

## **CLINICAL CORRELATES OF VULNERABLE AND GRANDIOSE NARCISSISM: A PERSONALITY PERSPECTIVE**

Scott Barry Kaufman, PhD, Brandon Weiss, MA, Joshua D. Miller,  
PhD, and W. Keith Campbell, PhD

There is broad consensus that there are at least two different dimensions of narcissism: vulnerable and grandiose. In this study, the authors use a new trifurcated, three-factor model of narcissism to examine relations between aspects of narcissism and an array of clinically relevant criteria related to psychopathology, the self, authenticity, and well-being. Neurotic and antagonistic aspects of narcissism emerged as the most clinically relevant dimensions of narcissism, bearing relations with outcomes relating to interpersonal guilt, insecure attachment styles, cognitive distortions, maladaptive defense mechanisms, experiential avoidance, impostor syndrome, weak sense of self, inauthenticity, low self-esteem, and reduced psychological well-being. Grandiose narcissism was not correlated with most forms of psychopathology and was even positively associated with life satisfaction. Nevertheless, a surprising link was found between grandiose narcissism and multiple indicators of inauthenticity. Implications for the appropriate conceptualization, assessment, and treatment of pathological narcissism are discussed.

*Keywords:* three-factor model, narcissism, trifurcated model, antagonism, vulnerable, grandiose, clinical, psychopathology, authenticity

There is broad consensus that there are at least two different dimensions of narcissism that have been discussed using different labels depending on the research tradition (e.g., Dickinson & Pincus, 2003; Fossati et al, 2005; Kernberg, 1975, 1986; Kohut, 1966, 1971, 1977; Miller & Campbell, 2008; Pincus & Lukowitsky, 2010; Reich, 1949, 1960; Russ, Shedler, Bradley, & Westen, 2008; Wink, 1991). In general, grandiose narcissism is associated with traits such as exhibitionism, immodesty, interpersonal dominance, self-absorption, callousness, manipulativeness, and a need for acclaim from others. In contrast, vulnerable narcissism is associated with psychological distress,

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From Positive Psychology Center, University of Pennsylvania, Philadelphia, Pennsylvania (S. B. K.); and University of Georgia, Athens, Georgia (B. W., J. D. M., W. K. C.).

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Brandon Weiss and Scott Barry Kaufman contributed equally to the preparation of this article.

Address correspondence to Scott Barry Kaufman, 3701 Market St., Suite 217, Positive Psychology Center, University of Pennsylvania, Philadelphia, PA 19003. E-mail: scott@scottbarrykaufman.com

anxiety, depression, negative emotions, withdrawal, hypersensitivity to criticism, and feelings of inferiority paired with an egocentric, entitled, and distrustful approach to interpersonal relations.

Over time, this two-dimensional model of narcissism has revealed important clinical implications because the descriptions of vulnerable and grandiose narcissism differ substantially, as do their nomological networks (Cain, Pincus, & Ansell, 2008; Hyatt et al., in press; Miller et al., 2011; Wink, 1991). Vulnerable narcissism has been linked to features characteristic of *internalizing disorders*, including anxiety, depression, paranoia, schizotypy, distrust, hostility, low self-esteem, and extreme sensitivity to criticism and rejection, with a similar nomological network to both neuroticism and borderline personality disorders (PD) (e.g., Ellison, Levy, Cain, Ansell, & Pincus, 2013; Miller et al., 2010, 2011, 2018; Pincus, Cain, & Wright, 2014). A robust empirical literature indicates that negative emotionality (or neuroticism), in addition to driving these relations with vulnerable narcissism (Miller et al., 2018), may represent a common factor underlying all internalizing disorders, and may even underlie a general factor of psychopathology (e.g., Lahey, 2009; Tackett, 2013). This would explain why neuroticism is related to the vast majority of “Axis I and II” disorders (e.g., Kotov et al., 2010; Samuel & Widiger, 2008). In contrast, grandiose narcissism is a more distinct construct with specific links to *externalizing disorders*, including proactive verbal and physical aggression, drive for dominance, and histrionic behaviors (e.g., Miller et al., 2011; Miller, Lynam, Hyatt, & Campbell, 2017).

Despite these relations, experts agree that features of vulnerable narcissism are underrepresented in the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (*DSM-5*; American Psychiatric Association [APA], 2013) criteria for narcissism (Miller, Lynam, & Campbell, 2016; Russ et al., 2008; Weiss & Miller, in press). Factor analyses of narcissistic personality disorder (NPD) symptoms suggest that the *DSM-IV* NPD criteria are either primarily or entirely consistent with grandiose narcissism (Fossati et al., 2005; Miller, Hoffman, Campbell, & Pilkonis, 2008; Weiss & Miller, in press). Furthermore, the alternative *DSM-5* model of NPD contained in Section III for “emerging models and measures” primarily involves grandiose elements of narcissism (*Criterion B*: grandiosity, attention seeking), although personality dysfunction required in *Criterion A* includes some vulnerable features (e.g., “excessive reference to others for self-definition and self-esteem regulation; exaggerated self-appraisal inflated or deflated, or vacillating between extremes; emotional regulation mirrors fluctuations in self-esteem” [APA, 2013, p. 767]).

In addition, vulnerable narcissism remains diminutive within more recent dimensional models of psychopathology as well. The Hierarchical Taxonomy of Psychopathology (HiTOP) is a dimensional alternative to the *DSM* that groups related symptoms together, and groups co-occurring syndromes into spectra (Kotov et al., 2017). Within the HiTOP model, narcissism is included under the umbrella “antagonistic externalizing” and is grouped together with histrionic PD, paranoid PD, and borderline PD. Nevertheless, developers of the HiTOP model are continuing to investigate the location of NPD within the structure of common mental disorders. In line with NPD’s heterogeneous

composition of extraverted, antagonistic, and neurotic traits (e.g., Samuel & Widiger, 2008), empirical evidence is mixed with respect to where NPD is located within the structure of common mental disorders, with some findings suggesting that NPD may best be characterized as an *externalizing* disorder (e.g., Kendler et al., 2011), others failing to find support for significant relations (e.g., Røysamb et al., 2011), and still others indicating that NPD is a *distress* disorder with stronger relations to *internalizing*, despite nontrivial relations to *externalizing*, and uniquely high disorder-specific variance that is not easily accounted for (Eaton et al., 2017). Ultimately, the manner in which narcissism relates to other disorders, even when measuring the same putative form of narcissism, can vary substantially depending on the assessment used (e.g., Miller et al., 2014). Investigations into the location of grandiose and vulnerable narcissism within the structure of common mental disorders may help clarify these issues.

### EXAMINING CLINICAL RELATIONS WITH NARCISSISM USING THE TRIFURCATED MODEL

Over the past 15 years, there has been a proliferation of self-report measures that capture the narcissism construct more comprehensively in that they assess both grandiose and vulnerable components of narcissism. One notable scale is the Five-Factor Narcissism Inventory (FFNI), which was developed to assess traits associated with NPD, as well as grandiose and vulnerable narcissism from a basic personality perspective (Miller et al., 2013). This model has been expanded in recent years by a personality trait–based approach that facilitates understanding the central versus peripheral features of narcissism (Miller, Lynam, et al., 2017). A striking convergence of data suggests that there are three dimensions of personality that more parsimoniously characterize the underlying structure of narcissism: agentic extraversion, disagreeableness, and neuroticism (Miller, Lynam, et al., 2017; cf. Krizan & Herlache, 2018). Although the FFNI was created from the perspective of the Five-Factor Model (FFM; Costa & McCrae, 1992), and thus its three dimensions map onto corresponding domains of FFM personality, the FFNI items were written to assess more maladaptive content directly relevant to narcissism (Glover, Miller, Lynam, Crego, & Widiger, 2012).

According to the trifurcated model, the core of narcissism that binds both grandiose and vulnerable narcissism together is best characterized as interpersonal antagonism, involving the hostile and manipulative aspects of disagreeableness, such as entitlement, manipulativeness, callousness, and reactive anger (Miller, Lynam, et al., 2017). There are nuanced differences between the two narcissism dimensions even at this level, as grandiose narcissism is more strongly related to immodesty and vulnerable narcissism is more strongly related to distrust (Miller, Lynam, et al., 2017), which may suggest different motivations for interpersonally antagonistic behaviors (e.g., Miller et al., 2010). The trifurcated model suggests that neuroticism and agentic extraversion are features that may work as “diagnostic specifiers” that provide additional important information above and beyond the core of antagonism. As Miller, Lynam,

et al. (2017) noted, “neuroticism and extraversion serve to distinguish or drive apart grandiose and vulnerable narcissism” (p. 296). Specifically, neuroticism (i.e., shame, self-consciousness, unstable self-esteem) is related to the more vulnerable aspects of narcissism, whereas agentic extraversion (i.e., acclaim seeking, authoritativeness, exhibitionism) is related to the more grandiose aspects of narcissism. In simple trait terms, the grandiose narcissistic individual may be a “disagreeable extravert” (Paulhus, 2001), whereas the vulnerable narcissistic individual is “neurotically disagreeable” (our term).

Ultimately, the field benefited greatly in the recognition of these two narcissism dimensions—grandiose and vulnerable—in that it explained the heterogeneity in presentations and correlates associated with narcissism (and various narcissism measures). However, it may be time for another progression in which the grandiose versus vulnerable bifurcation is augmented with a three-factor model that provides even greater flexibility by allowing researchers to understand more unidimensional components of narcissism and how they play a role in individuals’ functioning. Examining the clinical correlates of narcissism using the trifurcated model of narcissism affords researchers the opportunity to granularly examine which aspects of narcissism bear the most meaningful associations with and underlie maladaptive functioning.

We should note that the trifurcated model is not merely another model with its own factor structure (e.g., the subscale structure of other narcissism scales), but rather it represents a new evolution in measurement that cuts narcissism more cleanly at the joints of its psychological components (Krizan & Herlache, 2018; Miller, Lynam, & Campbell, 2016). Examining the nomological network of narcissism using the trifurcated model thus enables researchers to observe narcissism’s nomological network in higher resolution than was possible with the two-factor model where certain contributing components (e.g., Antagonism) were obscured. Using the trifurcated model may also yield clearer insight into appropriate treatment targets within NPD. For example, the trifurcated model is able to elucidate Antagonism’s unique relations to maladaptive functioning and could thus point to Antagonism as a promising psychotherapeutic target as well as lead to the development of more targeted and efficacious therapies.

