be clinically discriminated by the propensity of individuals with these disorders to become affectively dysregulated (anger, shame, depression, envy) or aggressively impulsive (lying, stealing, fighting). Clinical assessment and research should continue to assess for these two related but distinct constructs. Further efforts to clarify and validate their associations can contribute to the ongoing revisions of personality disorder classification and diagnosis initiated by the publication of DSM-5. Distinguishing affective dysregulation and aggressive impulsivity is also relevant for treatment planning by clinicians working in forensic settings and other facilities with frequent psychopathic and narcissistic patients (e.g., Roche, Shoss, Pincus, & Ménard, 2011).

Of course, our findings should be considered in the light of several limitations. Although the size of our sample was moderately large, all participants were White volunteers, the sample was nonrandom, and the major-

ity of the participants were female. These aspects limit the generalizability of our findings. Moreover, all participants were active community members; thus, our results cannot be extended to clinical or forensic populations. However, other research suggests that structural relationships between variables do tend to generalize in clinical and nonclinical samples (O'Conner, 2002). Some facet-level scales of the HEXACO personality traits exhibited modest reliability values. It should be observed, however, that poor reliability values attenuate the size of the correlations with external variables (Nunnally & Bernstein, 1994), thus placing our findings on the conservative side. Moreover, the average interitem correlations for the individual HEXACO facets were satisfactory (median average interitem r = .33, SD = .09), and even larger than the average interitem correlations of the HEXACO personality scales (median average interitem r = .22, SD =.02). Thus, the moderate values of the reliability estimates of the HEXACO facets may reflect the small number of items that described each facet (i.e., 2-4 items) rather than the actual dependability of the facet score. In our study, the reliability of the LSRPS SP scale was markedly lower than the reliability of the LSRS PP scale, although this is a frequently reported finding, probably because the SP scale has a smaller number of items than the PP scale (e.g., Miller et al., 2010). Although the lower reliability of the SP scale weakens the correlations between variables, it does not make our results less significant. However, given that SP was one of the central constructs we evaluated, we urge caution in interpreting our results without replication using multiple methods and measures. Finally, although we tried to provide some external validity data for our self-report measures, our study relied only on self-report data, which provides only one perspective on personality and its pathology. Moreover, we employed single measures of pathological narcissism and psychopathy, respectively. Other measures of narcissism and psychopathy may reflect different conceptualizations of these constructs.

In summary, even keeping these limitations in mind, our findings demonstrate that pathological narcissism and psychopathy share some similarities in personality traits and moral functioning, although they also manifest relevant differences, particularly when distinct phenotypic expressions are considered and HEXACO facet-level traits are taken into account. We believe that these findings may be useful for improving assessment, diagnosis, and treatment of pathological narcissism and psychopathy.

REFERENCES

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., rev.). Washington, DC: Author.

American Psychiatric Association. (2013). Di-

agnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

Ashton, M. C., & Lee, K. (2001). A theoretical basis for the major dimensions of per-

sonality. European Journal of Personality, 15, 327–353.

- Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*, 91(4), 340– 345.
- Ashton, M. C., Lee, K., Perugini, M., Szarota, P., de Vries, R. E., Di Blas, L., et al. (2004). A six-factor structure of personality-descriptive adjectives: Solutions from psycholexical studies in seven languages. *Journal of Personali*ty and Social Psychology, 86, 356–366.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1990). Mechanism of moral disengagement. In W. Reich (Ed.), Origin of terrorism: Psychologies, ideologies, theologies, states of mind (pp. 161–191). Cambridge, UK: Cambridge University Press.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Hand*book of moral behavior and development (Vol. 1, pp. 45–103). Hillsdale, NJ: Erlbaum.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3, 193–209.
- Bandura, A., Caprara, G. V., Barbaranelli, C., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364–374.
- Bandura, A., Caprara, G. V., Barbaranelli, C., Pastorelli, C., & Regalia, C. (2001). Sociocognitive self-regulatory mechanisms governing transgressive behavior. *Journal of Personality and Social Psychology*, 80, 125–135.
- Barnes, G. M., Welte, J. W., Hoffman, J. H., & Dintcheff, D. A. (2005). Shared predictors of youthful gambling, substance use, and delinquency. Psychology of Addictive Behaviors, 19, 165– 174.
- Besser, A., & Priel, B. (2010). Grandiose narcissism versus vulnerable narcissism in threatening situations: Emotional reactions to achievement failure and interpersonal rejection. *Journal of So-*

