



## Differences between grandiose and vulnerable narcissism and bulimic symptoms in young women

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### ABSTRACT

Researchers have found some evidence of a link between narcissism and bulimia nervosa (BN). It is increasingly recognized, however, that there are two forms of narcissism: grandiose and vulnerable. Unfortunately, extant research on this relation has failed to distinguish between these forms. This is important as they differ in underlying traits, etiology, and outcomes. In the current study, we examined the relations between grandiose and vulnerable narcissism and BN and tested whether the relation between vulnerable narcissism and BN is confounded by trait levels of neuroticism. As hypothesized, only vulnerable narcissism was related with BN symptoms and much of this relation was explained by neuroticism. Future research should examine what vulnerable narcissism adds to the prediction of BN above and beyond neuroticism.

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It has been suggested that traits related to narcissism and narcissistic PD are related to bulimia nervosa (BN; Brunton, Lacey, & Waller, 2005). Given the significant impairment associated with bulimic pathology, it is important to understand constructs that are potentially related to the etiology of this disorder. Unfortunately, the extant research addressing narcissism and BN has significant methodological limitations. First, many of the studies on this topic have used a relatively idiosyncratic measure of narcissism (O'Brien Multiphasic Narcissism Inventory; OMNI; 1987). Second, the studies have failed to assess both variants of narcissism that are increasingly recognized (e.g., Cain, Pincus, & Ansell, 2008). This is important as there is an increasing recognition of the heterogeneity of content included in assessments of narcissism. Multiple studies (e.g., Dickinson & Pincus, 2003; Miller & Campbell, 2008) have demonstrated that there are at least two variants of narcissism, which might be most aptly titled "grandiose narcissism" and "vulnerable narcissism."

These narcissism dimensions differ dramatically with regard to their underlying personality traits (grandiose narcissism: high Extraversion, low Agreeableness and Neuroticism; vulnerable narcissism: high Neuroticism, low Agreeableness, and Extraversion), environmental etiological factors (vulnerable narcissism is related to a history of childhood abuse and parental mistreatment), and outcomes (grandiose narcissism: externalizing behaviors; vulnerable narcissism: internalizing symptoms; Miller & Campbell, 2008; Miller, Dir et al., 2010). Trait neuroticism is consistently associated with ED symptoms (e.g., Steinberg & Shaw, 1997). Thus, it is plausible that the relation between measures of narcissism, if they measure vulnerable

narcissism, and BN may reflect their shared association with negative emotionality. The current study addresses these limitations by investigating the relations between these narcissism variants and BN symptoms in young women.

Initially, interest in the relations between narcissism and BN was driven primarily by psychoanalytic theories, which posited that deficiencies in an individual's ability to self-soothe and regulate self-esteem were shared features of narcissism and bulimia nervosa. However, emotional dysregulation and low self-esteem are associated with vulnerable but not grandiose narcissism (Miller, Dir et al., 2010). More recently, several studies have shown that narcissism, as measured by the Dimensional Assessment of Personality Pathology (DAPP-BQ; Livesley, 1990), differentiated among ED patients, psychiatric controls, and normal controls such that patients with EDs had higher levels of narcissism (Steiger, Jabalpurwala, Champagne, & Stotland, 1998). Additionally the DAPP narcissism scale differentiated people currently meeting criteria for BN from individuals with BN in remission and individuals without EDs (Lehoux, Steiger, & Jabalpurwala, 1999). The DAPP narcissism scale appears to be a better measure of the vulnerable narcissism dimension (than grandiose narcissism) as it loads more strongly on an emotional dysregulation factor rather than a Dissocial Behavior factor (e.g., Livesley, Jang, & Vernon, 1998).

Much of the research on the relation between narcissism and ED has utilized the OMNI, which conceptualizes narcissism as having three components. The first component, Narcissistic Personality, was designed to assess traits such as exploitativeness, entitlement, and attention seeking. The second component, Narcissistically Abused Personality, is related to a need for approval and validation from others and a view that the needs of others are more important than one's own. The third component, Poisonous Pedagogy, is "marked by tendencies towards the control of others through the rigid and

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aggrandized perfection of one's own virtues" (O'Brien, 1987, p. 500). All three scales are strongly related to Neuroticism ( $r$ s ranged from .56 to .65) and manifest limited correlations with the most prominent measure of grandiose narcissism, the Narcissistic Personality Inventory ( $r$ s ranged from  $-.02$  to .38; O'Brien, 1987). The OMNI appears to be a measure of vulnerable but not grandiose narcissism. BN symptoms are most consistently related to the Narcissistically Abused Personality subscale (Brunton et al., 2005; Waller, Sines, Meyer, Foster, & Skelton, 2006) and, to a lesser extent, the Narcissistic Personality subscale.