## THE PRESENT STUDIES

The primary aim of the current article is to assist in clarifying the clinical correlates of narcissism so as to better understand the implications of these traits. Doing so will inform the emerging literature on the divergent nomological networks of narcissism’s two and three factors, and it will provide further support for the clinical utility of taking a personality perspective on narcissism. Toward this aim, we report on the findings of two studies that measure the narcissism construct using both two- and three-factor models in relation to clinically relevant criteria, including components of cognitive-behavioral therapy (CBT; e.g., cognitive triad), acceptance and commitment therapy (ACT; e.g., experiential avoidance), and psychoanalytic psychotherapy (e.g., defense mechanisms). Although CBT and ACT treatments are more widely

used and professionally endorsed as first-line treatments than psychoanalytic/psychodynamic therapies, psychoanalytic theory remains an important source of knowledge concerning the treatment and nature of psychopathology; this is exemplified by multiple evidence-based psychodynamic therapies (e.g., Leichsenring & Schauenburg, 2014), *DSM-5*'s continued reference to defense mechanisms, and the prominence of defense mechanisms in the clinical literature (e.g., Fernando, 2011).

We also assess a number of psychopathology-related constructs tied to self-uncertainty and self-fragmentation. In particular, we expect to find that vulnerable narcissism is related to a "fragile sense of self," a phrase often used to describe individuals with borderline personality disorder (BPD; APA, 1994), a PD that is strongly correlated with vulnerable narcissism (e.g., Miller et al., 2010). The present study also measured other related markers of self-uncertainty and self-fragmentation, including impostor syndrome, alienation from self, and susceptibility to influence from external forces. Also in relation to self-beliefs, we measured negative self-perceptions by assessing the "cognitive triad" (consisting of negative view of self, negative view of others, and negative view of the world), interpersonal guilt, and attachment. We believe this extensive index of self-uncertainty, self-beliefs, and self-fragmentation is an important addition to the nomological network of narcissism, and it also has direct clinical relevance considering that a lack of understanding and acceptance of oneself has been linked to a central motivation for seeking therapy (e.g., Rogers, 1961/1995).

A secondary aim of the article is to assess the relevance of different dimensions of narcissism for well-being. There is an emerging argument that clinical outcomes should be expanded beyond mere remediation of dysfunction to flourishing, well-being, and growth (Keyes, 2002; Ryff, 1989; Ryff & Keyes, 1995; Seligman, Rashid, & Parks, 2006; Wood & Tarrrier, 2010). While grandiose narcissism has been associated with greater life satisfaction (Egan, Chan, & Shorter, 2014; Giacomini & Jordan, 2016; Rose, 2002; Rose & Campbell, 2004; Zuckerman & O'Loughlin, 2009), this link appears to be mediated by self-esteem (Hyatt et al., in press; Rose, 2002; Zuckerman & O'Loughlin, 2009). There is a dearth of data on the well-being correlates of vulnerable narcissism, particularly aspects of well-being that go beyond life satisfaction (cf. Rose, 2002; Sedikides, Rudich, Gregg, A. Kumashiro, & Rusbult, 2004). To expand the nomological network of narcissism to include a broader range of well-being indices, we not only examined the correlates of the trifurcated model of narcissism for life satisfaction, but we also included measures of positive relationships, competence, personal growth, purpose, self-acceptance, autonomy, and authentic living (Ryff, 1989; Ryff & Keyes, 1995), which we believe has direct clinical implications considering that these are outcomes that make life worth living.

## STUDY 1

In Study 1, we examined which dimensions of narcissism are meaningfully related to a comprehensive array of clinically important psychopathological

features, including features relevant to attachment, cognitive, and psychoanalytic theory.

## METHOD

### Participants

A power analysis indicated that a sample of at least 260 participants would be sufficiently well-powered to detect correlations as small as .21 using a  $p < .01$  threshold for significance; our decision was also based on data suggesting that correlations from samples of 250 or more participants are relatively stable (Schönbrodt & Perugini, 2013). A total of 302 participants were recruited from Amazon's Mechanical Turk (MTurk). Of these, 29 participants were excluded from the dataset because they failed attention checks and did not complete all questionnaire items, leaving a final sample of 273 participants. Most participants reported being female (57.5%) and White (88.6%). The average age was 36 years ( $SD = 12.4$ ), with a range of 18–77 years. The study received IRB approval from the University of Pennsylvania as part of a larger study on personality.

### Measures and Procedure

Participants completed a 25–30-minute online survey administered with Qualtrics. All scales were on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The survey was part of a larger scale validation study.

*Five-Factor Narcissism Inventory, Short Form (FFNI-SF)*. The FFNI-SF (Sherman et al., 2015) is a 60-item self-report inventory of 15 traits related to vulnerable and grandiose narcissism. Each trait scale was created to assess a more maladaptive variant of an FFM trait found to be an important component of either or both narcissism dimensions. The inventory assesses 15 trait scales related to vulnerable narcissism and grandiose narcissism, as well as three empirically derived higher-order factors: Antagonism, Agentic Extraversion, and Neuroticism (Miller, Lynam, McCain, et al., 2016). The following subscales were included in this analysis: Vulnerable Narcissism ( $\alpha = .85$ ), Grandiose Narcissism ( $\alpha = .94$ ), Antagonism ( $\alpha = .92$ ), Agentic Extraversion ( $\alpha = .91$ ), and Neuroticism ( $\alpha = .90$ ).

*Interpersonal Guilt Questionnaire (IGQ)*. The IGQ (O'Connor, Berry, Weiss, Bush, & Sampson, 1997) is a 67-item scale that assesses four types of guilt: *survivor* ("I sometimes feel I don't deserve the happiness I achieved";  $\alpha = .83$ ), *separation* ("It makes me anxious to be away from home for too long";  $\alpha = .84$ ), *omnipotent responsibility* ("I worry a lot about the people I love even when they seem to be fine";  $\alpha = .76$ ), and *self-hate* ("If something bad happens to me I feel I must have deserved it";  $\alpha = .91$ ).

*Adult Attachment Scale–Revised (AAS)*. The AAS-Revised (Collins, 1996) is an 18-item scale that measures the attachment styles of adults. Consistent with

Fraley and Spieker (2003), we computed two attachment styles: *anxious* (the extent to which a person is worried about being rejected or unloved;  $\alpha = .90$ ); and *avoidant* (the extent to which a person avoids intimacy and feels he or she can depend on others to be available when needed;  $\alpha = .89$ ).

*Cognitive Triad Inventory (CTI)*. The CTI (Beckham, Leber, Watkins, Boyer, & Cook, 1986) is a 30-item questionnaire that measures the “cognitive triad” (Beck, Rush, Shaw, & Emery, 1979), which consists of negative perceptions of *one’s self* (e.g., “I hate myself”;  $\alpha = .92$ ), *one’s world* (“The world is a very hostile place”;  $\alpha = .82$ ), and *one’s future* (“There is nothing left in my life to look forward to”;  $\alpha = .94$ ).

*Defense Style Questionnaire (DSQ)*. The DSQ (Andrews, Singh, & Bond, 1993) is a 40-item questionnaire that measures “defense styles” based on the *DSM-III-R* draft glossary of defense mechanisms (Advisory Committee on Defense Mechanisms, 1986). According to the *DSM-5* (APA, 2013), these are “mechanisms that mediate the individual’s reaction to emotional conflicts and to external stressors” (p. 819). The version of the DSQ that was used in this study was a revised version of the 72-item version of the scale (Andrews, Pollack, & Stewart, 1989). The scale included two items for each defense style. In view of the original scale structure’s suboptimal psychometric properties, we factor-analyzed the items to empirically derive the relationship between the structure of defense mechanisms and different forms of narcissism (see the Supplement).

## RESULTS AND DISCUSSION

### Bivariate Correlations

FFNI grandiose and vulnerable narcissism were not significantly correlated ( $r = .07$ ,  $p = \text{ns}$ ). Grandiose narcissism was positively correlated with FFNI antagonism ( $r = .86$ ,  $p < .01$ ) and extraversion ( $r = .82$ ,  $p < .01$ ) and negatively correlated with neuroticism ( $r = -.29$ ,  $p < .01$ ). Vulnerable narcissism was positively correlated with FFNI antagonism ( $r = .42$ ,  $p < .01$ ) and neuroticism ( $r = .75$ ,  $p < .01$ ), but not with extraversion ( $r = .02$ ,  $p = \text{ns}$ ). FFNI antagonism was positively correlated with extraversion ( $r = .51$ ,  $p < .01$ ), but not with neuroticism ( $r = -.06$ ,  $p = \text{ns}$ ), and FFNI neuroticism was not significantly correlated with extraversion ( $r = -.12$ ,  $p = \text{ns}$ ). Bivariate correlations among self-report narcissism subscales can be found in Supplement Table S3. FFNI. Bivariate correlations among all variables can be found in Supplement Table S4.

### Vulnerable and Grandiose Narcissism and Markers of Psychopathology

To examine relations between dimensions of narcissism and markers of psychopathology, we conducted correlational analyses investigating the relation between narcissism dimensions, on the one hand, and markers of psychopathology, on the other. Due to the number of significance tests conducted,

a  $p$  value equal to or less than .01 was set. To determine if correlates differed significantly across grandiose and vulnerable narcissism dimensions, and antagonism, extraversion, and neuroticism dimensions (i.e., correlations were tested against one another only within each model), tests of dependent  $r$  were conducted using a  $p$  value equal to or less than .01. Results can be found in Table 1.

We next conducted profile matching analyses in which we compared (using intraclass correlations [ICC]) the profiles of correlations of grandiose and vulnerable narcissism dimensions, on the one hand, and the profiles of correlations of grandiose, vulnerable, antagonism, extraversion, and neuroticism dimensions, on the other.