- cial and Clinical Psychology, 29, 874–902.
- Blair, R. J. (1995). A cognitive developmental approach to morality: Investigating the psychopath. Cognition, 57, 1–29.
- Blair, R. J. (2007). The amygdala and ventromedial prefrontal cortex in morality and psychopathy. *Trends in Cognitive Sciences*, 11, 387–392.
- Bresin, K., & Gordin, K. H. (2011). Characterizing pathological narcissism in terms of the HEXACO model of personality. *Journal of Psychopathology and Behavioral Assessment*, 33, 228–235.
- Brinkley, C. A., Schmitt, W. A., Smith, S. S., & Newman, J. P. (2001). Construct validation of a self-report psychopathy scale: Does Levenson's Self-Report Psychopathy Scale measure the same constructs as Hare's Psychopathy Checklist-Revised? Personality and Individual Differences, 31, 1021–1038.
- Cain, N. M., Pincus, A. L., Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. Clinical Psychology Review, 28, 638–656.
- Caprara, G. V., Bandura, A., Barbaranelli, C., & Vicino, S. (1996). La misura del disimpegno morale [The assessment of moral disengagement]. Rassegna di Psicologia, 13, 93–105.
- Cleckley, H. (1976). The mask of sanity (5th ed.). St. Louis, MO: Mosby.
- Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopath: Towards a hierarchical model. *Psychological As*sessment, 13, 171–188.
- Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders*, 17(3), 188–207.
- Elliott, D. S., & Ageton, S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. American Sociological Review, 45, 95–110.
- Elliott, D. S., & Huizinga, D. (1984). The relationship between delinquent behavior and ADM problems. Boulder, CO: Behavioral Research Institute.
- Ellison, W. D., Levy, K. N., Cain, N. M., Ansell, E. B., & Pincus, A. L. (2013). The impact of pathological narcissism on psychotherapy utilization, initial

- symptom severity, and early-treatment symptom change: A naturalistic investigation. *Journal of Personality Assessment*, *95*, 291–300.
- Fetterman, A. K., & Robinson, M. D. (2010). Contingent self-importance among pathological narcissists: Evidence from an implicit task. *Journal of Research* in Personality, 44, 691–697.
- Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong? Aggressive Behavior, 32, 528–539.
- Glenn, A. L., Iyer, R., Graham, J., Koleva, S., & Haidt, J. (2009). Are all types of morality compromised in psychopathy? *Journal of Personality Disorders*, 23, 384–398.
- Haines, V. J., Diekhoff, G. M., LaBeff, E. E., & Clark, R. E. (1986). College cheating: Immaturity, lack of commitment, and the neutralizing attitude. Research in Higher Education, 25, 342– 354.
- Hare, R. D. (1985). Comparison of procedures for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology*, 53, 7–16.
- Hare, R. D. (1991). Manual for the Revised Psychopathy Checklist. Toronto, Canada: Multi-Health Systems.
- Hare, R. D. (2003). Manual for the Psychopathy Checklist–Revised (2nd ed.). Toronto, Canada: Multi-Health Systems.
- Hare, R. D., & Neumann, C. S. (2008). Psychopathy as a clinical and empirical construct. Annual Review of Clinical Psychology, 4, 217–246.
- Harpur, T. J., Hakstian, A., & Hare, R. D. (1988). Factor structure of the Psychopathy Checklist. Journal of Consulting and Clinical Psychology, 56, 741–747.
- Harpur, T. J., Hare, R. D., & Hakstian, A. R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1, 6–17.
- Hart, S., & Hare, R. D. (1998). Association between psychopathy and narcissism: Theoretical views and empirical evidence. In E. F. Ronningstam (Ed.), Disorders of narcissism: Diagnostic, clinical, and empirical implications (pp. 415–436). Washington, DC: American Psychiatric Press.
- Hendin, H. M., & Cheek, J. M. (1997). As-