The literature on narcissism and ED suggests two important questions. First, are both grandiose and vulnerable narcissism related to ED or is this relation specific to vulnerable narcissism? Second, given the substantial correlations between both vulnerable narcissism and BN and neuroticism (Hendin & Cheek, 1997; Miller, Schmidt, Vaillancourt, McDougall, & Laliberte, 2006; O'Brien, 1987), it is unclear if the correlations between vulnerable narcissism and BN symptoms are simply a reflection of their shared association with neuroticism. The present study addresses these questions by examining the relations between measures of both grandiose and vulnerable narcissism and BN symptoms and testing whether the relation between vulnerable narcissism and BN is due to neuroticism.

## 1. Method

### 1.1. Participants and procedures

Participants were 158 undergraduate women; 81.7% described themselves as Caucasian ( $M$  age = 19.1;  $SD$  = 1.7). Participants took part in the study in group settings and received research credit for their participation. IRB approval was obtained for all aspects of this study.

### 1.2. Materials

#### 1.2.1. Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988)

The NPI is a 40-item self-report assessment of grandiose narcissism. In the current study, we used the total score and two factors, Leadership/Authority (L/A) and Exhibitionism/Entitlement (E/E) scored on the basis of factor analyses by Corry, Merritt, Mrug, and Pamp (2008). See Table 1 for coefficient alphas for all measures.

#### 1.2.2. Hypersensitive Narcissism Scale (HSNS)

The HSNS (Hendin & Cheek, 1997) is a 10-item self-report measure of vulnerable narcissism that reflects hypersensitivity, vulnerability, and entitlement. Previous research suggests that the HSNS manifests adequate internal consistency and is correlated with measures of covert narcissism, Neuroticism, and Disagreeableness (Hendin & Cheek, 1997).

**Table 1**  
Correlations among narcissism, BN symptoms, and neuroticism.

	NPI T	NPI L/A	NPI E/E	HSNS	BULIT	EDE T	Binge/purge	Neuroticism
NPI T	.84							
NPI L/A	.76**	.79						
NPI E/E	.78**	.36**	.72					
HSNS	-.02	-.06	.14	.76				
BULIT	-.10	-.16	.04	.36**	.94			
EDE T	-.15	-.12	-.09	.35**	.79**	.96		
Binge/purge	-.07	-.13	.04	.35**	.72**	.55**	–	
Neuroticism	-.36**	-.34**	-.13	.65**	.40**	.45**	.32**	.93

\* $p < .05$ ; \*\* $p < .01$ . Italicized numbers along the diagonal are coefficient alphas. NPI T = Narcissistic Personality Inventory Total; NPI L/A = Narcissistic Personality Inventory Leadership/Authority; NPI E/E = Narcissistic Personality Inventory Exhibitionism/Entitlement; HSNS = Hypersensitive Narcissism Scale; BULIT = Bulimia Test; EDE T = Eating Disorder Examination Questionnaire Total. Binge/purge = count of binge and purge episodes over the past month. No alpha is provided for the binge/purge variable as it represents a count of recent behaviors.

#### 1.2.3. Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994)

The EDE-Q is a self-report measure that assesses frequency of objective binge eating, frequency of purging, frequency of restraint over eating, and distorted cognitions associated with eating, weight and shape that occurred over the previous 28 days. In the current study, we used the global scale and created an item representing number of objective binge episodes and purging episodes over the past 28 days, which was log-transformed prior to use.

#### 1.2.4. Bulimia Test –Revised (BULIT-R)

The BULIT-R is a measure of individual differences in endorsement of BN symptoms (Thelen, Mintz, & Vander Wal, 1996). Participants rate the frequency or quality of their symptoms on a 5 point scale and cut off scores  $\geq 104$  indicate a probable diagnosis of BN (Thelen et al., 1996). Eight percent of the sample obtained a score of 104 or higher.

#### 1.2.5. Neuroticism

Neuroticism was measured using the 48-items from the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), which is a 240-item self-report inventory of the Five-Factor Model of personality that provides scores of five broad domains of personality and 30 facets.

## 2. Results

As expected, the grandiose and vulnerable narcissism scales were unrelated ( $median r = -.02$ ; see Table 1). The three grandiose narcissism scales were unrelated to the three BN scores ( $median r = -.10$ ). Alternatively, the vulnerable narcissism scale was significantly positively related to the BN scores ( $median r = .35$ ). Finally, the grandiose narcissism scales were negatively related to Neuroticism ( $median r = -.34$ ), whereas the vulnerable narcissism scale manifested a strong positive correlation with Neuroticism ( $r = .65$ ). All three BN variables were significantly correlated with Neuroticism ( $median r = .40$ ) and manifested strong correlations with one another ( $median r = .72$ ).