*Interpersonal Guilt.* FFNI vulnerable narcissism manifested statistically significant moderate to strong correlations with three of four subscales (survival guilt, omnipotence guilt, self-hate guilt), as well as a strong correlation with the total score. FFNI grandiose narcissism manifested significant weak to moderate negative associations with two of four subscales (survival guilt, omnipotence

**TABLE 1** Correlations Between Narcissistic Traits and Interpersonal Guilt, Attachment Style, Negative Triad, and Defense Styles

	FFNI Grandiose	FFNI Vulnerable	FFNI Antagonism	FFNI Extraversion	FFNI Neuroticism
<b>Interpersonal Guilt</b>					
Questionnaire (IGQ)	-.16*	.48*	-.05 <sup>a</sup>	-.04 <sup>b</sup>	.51*
Survival Guilt	-.35*	.31*	-.27 <sup>a</sup>	-.17 <sup>ab</sup>	.41*
Separation Guilt	-.05 <sup>a</sup>	.09 <sup>b</sup>	-.10	.08 <sup>a</sup>	.18 <sup>ab</sup>
Omnipotence Guilt	-.21*	.28*	-.23*	.03	.42 <sup>ab</sup>
Self-Hate Guilt	.10	.65*	.35 <sup>a</sup>	-.03	.46 <sup>ab</sup>
<b>Adult Attachment Scale– Revised (AAS)</b>					
Anxiety	-.05	.53*	.16*	-.12	.39*
Avoidance	.01	.49*	.27 <sup>a</sup>	-.16*	.24 <sup>ab</sup>
<b>Cognitive Triad Inventory (CTI)</b>					
View Self	-.07	.61*	.25 <sup>a</sup>	-.23*	.42 <sup>ab</sup>
View World	.08	-.60*	-.22*	.23*	-.45*
View Future	-.07	-.59*	-.34 <sup>a</sup>	.09	-.31 <sup>ab</sup>
<b>Defense Style Questionnaire (DSQ)</b>					
Maladaptive Action Patterns	.08	.67*	.33 <sup>a</sup>	-.04	.42 <sup>ab</sup>
Image-distorting	.63*	.09	.61*	.45*	-.19*
Adaptive coping	.18*	-.19*	-.01 <sup>a</sup>	.30*	-.15 <sup>b</sup>
Altruism	-.21	.05	-.32*	.06 <sup>a</sup>	.24 <sup>ab</sup>

Note. FFNI = Five-Factor Narcissism Inventory, Correlates significantly differed at  $p < .01$  between FFNI grandiose and vulnerable, FFNI antagonism and extraversion, FFNI antagonism and neuroticism, and between FFNI extraversion and neuroticism, except where a and b superscripts designate no significant difference (test of dependent  $r$ s; Cohen & Cohen, 1983); \* $p < .01$ .



guilt), as well as a weak negative correlation with the total score. All correlates except for separation guilt were significantly different across FFNI grandiose and vulnerable narcissism dimensions. FFNI antagonism manifested two significant weak negative associations (survival guilt, omnipotence guilt) and one significant moderate positive association (self-hate guilt). FFNI extraversion manifested significant correlations with only one subscale (survival guilt [negative]). FFNI neuroticism manifested significant weak to strong correlations with all subscales. All correlates were significantly different across FFNI antagonism, extraversion, and neuroticism except for survival guilt (across antagonism and extraversion), separation guilt (across extraversion and neuroticism), and self-hate guilt (across antagonism and neuroticism).

*Adult Attachment.* FFNI vulnerable narcissism manifested statistically significant moderate to strong correlations with both dimensions of adult attachment (anxious and avoidant). Correlates were significantly different across FFNI grandiose and vulnerable dimensions. FFNI antagonism manifested significant but weak correlations with both subscales in the direction of *less* secure attachment. FFNI extraversion manifested significant correlations with three of four subscales in the direction of *more* secure attachment. FFNI neuroticism manifested significant weak to moderate correlations with all subscales in the direction of *less* secure attachment. Correlates were significantly different across FFNI antagonism, extraversion, and neuroticism except for avoidance (across antagonism and neuroticism).

*Cognitive Triad.* FFNI vulnerable narcissism manifested significant strong negative correlations with all subscales of the cognitive triad. Correlates were significantly different across FFNI grandiose and vulnerable narcissism dimensions. FFNI antagonism exhibited negative correlations with two of the three subscales (view of self, view of world). FFNI extraversion manifested positive correlations with two of three subscales (view of self, view of future). FFNI neuroticism manifested moderate negative correlations with all subscales. Correlates were significantly different across FFNI antagonism, extraversion, and neuroticism except for view of world (across antagonism and neuroticism).

*Defense Styles.* In view of findings ascribing suboptimal psychometric properties of the original DSQ scale (e.g., Wilkinson & Ritchie, 2015), we conducted an exploratory factor analysis on the 40 DSQ items. The resulting four-factor solution consisted of *maladaptive action patterns* relating to an “inability to deal with [one’s] impulses by taking constructive action on [one’s] own behalf” (M. Bond, 1992, p. 139), *image-distorting*, relating to “splitting of the image of the self and other into good and bad, strong and weak” (M. Bond, 1992, p. 139), *adaptive*, relating to “a constructive type of mastery of the conflict” (M. Bond, 1992, p. 140), and *altruism*, relating to “a need to perceive one’s self as being kind, helpful to others, and never angry” (M. Bond, 1992, p. 140). Details of the factor analytic analyses and the resultant solution are included in the Supplement.

FFNI vulnerable manifested statistically significant weak to strong correlations with two of three defense style factors (adaptive coping [negative],

maladaptive action patterns [positive]). FFNI grandiose narcissism exhibited significant relations with three of the four factors (image-distorting and adaptive coping [positive], altruism [negative]). Two of four correlates (exception: altruism) were significantly different across FFNI grandiose and vulnerable dimensions. FFNI antagonism exhibited moderate to large correlations with three of four factors (maladaptive action patterns and image-distorting [positive], altruism [negative]). FFNI extraversion manifested moderate positive correlations with two of four factors (image-distorting, adaptive coping). FFNI neuroticism manifested weak to moderate correlations with all factors (maladaptive action patterns and altruism [positive], image-distorting and adaptive coping [negative]). Correlates were significantly different across FFNI antagonism, extraversion, and neuroticism except for maladaptive action patterns and adaptive coping (across antagonism and neuroticism) and altruism (across extraversion and neuroticism).

*Intraclass Correlations.* Profiles of psychopathology correlates were compared across FFNI dimensions as a means of comparing their absolute similarities (McCrae, 2008). FFNI vulnerable and grandiose narcissism factors exhibited inverse but small patterns of relations with markers of psychopathology ( $ICC = -.19$ ). FFNI grandiose narcissism exhibited similar patterns of relations vis-à-vis FFNI antagonism ( $ICC = .66$ ) and FFNI extraversion ( $ICC = .68$ ), but an inverse pattern of relations vis-à-vis FFNI neuroticism ( $ICC = -.51$ ). FFNI vulnerable narcissism exhibited strongly to moderately similar patterns of relations vis-à-vis FFNI neuroticism ( $ICC = .89$ ) and FFNI antagonism ( $ICC = .47$ ), but a strongly inverse pattern of relations vis-à-vis FFNI extraversion ( $ICC = -.52$ ).

## DISCUSSION

Study 1 results revealed three key findings with respect to relations between narcissism and psychopathology. First, vulnerable narcissism exhibited stronger links to psychopathology than did grandiose narcissism, as expected (e.g., Miller et al., 2010, 2011). Second, psychopathological correlates of narcissism are primarily linked to the neurotic and antagonistic components of narcissism (i.e., FFNI antagonism, FFNI neuroticism) relative to agentic extraversion. Notably, while neuroticism appears to primarily underlie psychopathological tendencies in narcissistic individuals, antagonism appears to contribute meaningfully as well, with relations to self-hate guilt; anxious and avoidant attachment style; maladaptive views of self, world, and future; and maladaptive action patterns.<sup>1</sup> Third, grandiose narcissism appears to be largely protective against psychopathology, most likely due to its association with agentic extraversion. Using the trifurcated model of narcissism was useful for (a) elucidating the dimensions of grandiose narcissism that underlie psychopathological

1. Providing further support for FFNI antagonism's role, FFNI antagonism bore significant relations with clinically relevant outcomes after controlling for FFNI extraversion and neuroticism in multiple regression analyses (see Supplement Table S5).

tendencies, namely antagonism versus agentic extraversion; and (b) revealing that both components of vulnerable narcissism (antagonism and neuroticism) are linked to psychopathology, while one of two components of grandiose narcissism (antagonism) is linked to psychopathology.

## STUDY 2

In Study 2, we expanded upon Study 1 by (a) examining links between dimensions of narcissism and additional clinically important features of psychopathology and (b) investigating which dimensions of narcissism are associated with deficits in well-being. We used two prominent measures of narcissism (i.e., FFNI; Pathological Narcissism Inventory [PNI; Pincus et al., 2009]) in order to demonstrate associations with clinical correlates that are not tied to just one operationalization of narcissism. We chose to include the PNI due to its status as a widely used measure of narcissism, our interest in comparing its nomological network to that of the FFNI, and our desire to link our results to relevant previous work (e.g., Thomas, Wright, Lukowitsky, Donnellan, & Hopwood, 2012).

## METHOD

### Participants

A power analysis indicated that a sample of at least 360 participants would be sufficiently well-powered to detect correlations as small as .18 using a  $p < .01$  threshold for significance. A total of 417 participants were recruited from Amazon's MTurk. Of these, 29 participants were excluded from the dataset because they failed attention checks and did not complete all questionnaire items, leaving a final sample of 388 participants. Most participants reported being male (54%) and White (71%). The average age was 35 years ( $SD = 11$ ), with a range of 19–80 years. The total  $N$  for all scales analyzed in this study included the full sample. The study received IRB approval from the University of Pennsylvania as part of a larger study.

### Measures

*Five-Factor Narcissism Inventory, Short Form (FFNI-SF)*. Same as Study 1. Reliability: Vulnerable Narcissism ( $\alpha = .89$ ), Grandiose Narcissism ( $\alpha = .96$ ), Antagonism ( $\alpha = .96$ ), Agentic Extraversion ( $\alpha = .90$ ), and Neuroticism ( $\alpha = .88$ ).

*Pathological Narcissism Inventory (PNI)*. The PNI (Pincus et al., 2009) is a 52-item self-report measure of seven traits relating to narcissistic grandiosity and vulnerability. Subscales related to narcissistic grandiosity include exploitativeness ( $\alpha = .60$ ), grandiose fantasy ( $\alpha = .79$ ), and self-sacrificing self-enhancement ( $\alpha = .76$ ). Subscales related to narcissistic vulnerability consist

of entitlement rage ( $\alpha = .75$ ), contingent self-esteem ( $\alpha = .84$ ), hiding the self ( $\alpha = .74$ ), and devaluing ( $\alpha = .69$ ).