- sessing hypersensitive narcissism: A reexamination of Murray's Narcissism Scale. *Journal of Research in Personality*, 31, 588–599.
- Hyde, L. W., Shaw, D. S., & Moilanen, K. L. (2010). Developmental precursors of moral disengagement and the role of moral disengagement in the development of antisocial behavior. *Journal of Abnormal Child Psychology*, 38, 197– 209.
- Hymel, S., Rocke-Henderson, N., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. *Journal of Social Sciences*, 8, 1–11.
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D. P. (2009). The Dark Triad: Facilitating a short-term mating strategy in men. European Journal of Personality, 23, 5–18.
- Jonason, P. K., & Tost, J. (2010). I just cannot control myself: The Dark Triad and self-control. *Personality and Individual Differences*, 49, 611–615.
- Karpman, B. (1941). On the need of separating psychopathy into two distinct clinical types: The symptomatic and the idiopathic. *Journal of Criminal Psychopathology*, 3, 112–137.
- Karpman, B. (1948). Conscience in the psychopath: Another version. American Journal of Orthopsychiatry, 18, 455–491.
- Kernberg, O. F. (1993). Aggression in personality disorders and perversions. New Haven, CT: Yale University Press.
- Kernberg, O. F. (1998). Pathological narcissism and narcissistic personality disorder: Theoretical background and diagnostic classification. In E. Ronningstam (Ed.), Disorders of narcissism: Diagnostic, clinical, and empirical implications (pp. 29–51). Washington DC: American Psychiatric Press.
- Kernberg, O. F. (2004). Aggressivity, narcissism and self-destructiveness in the psychotherapeutic relationship: New developments in the psychopathology and psychotherapy of severe personality disorders. New Haven, CT: Yale University Press.
- Kernberg, O. F., & Caligor, E. (2005). A psychoanalytic theory of personality disorders. In M. F. Lenzenweger & J. Clarkin (Eds.), Major theories of personality disorder (pp. 114–156). New York, NY: Guilford Press.

- Kosson, D. S., Smith, S. S., & Newman, J. P. (1990). Evaluating the construct validity of psychopathy in Black and White male inmates: Three preliminary studies. *Journal of Abnormal Psychology*, 99, 250–259.
- Krizan, Z., & Johar, O. (2012). Envy divides the two faces of narcissism. *Journal of Personality*, 80, 1415–1451.
- Krueger, R. F., Schmutte, P. S., Caspi, A., Moffitt, T. E., Campbell, K., & Silva, P. A. (1994). Personality traits are linked to crime among men and women: Evidence from a birth cohort. *Journal of Abnormal Child Psychology*, 103, 328– 338.
- Lee, K., & Ashton, M. C. (2005). Psychopathy, Machiavellianism, and narcissism in the Five-Factor Model and the HEXACO model of personality structure. Personality and Individual Differences, 38, 1571–1582.
- Lenzenweger, M. F., Clarkin, J. F., Kernberg, O. F., & Foelsch, P. A. (2001). The Inventory of Personality Organization: Psychometric properties, factorial composition, and criterion relations with affect, aggressive dyscontrol, psychosis proneness, and self-domains in a nonclinical sample. *Psychological Assessment*, 13, 577–591.
- Levenson, M., Kiehl, K., & Fitzpatrick, C. (1995). Assessing psychopathic attributes in a noninstitutionalized population. Journal of Personality and Social Psychology, 68, 151–158.
- Lilienfeld, S. O. (1990). Development and preliminary validation of a self-report measure of psychopathic personality.
 Unpublished doctoral dissertation, University of Minnesota, Minneapolis.
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. Clinical Psychology Review, 14, 17–38.
- Lilienfeld, S. O. (1998). Methodological advances and developments in the assessment of psychopathy. Behaviour Research and Therapy, 36, 99–125.
- Lilienfeld, S. O., & Widows, M. R. (2005).