Next, we tested whether Neuroticism accounted for the relations between vulnerable narcissism and BN symptoms. To do this, we utilized tests for statistical mediation (although we are not suggesting true causal mediation). First, we regressed the BN variable symptoms on vulnerable narcissism. Next, we regressed the mediator (Neuroticism) on vulnerable narcissism. Finally, we regressed the BN variables on Neuroticism and vulnerable narcissism (see Table 2). Sobel tests were used to test for statistical mediation. There was evidence of significant mediation for both broader BN variables: BULIT T:  $z = 2.37, p < .05$ ; EDE T:  $z = 3.71, p < .001$ ; there was no evidence that Neuroticism accounted for the relation between vulnerable narcissism and the count of binge and purge episodes:  $z = .99, ns$ . For the BULIT, the inclusion of Neuroticism reduced the direct effect of vulnerable narcissism by 47%. For the EDE, the inclusion of Neuroticism reduced the direct effect of vulnerable narcissism by 74%. Finally, for the binge/purge count, the

**Table 2**  
Predicting BN symptoms with vulnerable narcissism and neuroticism.

		BULIT	EDE T	Binge/purge
		$\beta$	$\beta$	
Step 1	HSNS	.36**	.35**	.39**
Step 2	HSNS	.19	.09	.32**
	Neuroticism	.26**	.39**	.11
% Reduction		47%	74%	18%

\* $p < .05$ ; \*\* $p < .01$ ; HSNS = Hypersensitive Narcissism Scale; BULIT = Bulimia Test; EDE T = Eating Disorder Examination Questionnaire Total. Binge/purge = count of binge and purge episodes over the past month.

inclusion of Neuroticism reduced the direct effect of vulnerable narcissism by 18%.

### 3. Discussion

This study assessed the relations between the two narcissism variants and BN symptoms in young women. Grandiose narcissism manifested nonsignificant relations with BN symptoms, whereas vulnerable narcissism manifested significantly positive correlations. These findings were expected as vulnerable narcissism and BN share a number of traits related to negative emotionality (e.g., depression, anxiety, feelings of inadequacy and shame). In fact, a substantial portion of the shared variance between vulnerable narcissism and BN is due to the high levels of neuroticism found in individuals high on either construct. In addition, both are related to traumatic experiences in childhood (Miller, Dir et al., 2010; Wonderlich et al., 2001) and problematic interpersonal attachment styles (Dickinson & Pincus, 2003; Evans, Kennedy, & Wertheim, 2005). It is not surprising that grandiose narcissism and BN were unrelated as grandiose narcissism manifests a largely distinct set of correlates from BN as it is positively correlated with self-esteem and negatively correlated with psychological distress (Miller, Dir, et al.).

We believe that the simultaneous examination of both grandiose and vulnerable narcissism in relation to BN represents an important methodological advance as it allows for an important clarification of the extant literature, which has suggested the existence of a link between narcissism and BN symptoms. A review of the previous literature in light of the more recent parsing of narcissism into grandiose and vulnerable variants, as well as the current results, suggests that only vulnerable narcissism is an important correlate of BN and that most of this relation is due to the shared role of significant negative emotionality in both constructs.

#### 3.1. Limitations and conclusions

The current study relied on self-report measures of narcissism, BN symptoms, and Neuroticism and thus the correlations may be inflated due to shared method variance. It will be important to replicate these findings using interview-based measures of these constructs in clinical samples in which there may be more extreme levels of BN. In addition, the current study assessed these relations in a moderate sized sample of undergraduate women with only a limited number of individuals manifesting eating disorder symptoms at a potentially diagnosable level. Finally, the current sample was restricted with regard to variability in age, race, and ethnicity; as such, the current results should be replicated in a sample with greater variability on a number of important demographic variables.

In conclusion, the current results suggest that only vulnerable narcissism is relevant to the study of BN and that this relation is

largely accounted for by their shared relations with Neuroticism. Future studies should explore in greater detail what the vulnerable narcissism construct can add to the prediction of ED above and beyond neuroticism.

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#### Contributors

Authors 1 and 2 conducted literature reviews and wrote the manuscript. Authors 3 and 4 designed the study and wrote the protocol, conducted the analyses, and edited the manuscript. Author 5 assisted with analyses. All authors contributed to and approved the final manuscript.

#### Conflict of interest

There is no known conflict of interest.

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