*Acceptance and Action Questionnaire, Second Version (AAQ-II)*. The AAQ-II (F. W. Bond et al., 2011) is a seven-item questionnaire that measures experiential avoidance and psychological inflexibility, the core constructs underlying acceptance and commitment therapy (ACT; Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Hayes, Strosahl, & Wilson, 1999). *Experiential avoidance* can be defined as “the attempt to alter the form, frequency, or situational sensitivity of difficult private events (i.e., thoughts, feelings, and physiological sensations), even when doing so leads to actions that are inconsistent with one’s values and goals (e.g., avoiding anxiety even when doing so prevents people from pursuing a long-held goal” (F. W. Bond et al., 2011, p. 678). *Psychological inflexibility* can be defined as “the rigid dominance of psychological reactions over chosen values and contingencies in guiding action; this often occurs when people fuse with evaluative and self-descriptive thoughts and attempt to avoid experiencing unwanted internal events, which has the ‘ironic’ effect of enhancing people’s distress . . . reducing their contact with the present moment, and decreasing their likelihood of taking values-based actions” (F. W. Bond et al., 2011, p. 678). Sample items include: “My painful experiences and memories make it difficult for me to live a life that I would value,” “I’m afraid of my feelings,” and “I worry about not being able to control my worries and feelings.” The scale’s reliability was .92.

*Leary Impostor Scale (LIS)*. The LIS (Leary, Patton, Orlando, & Funk, 2000) is a seven-item scale that measures the impostor syndrome ( $\alpha = .95$ ). Sample items include: “Sometimes I am afraid I will be discovered for who I really am,” “I’m afraid people important to me may find out that I’m not as capable as they think I am,” “I tend to feel like a phony,” and “In some situations I feel like a ‘great pretender’; that is, I’m not as genuine as others think I am.”

*Sense of Self Scale (SOSS)*. The SOSS (Flury & Ickes, 2007) is a 12-item scale that measures the extent to which one has a weak versus strong sense of self. While the scale is unidimensional, it has items relating to four components of a weak sense of self: (1) *Tendency to confuse one’s feelings, thoughts, and perspectives with those of others* (e.g., “I’m not sure that I can understand or put much trust in my thoughts and feelings”); (2) *Lack of understanding of oneself* (e.g., “‘Who am I?’ is a question that I ask myself a lot”); (3) *Sudden shifts in feelings, opinions, and values* (e.g., “I wish I were more consistent in my feelings”); and (4) *Feeling of a tenuous existence* (e.g., “I often think how fragile my existence is”). In prior research, the SOSS predicted splitting, identity impairment, borderline symptomatology, low self-esteem, low individuation, and engaging in behaviors indicative of a weak sense of self (Flury & Ickes, 2007). The reliability of the scale was .90.

*Rosenberg Self-Esteem Scale (RSES)*. The RSES (Rosenberg, 1965) is a 10-item global measure of self-esteem that measures both positive and negative

feelings about the self. Sample items include: “I feel I am a person of worth, at least on an equal basis of others” and “I feel that I have a number of good qualities.” The reliability of the scale was .92.

*The Authenticity Scale (TAS)*. The TAS (Wood, Linley, Maltby, Baliousis, & Joseph, 2008) is a 12-item scale that has three subscales: *authentic living* (e.g., “I live in accordance with my values and beliefs”;  $\alpha = .79$ ), *alienation from the self* (e.g., “I feel out of touch with the ‘real me’”;  $\alpha = .92$ ), and *accepting external influence* (“I always feel I need to do what others expect me to do”;  $\alpha = .90$ ).

*Psychological Well-Being Scale (PWBS)*. We administered the 42-item version of the PWBS (Ryff, 1989) that measures six dimensions of well-being: *autonomy* (e.g., “My decisions are not usually influenced by what everyone else is doing”;  $\alpha = .75$ ), *environmental mastery* (“In general, I feel I am in charge of the situation in which I live”;  $\alpha = .82$ ), *personal growth* (“I think it is important to have new experiences that challenge how you think about yourself and the world”;  $\alpha = .77$ ), *positive relations* (“Maintaining close relationships has been difficult and frustrating for me,” reverse-coded;  $\alpha = .81$ ), *purpose in life* (“I have a sense of direction and purpose in life”;  $\alpha = .72$ ), and *self-acceptance* (“In general, I feel confident and positive about myself”;  $\alpha = .88$ ).

## RESULTS AND DISCUSSION

### Bivariate Correlations

FFNI grandiose and vulnerable narcissism were significantly positively correlated ( $r = .40, p < .01$ ),<sup>2</sup> as were PNI grandiosity and vulnerability ( $r = .59, p < .01$ ). FFNI grandiose narcissism was positively correlated with FFNI antagonism ( $r = .91, p < .01$ ) and extraversion ( $r = .85, p < .01$ ), but not with neuroticism ( $r = -.09, p = ns$ ). FFNI vulnerable narcissism was positively correlated with FFNI antagonism ( $r = .64, p < .01$ ), extraversion ( $r = .22, p < .01$ ), and neuroticism ( $r = .76, p < .01$ ). PNI grandiosity was positively correlated with FFNI antagonism ( $r = .60, p < .01$ ), extraversion ( $r = .70, p < .01$ ), and neuroticism ( $r = .27, p < .01$ ). PNI vulnerability was positively correlated with FFNI antagonism ( $r = .65, p < .01$ ), extraversion ( $r = .29, p < .01$ ), and neuroticism ( $r = .64, p < .01$ ). FFNI antagonism was positively correlated with extraversion ( $r = .60, p < .01$ ) and neuroticism ( $r = .14, p < .01$ ), and FFNI neuroticism was not significantly correlated with extraversion ( $r = -.10, p = ns$ ). Bivariate correlations among self-report narcissism subscales can be found in Supplement Table S6. Bivariate correlations among all variables can be found in Supplement Table S7.

2. Of note, this effect size is somewhat atypical in the literature. However, scoring errors were assiduously ruled out.

### Vulnerable and Grandiose Narcissism and Clinically Relevant Outcomes

To examine relations between dimensions of narcissism and markers of psychopathology and well-being, we conducted correlational analyses investigating the relation between narcissism dimensions, on the one hand, and markers of psychopathology and well-being, on the other. Due to the number of significance tests conducted, a  $p$  value equal to or less than .01 was set. To determine if correlates differed across narcissism dimensions, tests of dependent  $r$  analyses were conducted using a  $p$  value equal to or less than .01. Results indicated that all pairs of correlates between FFNI grandiose and vulnerable narcissism, as well as between PNI grandiosity and vulnerability, were significantly different. Results for differences in correlates across FFNI antagonism, extraversion, and neuroticism are discussed below. Results for markers of psychopathology and well-being can be found in Table 2.

We next conducted profile matching analyses in which we compared (using intraclass correlations) the profiles of correlations of FFNI grandiose

**TABLE 2. Correlations Between Narcissistic Traits and Markers of Psychopathology and Well-Being**

	PNI Grandiosity	PNI Vulnerability	FFNI Grandiose	FFNI Vulnerable	FFNI Antagonism	FFNI Extraversion	FFNI Neuroticism
<b>Psychopathology</b>							
Experiential Avoidance (AAQ-II)	.36*	.74*	.28*	.76*	.50*a	.07	.57*b
Impostor Syndrome	.42*	.72*	.30*	.69*	.47*a	.11	.57*b
Weak Sense of Self	.43*	.76*	.32*	.74*	.52*a	.13	.59*b
Self-Alienation	.37*	.67*	.39*	.62*	.54*	.16*	.41*
Accepting External Influence	.49*	.60*	.35*	.52*	.44*a	.23*	.48*b
Rosenberg Self- Esteem	-.19*	-.57*	-.08	-.61*	-.30*	.12	-.58*
<b>Well-Being</b>							
Life Satisfaction	.15*	-.22*	.26*	-.33*	.06	.34*	-.39*
Authentic Living	-0.04	-.35*	-0.09	-.33*	-.26*a	.09	-.34*b
Autonomy	-.22*	-.57*	-0.07	-.56*	-.28*	.07	-.65*
Environmental Mastery	-.17*	-.61*	-0.09	-.66*	-.33*	.11	-.57*
Personal Growth	-0.1	-.54*	-.14*	-.53*	-.40*a	.17*	-.46*b
Positive Relations	-0.03	-.50*	-.15*	-.52*	-.39*a	.15*	-.34*b
Purpose	-.15*	-.52*	-.18*	-.54*	-.40*a	.09	-.39*b
Self-Acceptance	-0.06	-.50*	0.06	-.60*	-.20*	.23*	-.60*

Note. PNI = Pathological Narcissism Inventory; FFNI = Five-Factor Narcissism Inventory; AAQ-II = Acceptance and Action Questionnaire, Second Version. Correlates significantly differed at  $p < .01$  between FFNI grandiose and vulnerable, PNI grandiosity and vulnerability, FFNI antagonism and extraversion, FFNI antagonism and neuroticism, and FFNI extraversion and neuroticism, except where ab superscripts designate no significant difference (test of dependent  $r$ s; Cohen & Cohen, 1983); Authentic Living is a subscale of the Authenticity scale; Self-Alienation and Accepting External Influence are subscales of the Authenticity scale; \* $p < .01$ .

and vulnerable narcissism dimensions, on the one hand, and the profiles of correlations of FFNI grandiose, vulnerable, antagonism, extraversion, and neuroticism dimensions, and PNI grandiosity and vulnerability, on the other.

### Markers of Psychopathology

*Experiential Avoidance (AAQ-II), Impostor Syndrome, Weak Sense of Self.* FFNI vulnerable narcissism and PNI vulnerability manifested strong significant correlations with all psychopathology scales. FFNI neuroticism exhibited the same pattern of associations. FFNI grandiose narcissism and PNI grandiosity manifested weak to moderate significant associations with all scales. FFNI antagonism manifested moderate significant correlations with all scales, whereas FFNI extraversion manifested weak correlations with two of three scales (exception: experiential avoidance). Overall, PNI grandiosity exhibited stronger relations with correlates than did FFNI grandiose narcissism. Correlates were significantly different between FFNI antagonism and extraversion, and between extraversion and neuroticism, but not between antagonism and neuroticism.

*Self-Alienation and Accepting External Influence (Authenticity Scale).* FFNI vulnerable narcissism and neuroticism as well as PNI vulnerability manifested strong correlations with both subscales. FFNI grandiose narcissism and PNI grandiosity manifested moderate correlations with both subscales. FFNI antagonism exhibited moderate to strong associations with both subscales in directions related to inauthenticity. FFNI grandiose narcissism and PNI grandiosity manifested moderate correlations with both subscales. Correlates were different across FFNI antagonism, extraversion, and neuroticism, except for accepting external influence (between antagonism and neuroticism).

*Self-Esteem.* FFNI and PNI vulnerable narcissism manifested strong negative correlations with self-esteem. FFNI antagonism and vulnerable manifested significant moderate to strong (respectively) negative correlations with self-esteem. PNI grandiosity, but not FFNI grandiose narcissism, manifested a weak negative correlation with self-esteem. Correlates were significantly different across FFNI antagonism, extraversion, and neuroticism.