 Psychopathic Personality Inventory—
 Revised: Professional manual. Lutz, FL:
 Psychological Assessment Resources.
- Livesley, W. J. (1998). The phenotypic and genotypic structure of psychopathic traits. In D. J. Cooke, A. E. Forth, & R. D. Hare (Eds.), Psychopathy: Theory, research and implications for soci-

- ety (pp. 69–81). Dordrecht, The Netherlands: Kluwer Academic.
- Livesley, W. J., Jang, K. L., Jackson, D. N., & Vernon, P. A. (1993). Genetic and environmental contributions to dimensions of personality disorder. American Journal of Psychiatry, 150, 1826–1831.
- Lynam, D. R., Gaughan, E. T., Miller, D. J., Mullins-Sweatt, S., & Widiger, T. A. (2011). Assessing the basic traits associated with psychopathy: Development and validation of the Elemental Psychopathy Assessment. Psychological Assessment, 23, 108–124.
- Lynam, D. R., Whiteside, S., & Jones, S. (1999). Self-reported psychopathy: A validation study. *Journal of Personali*ty Assessment, 73(1), 110–132.
- Lynam, D. R., & Widiger, T. A. (2001). Using the Five-Factor Model to represent the DSM-IV personality disorders: An expert consensus approach. Journal of Abnormal Psychology, 110, 401–412.
- Maxwell, K., Donnellan, M. B., Hopwood, C. J., & Ackerman, R. A. (2011). The two faces of Narcissus? An empirical comparison of the Narcissistic Personality Inventory and the Pathological Narcissism Inventory. Personality and Individual Differences, 50, 577–582.
- McHoskey, J. W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. Journal of Personality and Social Psychology, 74, 192–210.
- Miller, J. D., Dir, A., Gentile, B., Wilson, L., Pryor, L. R., & Campbell, W. K. (2010). Searching for a vulnerable Dark Triad: Comparing Factor 2 psychopathy, vulnerable narcissism, and borderline personality disorder. *Journal of Personality*, 78, 1530–1564.
- Miller, J. D., Lynam, D. R., Widiger, T. A., & Leukefeld, C. (2001). Personality disorders as extreme variants of common personality dimensions: Can the Five-Factor Model adequately represent psychopathy? *Journal of Personality*, 69, 253–276.
- Morf, C. C., Torchetti, L., & Schürch, E. (2011). Narcissism from the perspective of the dynamic self-regulatory processing model. In W. K. Campbell & J. D. Miller (Eds.), Handbook of narcissism and narcissistic personality disorder (pp. 331–340). Hoboken, NJ: John Wiley and Sons.

- Nunnally, J. C., & Bernstein, I. H. (1994).

 Psychometric theory (3rd ed.). New York, NY: McGraw Hill.
- O'Conner, B. P. (2002). The search for dimensional structure differences between normality and abnormality: A statistical review of published data on personality and psychopathology. *Journal of Personality and Social Psychology*, 83, 962–982.
- Osofsky, M. J., Bandura, A., & Zimbardo, P. G. (2005). The role of moral disengagement in the execution process. Law and Human Behavior, 29, 371–393.
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism and psychopathy. *Journal of Research in Personality, 36*, 556–563.
- Pelton, J., Gound, M., Forehand, R., & Brody, G. (2004). The Moral Disengagement Scale: Extension with an American minority sample. *Journal of Psychopathology and Behavioral Assessment*, 26, 31–39.
- Pincus, A. L. (2013). The Pathological Narcissism Inventory. In J. Ogrudniczuk (Ed.), *Understanding and treating pathological narcissism* (pp. 93–110). Washington, DC: American Psychological Association.
- Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G. C., & Levy, K. N. (2009). The initial construction and validation of the Pathological Narcissism Inventory. *Psychological As*sessment, 21, 365–379.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. Annual Review of Clinical Psychology, 6, 421–446.
- Pincus, A. L., & Roche, M. J. (2011). Narcissistic grandiosity and narcissistic vulnerability. In W. K. Campbell & J. D. Miller (Eds.), *Handbook of narcissism and narcissistic personality disorder* (pp. 31–40). Hoboken, NJ: John Wiley and Sons.
- Roche, M. J., Pincus, A. L., Conroy, D. E., Hyde, A. L., & Ram, N. (2013). Pathological narcissism and interpersonal behavior in daily life. Personality Disorders: Theory, Research, and Treatment, 4(4), 315–323.
- Roche, M. J., Pincus, A. L., Lukowitsky, M.