### Markers of Well-Being

*Life Satisfaction.* FFNI vulnerable narcissism and FFNI neuroticism manifested moderate negative correlations with life satisfaction, while PNI vulnerability manifested a weak negative correlation. FFNI grandiose narcissism, FFNI extraversion, and PNI grandiosity manifested weak to moderate positive correlations. FFNI antagonism was not significantly related to life satisfaction. Correlates were significantly different across FFNI antagonism and extraversion, and neuroticism.

*Authentic Living (Authenticity Scale).* FFNI vulnerable narcissism, FFNI neuroticism, and PNI vulnerability manifested moderate negative correlations with authentic living. FFNI grandiose narcissism, FFNI extraversion, and PNI grandiosity manifested null correlations. FFNI antagonism exhibited a weak, negative relation. Correlates were significantly different between FFNI antagonism and extraversion, and extraversion and neuroticism, but not antagonism and neuroticism.

*Psychological Well-Being Scale.* FFNI and PNI vulnerable narcissism manifested strong negative correlations with all subscales. FFNI neuroticism manifested moderate to strong correlations with all subscales. FFNI antagonism exhibited a similar pattern of weak to moderate magnitude. FFNI grandiose narcissism manifested weak negative correlations with three of six subscales (personal growth, positive relations, purpose). PNI grandiosity manifested weak negative correlations with a different set of subscales (autonomy, environmental mastery, purpose). FFNI extraversion manifested weak positive correlations with three of six subscales (personal growth, positive relations, self-acceptance). Correlates were different across FFNI antagonism, extraversion, and neuroticism, except for personal growth, positive relations, and purpose (between antagonism and neuroticism).

#### Intraclass Correlations

Profiles of clinical correlates were compared across narcissism factors. FFNI vulnerable and grandiose narcissism exhibited moderately similar patterns of relations with markers of psychopathology and well-being ( $ICC = .50$ ). FFNI grandiose narcissism exhibited a strongly similar pattern of relations vis-à-vis PNI grandiosity ( $ICC = .91$ ) and FFNI antagonism ( $ICC = .78$ ), a moderately similar pattern of relations vis-à-vis PNI vulnerability ( $ICC = .54$ ) and FFNI Neuroticism ( $ICC = .49$ ), and a weakly similar pattern vis-à-vis FFNI extraversion ( $ICC = .17$ ). FFNI vulnerable narcissism exhibited an almost interchangeable pattern of relations vis-à-vis PNI vulnerability ( $ICC = 1.00$ ) and FFNI neuroticism ( $ICC = .98$ ), a strongly similar pattern of relations vis-à-vis PNI grandiosity ( $ICC = .64$ ) and FFNI antagonism ( $ICC = .88$ ), and a dissimilar pattern of relations vis-à-vis FFNI extraversion ( $ICC = -.09$ ).

#### DISCUSSION

Study 2 results revealed four key findings with respect to relations between narcissism and psychopathology. First, consistent with Study 1, vulnerable narcissism exhibits stronger links to psychopathology relative to grandiose narcissism as was expected (e.g., Miller et al., 2011). Neuroticism substantially underlies the relation between vulnerable narcissism and elements of psychopathology. Second, FFNI grandiose narcissism and PNI grandiosity exhibited meaningful relations with a number of self-related markers of psychopathology, including impostor syndrome, self-alienation, and accepting external influence, which indexes a belief in needing to conform to the expectations of others. Third, psychopathological traits appear to be meaningfully



linked to only two of three components of narcissism (FFNI antagonism and FFNI neuroticism); antagonism bore consistent relations to clinically relevant outcomes.<sup>3</sup> Indeed, results from the trifurcated model suggest that FFNI antagonism largely underlies FFNI grandiose narcissism's association with psychopathology. Nevertheless, FFNI extraversion exhibited weak relations with a number of indicators of inauthenticity, including self-alienation and accepting external influence. Fourth, the pattern of correlates was highly similar across FFNI and PNI two-factor models, with the qualification that PNI grandiosity generally bore stronger relations to psychopathology than FFNI grandiose narcissism (e.g., self-esteem). This pattern is in line with findings suggesting that PNI grandiosity may not be adequately differentiated from vulnerable content (e.g., Miller, Lynam, & Campbell, 2016).

Study 2 results revealed three key findings with respect to relations between narcissism and well-being. First, two of three components of narcissism (FFNI antagonism and FFNI neuroticism) appear to largely underlie deficits in well-being. Second, FFNI extraversion appears to be positively related to the majority of well-being markers and may be protective for grandiosely narcissistic individuals. Third, the FFNI two-factor model and the PNI model appeared to bear similar patterns of relations to well-being. As in Study 1, the trifurcated model was useful for uncovering the aspects of narcissism that appear to underlie psychopathology and well-being.

## GENERAL DISCUSSION

The purpose of this investigation was to review and delineate the nuanced relations between grandiose and vulnerable dimensions of narcissism, on the one hand, and important clinical correlates, on the other. To elucidate these issues, we drew on the trifurcated model of narcissism (Miller, Lynam, McCain, et al., 2016; Miller, Lynam, et al., 2017; cf. Krizan & Herlache, 2018), in which narcissistic personality consists of three dimensions: antagonism, agentic extraversion, and neuroticism. Drawing on this more comprehensive model of narcissism allowed us to capture clinical implications that have been obscured in the prior literature.

Our results offer four key findings that contribute important knowledge to the field. First, consistent with the prior literature, vulnerable narcissism was consistently and broadly associated with psychopathology and maladaptive coping (e.g., Miller et al., 2010, 2018). On the basis of the overall pattern, the results suggest that the core deficits in vulnerable narcissism are those that are strongly colored by neuroticism, including greater guilt; anxious and avoidant attachment; negative irrational beliefs about the self, world, and future; and maladaptive, impulsive, and avoidant ways of coping with stress. The findings with the cognitive triad are particularly notable because they

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3. Providing further support, associations between FFNI antagonism and clinically relevant outcomes survived even after partialing out variance from FFNI extraversion and neuroticism in multiple regression analyses (see Supplement Table S8).

suggest that vulnerable narcissism is associated not only with negative views of the self, but also with a pessimistic *future* outlook, a potential target for interventions that address the optimism of the future self, not just evaluations of the current self (Kealy, Sandhu, & Ogrodniczuk, 2017).

Second, looking at a number of measures of the self, we found self-uncertainty and inauthenticity among those scoring higher in vulnerable narcissism, including higher levels of impostor syndrome, weak sense of self, self-alienation, accepting external influence, and low self-esteem. All of these factors limit a person's quality of life, and indeed vulnerable narcissism was negatively associated with every measure of well-being we administered, including measures of life satisfaction, authentic living, autonomy, environmental mastery, personal growth, positive relations, purpose, and self-acceptance. This supports the notion that the maladaptive coping strategies and negative beliefs of those with high levels of vulnerable narcissism are stunting their personal growth.

Third, FFNI neuroticism did not fully explain the link between vulnerable narcissism and psychopathology. Many of the correlations with psychopathology, the self, and well-being were also correlated with FFNI antagonism in the trifurcated model, and supplemental analyses confirmed FFNI antagonism's association with vulnerable narcissism even after FFNI neuroticism's contribution had been removed. This is consistent with prior research suggesting that antagonism is also a core part of vulnerable narcissism—particularly entitlement, manipulateness, grandiosity, distrust, and a hostile attribution bias—and therefore has clinical implications for the treatment of NPD (antagonism is a core part of NPD).

Fourth, these findings help explain why grandiose narcissism was more of a “mixed bag” when it came to relations to clinical outcomes. On the one hand, FFNI grandiose narcissism was less consistently and strongly related to psychopathology than FFNI vulnerable narcissism. FFNI grandiose narcissism showed no relationship to adult attachment, the cognitive triad, or maladaptive action patterns, and even showed *positive* correlations with adaptive coping, life satisfaction, and image-distorting defense mechanisms, which appear to partially index boldness and fearlessness elements and FFM extraversion. This suggests that for these outcomes, the agentic extraversion dimension of grandiose narcissism may serve as a protective factor against psychopathology and also contribute to higher well-being, contributing to the “happy face of narcissism” (Rose, 2002). This may explain why those with high levels of grandiose narcissism may be satisfied with their lives, even as they remain potentially harmful to others.

With that said, one may wonder why the correlations between agentic extraversion and well-being were not even higher, considering the well-known link between extraversion and well-being reported in the literature. It is important to acknowledge that agentic extraversion is only one aspect of the extraversion domain, and it has shown more limited relations to well-being than the enthusiasm aspect of extraversion (Sun, Kaufman, & Smillie, 2018). The FFNI includes only those aspects of the extraversion domain that are most strongly related to the narcissism construct, but this does not mean that other aspects of extraversion are not equally if not more pertinent for our understanding of well-being.

Indeed, FFNI grandiose narcissism was negatively associated with more comprehensive measures of psychological well-being, including personal growth, positive relations, and purpose, as well as measures of self-uncertainty and self-fragmentation, including impostor syndrome, weak sense of self, self-alienation, and accepting external influence. Both FFNI grandiose narcissism and PNI grandiosity were associated with these indicators of inauthenticity, as well as with lower levels of purpose. These findings point to the validity of including a more comprehensive model of well-being in psychotherapy (e.g., Keyes, 2002; Seligman et al., 2006).

### IMPLICATIONS FOR CLINICAL INTERVENTION

Targeted clinical interventions for NPD remain in an early stage of evaluation and development, with no controlled treatment outcome studies having yet been completed. Nevertheless, clinical theorists and researchers suggest that a number of long-standing treatment models may lend themselves usefully to the treatment of NPD. In this section, we explore the implications that our findings may have for the pursuit of efficacious treatments. Although NPD is not interchangeable with grandiose and vulnerable narcissism, research suggests that NPD contains substantially overlapping content (e.g., Fossati et al., 2005), making the present findings clinically relevant.

The current findings have some initial implications for clinical intervention. First, researchers have posited the relevance of dialectical behavioral therapy (DBT) to vulnerable narcissism in view of evidence from case analysis (Reed-Knight & Fischer, 2011), significant overlap between BPD and vulnerable narcissism in relation to clinical correlates (Miller et al., 2010), and evidence that emotion dysregulation may underlie both disorders (e.g., Pincus & Lukowitsky, 2010). Our findings provide further support for DBT's relevance by demonstrating a relation between weak sense of self and vulnerable components of narcissism that bore similar magnitude to the relation with borderline symptoms in prior research (Flury & Ickes, 2007).

Second, the trifurcated model demonstrated that narcissistic antagonism is meaningfully related to and may underlie certain negative clinical outcomes, suggesting that antagonism represents a promising and relatively underspecified target for clinical intervention. As previous findings have suggested, targeting narcissistic antagonism could involve techniques designed to increase communal focus (Gilbert, 2005; Hofmann, Grossman, & Hinton, 2011), which has been found to reduce some of the deleterious consequences of narcissism (e.g., Finkel, Campbell, Buffardi, Kumashiro, & Rusbult, 2009) and cause short-term decrements to state narcissism (Giacomin & Jordan, 2014). Consistent with this approach, DBT's interpersonal effectiveness component of therapy could be useful for prioritizing goals related to maintaining positive relationships versus other goals (e.g., self-respect, getting what one wants) (Linehan, 2014). Any intervention that targets narcissistic antagonism, however, should be nuanced in its approach, such that strategies are tailored to the unique presentations of antagonism within grandiose (i.e., immodesty, dominance; Weiss & Miller, *in press*) versus vulnerable narcissism (i.e., distrust, hostile attribution bias, dysregulation; Miller et al., 2010).

Third, the trifurcated model demonstrated that although grandiosely narcissistic individuals were fairly free from more internalizing/distress-based aspects of psychopathology, they were not immune to issues related to a fractured self, including image-distorting defenses, impostor syndrome, self-alienation, a weak sense of self, accepting external influence, and a lack of purpose, even when partialing out antagonistic traits. These results suggest that helping patients incorporate a more valued or authentic self into the core of their identity may be clinically beneficial, a therapeutic direction that may be related to ideas within psychoanalytic theory (Kernberg, 1986; Kernberg, Yeomans, Clarkin, & Levy, 2008) and that could point to further research investigating different paths to inauthenticity. Vulnerable narcissism's inauthenticity and weak sense of self may be more related to *avoiding* negative outcomes (e.g., rejection, negative evaluation), whereas grandiose narcissism's inauthenticity and weak sense of self may be related to a motive toward *maintaining* (and projecting) a superior self-image at all times. These different causes of inauthenticity and weak sense of self may be tied to the different developmental experiences of vulnerable versus grandiose narcissism (e.g., Brummelman et al., 2015).

Fourth, we found that vulnerable narcissism was associated with a negative view of the future. These results are consistent with Kealy et al.'s (2017) observation that vulnerably narcissistic individuals hold a negative view of the future, with significantly lower optimism as well as reduced expectations of recovery and career satisfaction. A negative view of the future may be effectively addressed within a CBT model of therapy, wherein distorted future views are confronted and subjected to cognitive reframing. In addition, our finding that vulnerable narcissism was so strongly negatively correlated with personal growth suggests a possible obstacle to NPD-specific treatment, namely that vulnerably narcissistic individuals may be less invested in personal growth or improving a future self, which could manifest in in-session resistance to investment in therapy.

Fifth, the way in which we conceptualize the structure of narcissism has implications for the design of efficacious treatment protocols. The differential relations between components of narcissism and clinically relevant correlates presented here are in line with evidence of relatively separable dimensions of narcissism, and they could suggest that the most efficacious therapeutic approach is one in which the therapist flexibly and deliberately treats only those components of narcissism that are elevated in an individual on a case-by-case basis. Another conceptualization of narcissism holds that narcissistic individuals oscillate between grandiose and vulnerable states and that even grandiosely narcissistic individuals who exhibit low mean level neuroticism may be at greater risk for emotion dysregulation in reaction to stressors (e.g., Jauk, Weigle, Lehmann, Benedek, & Neubauer, 2017; Pincus & Lukowitsky, 2010). This conceptualization may guide an approach to treatment that uniformly includes psychotherapeutic elements relevant to both grandiose and vulnerable narcissism. Further investigation of whether narcissistic individuals oscillate between grandiose and vulnerable states will thus inform future treatment protocols.

## LIMITATIONS AND CONCLUSION

A primary limitation of the current study is the reliance on self-report scales, which can artificially inflate the correlations among variables due to common method variance. With that said, many of the results are consistent with the prior literature using self- and other reports, as well as the observations of clinicians. Another limitation of the study is the sampling approach. Although more diverse than undergraduate samples (e.g., Chandler & Shapiro, 2016), MTurk samples still differ from the general population (e.g., tending to be younger, better educated, less diverse, having greater cognitive ability; e.g., Berinsky, Huber, & Lenz, 2012). Nevertheless, MTurk samples are considered well-suited to clinical research (Miller, Crowe, Weiss, Maples-Keller, & Lynam, 2017), given levels of depression and anxiety symptoms that are similar to those found in community and clinical samples (Arditte, Çek, Shaw, & Timpano, 2016).

By employing the trifurcated model of narcissism and examining an array of clinically relevant outcomes, we were able to reveal in a more nuanced fashion than has been demonstrated previously the aspects of narcissism that most directly underlie clinical psychopathology and deficits in well-being. Neurotic and antagonistic components emerged as the most clinically relevant aspects of narcissism, with agentic extraversion mostly serving as a protective factor. This has important implications (a) for the assessment of NPD in future iterations of the *DSM*, which have largely excluded vulnerable traits; (b) for a closer integration between research on normal personality variation and clinical outcomes; and (c) for the design of NPD treatment protocols and future treatment outcome trials.

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## SUPPLEMENT: FACTOR STRUCTURE OF THE DEFENSE STYLE QUESTIONNAIRE IN STUDY 1

In view of findings ascribing suboptimal psychometric properties to the original Defense Style Questionnaire (DSQ) scale (e.g., Wilkinson & Ritchie, 2015), we conducted an exploratory factor analysis (EFA) on the 40 DSQ items using all available data ( $N = 277$ ; principal axis factoring with an oblimin rotation). We first employed the Parallel Analysis (PA) method of Horn (1965) and the Minimum Average Partial (MAP) method of Velicer (1976) to identify the optimal number of factors. The PA method suggested that up to four factors could be extracted, and the MAP method suggested that only four factors could be extracted. The EFA resulted in four eigenvalues with values of 1.0 or greater and a scree plot suggestive of four factors. The first five eigenvalues were as follows: 5.516, 3.156, 2.263, 1.388, and .751; the first four factors explained 30.81% of the variance. The four-factor solution loadings are presented in Table S1.

The four-factor solution was consistent with prior analyses of the DSQ (M. Bond, 1992). Loading on Factor 1—*maladaptive action patterns*—were items relating to an “inability to deal with [one’s] impulses by taking constructive action on [one’s] own behalf” (M. Bond, 1992, p. 139). This includes harboring infantile and unrealistic fantasies, projecting responsibility onto others, passive aggression, somatization, inhibition, isolation, emotional suppression, apologizing for asserting one’s needs, reactive anger when hurt or stressed, and impulsive behaviors such as eating to feel better. Loading on Factor 2—*image-distorting*—were items relating to “splitting of the image of the self and other into good and bad, strong and weak” (M. Bond, 1992, p. 139). These image-oriented items include alternating between seeing oneself as (a) fearless and superior and (b) evil and devilish; alternating between (a) cutting others down to size and (b) idealizing others; and denying unpleasant facts. Loading on Factor 3—*adaptive*—were items relating to “a constructive type of mastery of the conflict” (M. Bond, 1992, p. 140). These items included suppressing an anxiety-producing conflict until the individual is ready to deal with the issue, sticking with a current task to avoid feelings of depression or anxiety, coming up with rational reasons for why something did not work out, using humor to take the edge off painful aspects of a situation, using anticipation to predict a stressful event to better cope with the situation when it does occur, and being nice to people to deal with a situation. Loading on Factor 4—*altruism*—were items relating to “a need to perceive one’s self as being kind, helpful to others, and never angry” (M. Bond, 1992, p. 140). The highest loading items on this factor was “I get satisfaction from helping others and if this were taken away from me, I would get depression.”

The factors manifested interrelations of  $-.19$  (Factor 1 Maladaptive and Factor 2 Image-distorting),  $-.04$  (Factor 1 Maladaptive and Factor 3 Adaptive),  $.09$  (Factor 1 Maladaptive and Factor 4 Grandiose),  $.12$  (Factor 2 Image-distorting and Factor 3 Adaptive),  $-.02$  (Factor 2 Image-distorting and Factor 4 Altruism), and  $.10$  (Factor 3 Adaptive and Factor 4 Altruism). The factor scores, generated from the EFA using Thurstone regression-based weighting, were saved and used as the four-factor Maladaptive action patterns,

Image-distorting, Adaptive coping, and Altruism scores when examined in relation to the Five-Factor Narcissism Inventory (FFNI) predictor variables from Sample 1.

To further elucidate the construct identity of the EFA-generated DSQ factors, we examined correlational relations between each factor score and each FFM domain, using the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). Maladaptive action patterns exhibited moderate negative relations with BFI extraversion, agreeableness, and conscientiousness, and a strong positive relation with BFI neuroticism. Image-distorting exhibited a weak positive correlation with extraversion. Adaptive coping exhibited weak positive relations with BFI extraversion, openness, agreeableness, and conscientiousness, and a moderate negative relation with BFI neuroticism. Altruism exhibited weak to moderate positive relations with BFI neuroticism, extraversion, openness, and agreeableness (see Table S2).