- R., Ménard, K. S., & Conroy, D. E. (2013). An integrative approach to the assessment of narcissism. *Journal of Personality Assessment*, 95, 237–248.
- Roche, M. J., Shoss, N. E., Pincus, A. L., & Ménard, K. S. (2011). Psychopathy moderates the relationship between time in treatment and levels of empathy in incarcerated male sexual offenders. Sexual Abuse: A Journal of Research and Treatment, 23, 171–192.
- Ronningstam, E. (2005a). *Identifying and understanding narcissistic personality*. New York, NY: Oxford University Press.
- Ronningstam, E. (2005b). Narcissistic personality disorder: A review. In M. Maj, H. S. Akiskal, J. E. Mezzich, & A. Okasha (Eds.), Evidence and experience in psychiatry. Volume 8: Personality disorders (pp. 277–327). New York, NY: John Wiley & Sons.
- Ronningstam, E. (2011). Psychoanalytic theories on narcissism and narcissistic personality. In W. K. Campbell & J. D. Miller (Eds.), *Handbook of narcissism and narcissistic personality disorder* (pp. 41–55). Hoboken, NJ: John Wiley and Sons.
- Ruiz, M. A., Pincus, A. L., & Schinka, J. A. (2008). Externalizing disorders and the Five-Factor Model: A meta-analysis of personality traits associated with antisocial personality disorder, substance use disorder, and their co-occurrence. *Journal of Personality Disorders*, 22, 365–388.
- Russ, E., Shedler, J., Bradley, R., & Westen, D. (2008). Refining the construct of narcissistic personality disorder: Diagnostic criteria and subtypes. American Journal of Psychiatry, 165, 1473– 1481.
- Salekin, R. T., Rogers, R., & Sewell, K. W. (1996). A review and meta-analysis of the Psychopathy Checklist and Psychopathy Checklist–Revised: Predictive validity of dangerousness. Clinical Psychology: Science and Practice, 3, 203–215.
- Saulsman, L. M., & Page, A. C. (2004). The Five-Factor Model and personality disorder empirical literature: A metaanalytic review. Clinical Psychology Review, 23, 1055–1085.
- Saulsman, L. M., & Page, A. C. (2005). Corrigendum to "The Five-Factor Model and personality disorder empirical lit-

erature: A meta-analytic review." Clinical Psychology Review, 25, 383–394.

- Samuel, D. B., & Widiger, T. A. (2008). A meta-analytic review of the relationships between the Five-Factor Model and DSM-IV-TR personality disorders: A facet level analysis. Clinical Psychology Review, 28, 1326–1342.
- Shulman, E. P., Cauffman, E., Piquero, A. R., & Fagan, J. (2011). Moral disengagement among serious juvenile offenders: A longitudinal study of the relations between morally disengaged attitudes and offending. *Developmental Psychology*, 47, 1619–1632.
- Swogger, M. T., & Kosson, D. S. (2007). Identifying subtypes of criminal psychopaths. Criminal Justice and Behavior, 34, 953–970.
- Tamborski, M., & Brown, R. P. (2011). The measurement of trait narcissism in social-personality research. In W. K. Campbell & J. D. Miller (Eds.), Handbook of narcissism and narcissistic personality disorder (pp. 133–140). Hoboken, NJ: John Wiley and Sons.
- Thomas, K. M., Wright, A. G. C., Lukowitsky, M. R., Donnellan, M. B., & Hopwood, C. J. (2012). Evidence for the criterion validity and clinical utility of the Path-

- ological Narcissism Inventory. Assessment, 19, 135–145.
- Thornberry, T. P., Krohn, M. D., Lizotte, A. J., Smith, C. A., & Tobin, K. (2003). Gangs and delinquency in developmental perspective. New York, NY: Cambridge University Press.
- Vassileva, J., Kosson, D. S., Abramowitz, C., & Conrod, P. (2005). Psychopathy versus psychopathies in classifying criminal offenders. Legal and Criminological Psychology, 10, 27–43.
- Vollum, S., Buffinton-Vollum, J., & Longmire, D. R. (2004). Moral disengagement and attitudes about violence toward animals. Society and Animals, 12, 209–235.
- Wright, A. G. C., Lukowitsky, M. R., Pincus, A. L., & Conroy, D. E. (2010). The higher order factor structure and gender invariance of the Pathological Narcissism Inventory. Assessment, 17, 467–483.
- Zeigler-Hill, V., Green, B. A., Arnau, R. C., Sisemore, T. B., & Myers, E. M. (2011). Trouble ahead, trouble behind: Narcissism and early maladaptive schemas. Journal of Behavior Therapy and Experimental Psychiatry, 42, 96–103.