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TABLE S1. Exploratory Factor Analysis of Defense Style Questionnaire

Item	Defense Style	Maladaptive Action Patterns	Image- distorting	Adaptive	Altruism
14. I get more satisfaction from my fantasies than from my real life.	Autistic Fant	<b>0.73</b>	-0.03	-0.02	-0.14
29. I am sure I get a raw deal from life.	Projection	<b>0.68</b>	0.04	-0.13	0.05
17. I work more things out in my daydreams than in my real life.	Autistic Fant	<b>0.62</b>	0.01	-0.02	-0.07
13. I'm a very inhibited person.	Devaluation	<b>0.60</b>	-0.13	-0.01	-0.08
6. People tend to mistreat me.	Projection	<b>0.59</b>	0.07	-0.05	0.08
36. No matter how much I complain, I never get a satisfactory response.	Passive Agg	<b>0.58</b>	0.13	-0.02	-0.05
12. I get physically ill when things aren't going well for me.	Somatization	<b>0.54</b>	-0.07	0.03	0.22
31. Doctors never really understand what is wrong with me.	Dissociation	<b>0.53</b>	0.06	0.04	0.08
32. After I fight for my rights, I tend to apologize for my assertiveness.	Undoing	<b>0.45</b>	0.05	0.14	0.29
27. I get a headache when I have to do something I don't like.	Somatization	<b>0.43</b>	0.01	0.12	0.09
20. I get openly aggressive when I feel hurt.	Acting out	<b>0.36</b>	<b>0.31</b>	-0.21	0.07
11. I often act impulsively when something is bothering me.	Acting out	<b>0.34</b>	0.28	-0.02	-0.01
37. Often I find that I don't feel anything when the situation would seem to warrant strong emotions.	Isolation	<b>0.33</b>	0.13	0.26	-0.31
40. If I have an aggressive thought, I feel the need to do something to compensate for it.	Undoing	<b>0.31</b>	0.24	0.05	0.19
33. When I'm depressed or anxious, eating makes me feel better.	Dissociation	<b>0.30</b>	-0.18	0.05	0.03
18. I fear nothing.	Denial	-0.12	<b>0.65</b>	-0.01	-0.16
9. I ignore danger as if I was Superman.	Dissociation	-0.03	<b>0.54</b>	-0.08	0.13
19. Sometimes I think I'm an angel and other times I think I'm a devil.	Splitting	<b>0.30</b>	<b>0.52</b>	0.03	0.15
15. I've special talents that allow me to go through life with no problems.	Dissociation	-0.11	<b>0.52</b>	0.21	-0.14
24. There is someone I know who can do anything and who is absolutely fair and just.	Idealization	-0.06	<b>0.48</b>	0.03	0.22
10. I pride myself on my ability to cut people down to size.	Devaluation	0.18	<b>0.47</b>	-0.04	-0.20
22. As far as I'm concerned, people are either good or bad.	Splitting	0.10	<b>0.45</b>	-0.13	0.10
21. I always feel that someone I know is like a guardian angel.	Idealization	0.03	<b>0.44</b>	0.14	<b>0.39</b>
23. If my boss bugged me, I might make a mistake in my work or work more slowly so as to get back at him.	Passive Agg	0.31	<b>0.37</b>	-0.09	-0.13
8. People say I tend to ignore unpleasant facts as if they don't exist.	Denial	0.12	<b>0.35</b>	0.11	-0.07
38. Sticking to the task at hand keeps me from feeling depressed or anxious.	Sublimation	0.06	0.05	<b>0.56</b>	0.06

(continued)

TABLE S1. *Continued*

Item	Defense Style	Maladaptive Action Patterns	Image- distorting	Adaptive	Altruism
25. I can keep the lid on my feelings if letting them out would interfere with what I'm doing.	Suppression	-0.03	-0.03	<b>0.55</b>	-0.17
26. I'm usually able to see the funny side of an otherwise painful predicament.	Humor	-0.16	0.04	<b>0.53</b>	-0.06
30. When I have to face a difficult situation, I try to imagine what it will be like and plan ways to cope with it.	Anticipation	0.09	-0.18	<b>0.52</b>	0.22
2. I'm able to keep a problem out of my mind until I have time to deal with it.	Suppression	<b>-0.31</b>	0.25	<b>0.44</b>	-0.16
4. I am able to find good reasons for everything I do.	Rationalization	<b>-0.31</b>	0.06	<b>0.44</b>	0.06
5. I'm able to laugh at myself pretty easily.	Humor	-0.23	-0.03	<b>0.44</b>	0.14
35. If I can predict that I'm going to be sad ahead of time, I can cope better.	Anticipation	0.11	0.09	<b>0.39</b>	0.19
28. I often find myself being very nice to people who by all rights I should be angry at.	Reaction Form	0.27	-0.10	<b>0.33</b>	0.23
16. There are always good reasons when things don't work out for me.	Rationalization	0.01	0.18	<b>0.30</b>	0.00
1. I get satisfaction from helping others and if this were taken away from me, I would get depressed.	Altruism	0.14	-0.02	0.23	<b>0.55</b>
39. If I were in a crisis, I would seek out another person who had the same problem.	Altruism	0.14	-0.03	0.27	<b>0.36</b>
3. I work out my anxiety through doing something creative like painting or woodwork.	Sublimation	0.05	0.04	0.25	<b>0.32</b>
7. If someone mugged me and stole my money, I'd rather he be helped than punished.	Reaction Form	-0.01	0.03	0.04	<b>0.23</b>
34. I'm often told that I don't show my feelings.	Isolation	<b>0.33</b>	0.02	0.28	<b>-0.53</b>

Note. Autistic Fant = Autistic Fantasy; Reaction Form = Reaction Formation; Passive Agg = Passive Aggression; Principal axis factor analysis with oblimin rotation was used to produce factor loadings. Bolding indicates loading  $\geq .30$ .

**TABLE S2. Relations Between Defense Styles and FFM Personality**

DSQ Factor	BFI N	BFI E	BFI O	BFI A	BFI C
Maladaptive Action Patterns	.61*	-.44*	-.07	-.38*	-.36*
Image-distorting	-.06	.24*	-.01	-.13	-.06
Adaptive coping	-.34*	.24*	.22*	.25*	.19*
Altruism	.22*	.23*	.37*	.45*	.09

\* $p < .01$ .

**TABLE S3. Bivariate Correlations Among FFNI Subscales: Study 1**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. FFNI Acclaim Seeking														
2. FFNI Arrogance	.41*													
3. FFNI Authoritativeness	.59*	.35*												
4. FFNI Distrust	0.09	.23*	-.05											
5. FFNI Entitlement	.38*	.68*	.36*	.17*										
6. FFNI Exhibitionism	.48*	.25*	.50*	-.19*	.31*									
7. FFNI Exploitativeness	.39*	.60*	.31*	.27*	.59*	.26*								
8. FFNI Grandiose Fantasies	.50*	.40*	.35*	.19*	.45*	.39*	.40*							
9. FFNI Indifference	0.1	.36*	.22*	0.05	.25*	-.06	.20*	0.04						
10. FFNI Lack Empathy	0.05	.44*	0.07	.31*	.36*	-.17*	.49*	.16*	.40*					
11. FFNI Manipulativeness	.42*	.43*	.62*	0.15	.46*	.39*	.54*	.34*	.17*	.25*				
12. FFNI Need For Admiration	-.19*	-.02	-.30*	.26*	-.05	-.01	0	0.13	-.52*	-.09	-.09			
13. FFNI Reactive Anger	0.13	.39*	0.14	.35*	.33*	0.12	.25*	.36*	-.09	0.11	.24*	.40*		
14. FFNI Shame	-.07	0	-.015	.24*	0.02	-.03	0.02	0.08	-.49*	-.01	0.01	.62*	.35*	
15. FFNI Thrill Seeking	.32*	.37*	.32*	0.11	.42*	.33*	.39*	.35*	.16*	.17*	.42*	0.03	.24*	-.04

\* $p < .01$ .

TABLE S4. Bivariate Correlations Among All Variables: Study 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1. FFNI Grandiose Narcissism																									
2. FFNI Vulnerable Narcissism	0.07																								
3. FFNI Antagonism Factor	.86*	.42*																							
4. FFNI Extraversion Factor	.82*	0.02	.51*																						
5. FFNI Neuroticism Factor	-.29*	.75*	-.006	-.012																					
6. BFI Negative Emotionality	-.20*	.63*	0.07	-.23*	.53*																				
7. BFI Extraversion	.43*	-.35*	0.09	.64*	-.32*	-.42*																			
8. BFI Open Mindedness	-0.01	-0.1	-.17*	.19*	0.05	0.04	.30*																		
9. BFI Agreeableness	-.30*	-.42*	-.56*	0.03	-0.03	-.28*	.29*	.36*																	
10. BFI Conscientiousness	0.08	-.26*	-0.1	.23*	-.18*	-.37*	.33*	0.13	.34*																
11. IQG Total	-.16*	.48*	-.005	-0.04	.51*	.53*	-.20*	0.07	0.1	-.17*															
12. Survival Guilt	-.35*	.31*	-.27*	-.17*	.41*	.48*	-.17*	.18*	.21*	-0.15	.84*														
13. Separation Guilt	-0.05	0.09	-0.1	0.08	.18*	0.02	0.03	-0.01	.28*	0.12	.66*	.34*													
14. Omnipotence Guilt	-.21*	.28*	-.23*	0.03	.42*	.31*	0	.18*	.33*	-0.04	.76*	.59*	.60*												
15. Self-Hate Guilt	0.1	.65*	.35*	-0.03	.46*	.64*	-.37*	-0.1	-.38*	-.34*	.69*	.48*	0.14	.21*											
AAS																									
16. Anxiety	-0.05	.53*	.16*	-0.12	.39*	.49*	-.36*	-0.07	-.28*	-.26*	.41*	.33*	0.01	.22*	.57*										
17. Avoidance	0.01	.49*	.27*	-.16*	.24*	.39*	-.46*	-.16*	-.49*	-0.13	.18*	0.14	-.17*	-0.07	.50*	.63*									
18. Negative Triad Total	-0.07	.61*	.25*	-.23*	.42*	.67*	-.54*	-0.12	-.42*	-.40*	.45*	.36*	-0.05	0.05	.78*	.56*	.59*								
19. View Self	0.08	-.60*	-.22*	.23*	-.45*	-.68*	.53*	0.14	.42*	.48*	-.49*	-.39*	0.02	-0.08	-.80*	-.57*	-.53*	-.95*							
20. View World	-0.07	-.59*	-.34*	0.09	-.31*	-.55*	.43*	0.1	.42*	.27*	-.34*	-.29*	0.13	0	-.67*	-.53*	-.64*	-.87*	.75*						
21. View Future	0.14	-.51*	-0.15	.29*	-.38*	-.60*	.50*	0.1	.33*	.33*	-.39*	-.31*	0.01	-0.04	-.66*	-.43*	-.48*	-.93*	.83*	.72*					
DSQ Total																									
22. Maladaptive Action Patterns	0.08	.67*	.33*	-0.04	.42*	.66*	-.42*	-0.04	-.37*	-.34*	.57*	.45*	0.08	.23*	.79*	.64*	.57*	.76*	-.75*	-.73*	-.63*				
23. Imagedistorting	.63*	0.09	.61*	.45*	-.19*	-0.02	.23*	-0.1	-0.13	-0.06	0.12	-0.07	0.12	-0.07	.31*	0.07	0.02	0.1	-0.12	-.16*	-0.01	.26*			
24. Adaptive	.18*	-.19*	-0.01	.30*	-0.15	-.31*	.25*	.23*	.26*	.21*	0.03	0.07	0.09	0.05	-0.09	-0.1	-0.13	-.31*	.29*	.23*	.33*	-0.06	0.13		
25. Altruism	-.21*	0.05	-.32*	0.06	.24*	.24*	.24*	.38*	.45*	0.09	.47*	.52*	.32*	.54*	0.09	0.01	-0.27*	-0.05	0.05	0.05	0.03	0.12	-0.02	0.14	

\*p < .01.

**TABLE S5. Study 1 Markers of Psychopathology Regressed on Narcissistic Traits in Multiple Regression**

	FFNI Antagonism	FFNI Extraversion	FFNI Neuroticism
<b>Interpersonal Guilt Questionnaire (IGQ)</b>			
Survival Guilt	-.04	.04	.51*
Separation Guilt	-.26*	.01	.39*
Omnipotence Guilt	-.19*	.21*	.20*
SelfHate Guilt	-.33*	.25*	.43*
	.49*	-.22*	.46*
<b>Adult Attachment Scale-Revised (AAS)</b>			
Anxiety	.30*	-.23*	.38*
Avoidance	.48*	-.39*	.22*
<b>Cognitive Triad Inventory (CTI)</b>	.50*	-.44*	.39*
View Self	-.46*	.42*	-.43*
View World	-.52*	.32*	-.30*
View Future	-.40*	.45*	-.34*
<b>Defense Style Questionnaire (DSQ)</b>			
Maladaptive Action Patterns	.47*	-.22*	.42*
Image-distorting	-.22*	.39*	-.12*
Adaptive coping	-.22*	.39*	-.12
Altruism	-.47*	.33*	.25*

\* $p < .01$ .

TABLE S6. Bivariate Correlations of Self Report Narcissism Subscales: Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1. PNI Contingent Self Esteem																						
2. PNI Exploitative	.16*																					
3. PNI SSSE	.42*	.39*																				
4. PNI Hiding the Self	.47*	.08	.28*																			
5. PNI Grandiose Fantasies	.56*	.28*	.51*	.47*																		
6. PNI Devaluing	.67*	.26*	.37*	.51*	.48*																	
7. PNI Entitlement Rage	.71*	.30*	.37*	.43*	.52*	.73*																
8. FFNI Acclaim Seeking	.02	.41*	.35*	.02	.40*	.13*	.16*															
9. FFNI Arrogance	.40*	.51*	.38*	.15*	.39*	.54*	.56*	.43*														
10. FFNI Authoritativeness	-.01	.65*	.35*	-.04	.20*	.20*	.17*	.54*	.53*													
11. FFNI Distrust	.39*	.17*	.10	.52*	.25*	.46*	.41*	-.01	.29*	.02												
12. FFNI Entitlement	.44*	.52*	.37*	.14*	.42*	.54*	.59*	.37*	.80*	.46*	.30*											
13. FFNI Exhibitionism	.30*	.49*	.51*	.06	.49*	.31*	.33*	.51*	.50*	.56*	.00	.51*										
14. FFNI Exploitativeness	.49*	.54*	.29*	.19*	.36*	.55*	.61*	.27*	.70*	.40*	.41*	.74*	.41*									
15. FFNI Grandiose Fantasies	.39*	.38*	.37*	.21*	.67*	.42*	.46*	.46*	.51*	.37*	.20*	.57*	.61*	.52*								
16. FFNI Indifference	-.22*	.39*	-.05	-.07	-.03	.04	-.02	.29*	.30*	.46*	.10	.25*	.20*	.24*	.13							
17. FFNI Lack Empathy	.35*	.29*	.09	.20*	.26*	.42*	.49*	.14*	.62*	.23*	.39*	.58*	.17*	.64*	.36*	.38*						
18. FFNI Manipulativeness	.21*	.83*	.31*	.11	.28*	.32*	.36*	.34*	.58*	.63*	.26*	.58*	.43*	.65*	.42*	.39*	.43*					
19. FFNI Need Admiration	.75*	.01	.33*	.48*	.50*	.58*	.57*	-.07	.29*	-.12	.41*	.35*	.20*	.36*	.29*	-.31*	.28*	.08				
20. FFNI Reactive Anger	.55*	.38*	.37*	.37*	.46*	.68*	.79*	.25*	.65*	.34*	.41*	.63*	.40*	.64*	.49*	.07	.49*	.46*	.47*			
21. FFNI Shame	.62*	-.06	.30*	.59*	.45*	.54*	.54*	-.08	.15*	-.14*	.37*	.19*	.13*	.19*	.20*	-.33*	.13	-.02	.69*	.47*		
22. FFNI Thrill Seeking	.40*	.47*	.26*	.21*	.38*	.49*	.47*	.35*	.56*	.40*	.29*	.55*	.42*	.64*	.51*	.29*	.50*	.55*	.27*	.55*	.14*	

Note. PNI SSSE = PNI Self-Sacrificing Self-Enhancement. \* $p < .01$ .



TABLE 57. Bivariate Correlations of All Variables: Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1. PNI Grandiosity																										
2. PNI Vulnerability	.59*																									
3. FFNI Grandiose	.67*	.47*																								
4. FFNI Vulnerable	.49*	.86*	.40*																							
5. FFNI Antagonism	.60*	.65*	.91*	.64*																						
6. FFNI Extraversion	.70*	.29*	.85*	.22*	.60*																					
7. FFNI Neuroticism	.27*	.64*	-0.09	.76*	.14*	-0.1																				
8. BFAS Neuroticism	.20*	.65*	0.05	.70*	.31*	-0.12	.64*																			
9. BFAS Extraversion	.19*	-.33*	.29*	-.38*	-0.01	.55*	-.45*	-.57*																		
10. BFAS Openness	0.03	-.30*	-0.06	-.26*	-.25*	.21*	-.23*	-.35*	.45*																	
11. BFAS Agreeableness	-.24*	-.48*	-.58*	-.45*	-.73*	-.22*	-0.08	-.38*	.31*	.43*																
12. BFAS Conscient	-0.06	-.40*	-0.04	-.36*	-.21*	.17*	-.31*	-.56*	.50*	.41*	.38*															
13. Experiential Avoidance	.36*	.74*	.28*	.76*	.50*	0.07	.57*	.71*	-.45*	-.27*	-.42*	-.45*														
14. Imposter Syndrome	.42*	.72*	.30*	.69*	.47*	0.11	.57*	.57*	-.42*	-.27*	-.39*	-.46*	.73*													
15. Weak Sense of Self	.43*	.76*	.32*	.74*	.52*	0.13	.59*	.68*	-.44*	-.34*	-.44*	-.48*	.80*	.71*												
16. Self-Esteem	-.19*	-.57*	-0.08	-.61*	-.30*	0.12	-.58*	-.70*	.59*	.35*	.38*	.52*	-.70*	-.69*	-.71*											
Authenticity Scale																										
17. Authentic Living	-0.04	-.35*	-0.09	-.33*	-.26*	0.09	-.34*	-.44*	.41*	.41*	.43*	.40*	-.37*	-.40*	-.51*	.53*										
18. Self-Alienation	.37*	.67*	.39*	.62*	.54*	.16*	.41*	.56*	-.37*	-.35*	-.47*	-.42*	.72*	.70*	.80*	-.67*	-.42*									
19. Accepting Ext Influence	.49*	.60*	.35*	.52*	.44*	.23*	.48*	.42*	-.22*	-.32*	-.31*	-.21*	.48*	.53*	.58*	-.43*	-.29*	.55*								
Psychological WellBeing																										
20. Autonomy	-.22*	-.57*	-0.07	-.56*	-.28*	0.07	-.65*	-.59*	.43*	.45*	.31*	.35*	-.54*	-.50*	-.65*	.56*	.60*	-.51*	-.61*							
21. Environmental Mastery	-.17*	-.61*	-0.09	-.66*	-.33*	0.11	-.57*	-.76*	.58*	.29*	.40*	.59*	-.75*	-.62*	-.70*	.76*	.49*	-.61*	-.38*	.53*						
22. Personal Growth	-0.1	-.54*	-.14*	-.53*	-.40*	.17*	-.46*	-.59*	.54*	.61*	.52*	.45*	-.60*	-.51*	-.62*	.68*	.53*	-.57*	-.44*	.60*	.63*					
23. Positive Relations	-0.03	-.50*	-.15*	-.52*	-.39*	.15*	-.34*	-.59*	.62*	.36*	.61*	.43*	-.61*	-.48*	-.57*	.62*	.51*	-.48*	-.26*	.44*	.69*	.64*				
24. Purpose	-.15*	-.52*	-.18*	-.54*	-.40*	0.09	-.39*	-.58*	.53*	.41*	.49*	.54*	-.67*	-.55*	-.69*	.69*	.51*	-.61*	-.35*	.50*	.74*	.72*	.67*			
25. Self-Acceptance	-0.06	-.50*	0.06	-.60*	-.20*	.23*	-.60*	-.69*	.64*	.29*	.32*	.48*	-.71*	-.59*	-.62*	.81*	.47*	-.50*	-.31*	.52*	.82*	.64*	.69*	.72*		
26. Life satisfaction	.15*	-.22*	.26*	-.33*	0.06	.34*	-.39*	-.48*	.57*	0.08	.16*	.34*	-.43*	-.32*	-.32*	.59*	.34*	-.22*	-0.01	.30*	.60*	.34*	.52*	.46*	.76*	

\*p < .01.

**TABLE S8. Study 2 Markers of Psychopathology and Well-Being Regressed on Narcissistic Traits in Multiple Regression**

	FFNI Antagonism ( <i>b</i> )	FFNI Extraversion ( <i>b</i> )	FFNI Neuroticism ( <i>b</i> )
<b>Psychopathology</b>			
Experiential Avoidance (AAQ-II)	.57*	-.23*	.47*
Imposter Syndrome	.48*	-.13*	.50*
Weak Sense of Self	.53*	-.14*	.51*
Self-Alienation	.60*	-.16*	.31*
Accepting External Influence	.34*	.07	.44*
Rosenberg Self-Esteem	-.43*	.33*	-.49*
<b>Well-Being</b>			
Life Satisfaction	-.13	.38*	-.33*
Authentic Living	-.40*	.31*	-.25*
Autonomy	-.32*	.20*	-.59*
Environmental Mastery	-.47*	.34*	-.47*
Personal Growth	-.69*	.55*	-.31*
Positive Relations	-.69*	.54*	-.19*
Purpose	-.63*	.44*	-.26*
Self-Acceptance	-.37*	.41*	-.51*

*Note.* Authentic Living is a subscale of the Authenticity scale; Self-Alienation and Accepting External Influence are subscales of the Authenticity scale. \* $p < .01$ .