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# A Glimpse Behind the Mask: Facets of Narcissism and Feelings of Self-Worth

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This study examined the connections that the facets of narcissism captured by the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979) and the Pathological Narcissism Inventory (PNI; Pincus et al., 2009) have with self-esteem. This was accomplished by asking 372 participants to complete measures of narcissism and self-esteem level as well as daily diary measures concerning their state self-esteem and daily experiences. Our analyses found that the facets of narcissism differed in their associations with average level of self-esteem, fluctuations in state self-esteem over time, and self-esteem reactions following daily events. These results suggest that it is important to consider specific facets of narcissism when examining feelings of self-worth rather than relying on broader composite measures of narcissistic personality features. Implications of these results for our understanding of the dynamics of the narcissistic personality are discussed.

Narcissistic individuals often express grandiose beliefs about themselves but these views tend to be highly susceptible to threat (see Zeigler-Hill & Jordan, 2011, for a review). This combination of grandiosity and vulnerability is believed to be responsible for many of the self-serving and defensive behaviors that are exhibited by individuals with narcissistic personality features (e.g., self-aggrandizement, exhibitionism). One of the most influential perspectives that has been used to understand the narcissistic personality is the *psychodynamic mask model* of narcissism, which is derived from the work of Kohut (1966) and Kernberg (1975; see Bosson et al., 2008, for a review). Despite differences in their views of narcissism, Kohut and Kernberg generally agree that the grandiosity expressed by narcissistic individuals largely serves as a facade that is intended to conceal their underlying feelings of inferiority and insecurity. That is, the positive self-views expressed by individuals with narcissistic personality features are not believed to be completely authentic but to serve as a sort of “mask” that disguises their underlying low self-esteem. There is preliminary evidence that this outward mask of grandiosity is consciously experienced because individuals with narcissistic personality features tend to report lower levels of self-esteem when they believe that others will know if they are lying about their feelings of self-worth (Myers & Zeigler-Hill, 2012). Variations of this basic mask idea are found in many current perspectives of narcissism (e.g., the dynamic self-regulatory model of narcissism; Morf & Rhodewalt, 2001) and have been incorporated into the diagnostic criteria for narcissistic personality disorder (e.g., the self-esteem of narcissistic individuals is considered to be “almost invariably very fragile”; American Psychiatric Association, 2000, p. 714). Despite the considerable empirical attention dedicated to narcissism in recent decades, a clear answer to one of the most basic and important questions concerning narcissism continues

to elude researchers: How do narcissistic individuals really feel about themselves?

The psychodynamic mask model of narcissism has led to the proposal that the core of narcissism is a self-concept that is grandiose yet extremely vulnerable to threat (Morf & Rhodewalt, 2001). The vulnerability of the narcissistic self-concept is believed to be what motivates individuals with narcissistic personality features to seek feedback from the social environment that affirms their tenuous feelings of self-worth and to be at least partially responsible for the volatile responses of these individuals to events that have the potential to threaten their tenuously held feelings of self-worth. Laboratory-based manipulations have clearly illustrated that certain events—such as failure or social rejection—threaten the self-esteem of narcissistic individuals (e.g., Besser & Priel, 2009, 2010; Besser & Zeigler-Hill, 2010; Bushman & Baumeister, 1998; Kernis & Sun, 1994; Rhodewalt & Morf, 1998; Twenge & Campbell, 2003). Similar results have been found for important life events such as the transition to the university (Besser & Zeigler-Hill, 2011; Zeigler-Hill & Besser, 2011). What remains somewhat less clear is how reactive the self-esteem of narcissistic individuals is to the sorts of events that might occur during their typical daily lives. Past research concerning the effects of daily experiences on the self-esteem of individuals with narcissistic personality features has shown an asymmetry such that these individuals are highly responsive to negative events (e.g., Rhodewalt, 2005; Rhodewalt, Madrian, & Cheney, 1998; Zeigler-Hill, Myers, & Clark, 2010) but not to positive events. It has been suggested that this asymmetry arises because negative events are particularly meaningful for narcissistic individuals because these events serve as evidence that their grandiose self-views might be inaccurate (Zeigler-Hill et al., 2010). We sought to extend these previous findings concerning the self-esteem reactivity of narcissistic individuals by taking advantage of recent developments in the measurement and conceptualization of narcissism that allow for the differentiation of the subclinical form of narcissism, which is generally considered to be a normally distributed personality feature

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from its more pathological counterpart (see Miller & Campbell, 2008, or Pincus & Lukowitsky, 2010, for extended discussions). That is, we were interested in learning whether these forms of narcissism differed in their connections with self-esteem.

The subclinical form of narcissism has been the primary focus of social-personality psychologists who have conceptualized narcissism as a normally distributed personality feature that has relatively adaptive properties (e.g., extraversion) as well as maladaptive properties (e.g., feelings of entitlement). This form of narcissism is sometimes referred to as “normal” narcissism (e.g., Pincus & Lukowitsky, 2010) and is most often captured by the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981; Raskin & Terry, 1988). It is important to note that normal narcissism is not a “healthy” form of narcissism because it contains some maladaptive elements. In contrast to the emphasis on normal narcissism that characterizes social-personality psychologists, clinical psychologists are more likely to consider narcissism in terms of narcissistic personality disorder, which is associated with an array of maladaptive outcomes including arrogance, lack of empathy, a willingness to exploit others, and emotional instability (American Psychiatric Association, 2000). New assessment tools such as the Pathological Narcissism Inventory (PNI; Pincus et al., 2009) have been developed in recent years to measure this more pathological form of narcissism that is not adequately captured by the NPI. Although the pathological form of narcissism captured by the PNI is considered to be largely maladaptive, the PNI has been used successfully in both clinical and nonclinical samples to predict outcomes related to pathological narcissism (e.g., Pincus et al., 2009). To be clear, both the normal and pathological forms of narcissism contain maladaptive elements, but they differ with regard to the emphasis that is placed on these maladaptive features.

The differences between the normal and pathological forms of narcissism are further complicated by the possibility that both forms of narcissism can also be heterogeneous constructs in themselves. For example, pathological narcissism appears to consist of both grandiose and vulnerable facets of the construct (e.g., Pincus & Lukowitsky, 2010). We use the term *facet* to refer to the various aspects of the overarching construct of narcissism. This use of the term *facet* should not be confused with the similar use of this term in the context of the Five-factor model of personality. Grandiose narcissism is the most easily recognized facet of pathological narcissism because it is similar to the diagnostic criteria for narcissistic personality disorder, which include maladaptive self-enhancement strategies such as holding an overly positive self-image, exploiting others, and engaging in exhibitionistic behaviors (Pincus & Lukowitsky, 2010). The vulnerable facet of pathological narcissism, in contrast, is characterized by dysregulation for both self-processes and emotional states, which results in outcomes such as a negative self-image, self-criticism, negative affective experiences (e.g., anger, shame, dysphoria), interpersonal sensitivity, and social withdrawal (Pincus & Lukowitsky, 2010). The connection between the facets of pathological narcissism and self-esteem is still in its early stages of exploration but it appears that the vulnerable facet is negatively associated with self-esteem, whereas the grandiose facet does not appear to have a significant association with feelings of self-worth (e.g., Pincus et al., 2009). This study will be the first to examine the association between the facets of pathological narcissism and changes in state self-esteem over time.

Normal narcissism is most often captured using the total score for the NPI. This approach to measuring normal narcissism has consistently shown a modest positive correlation with measures of self-esteem (e.g., Brown & Zeigler-Hill, 2004). However, there has been considerable debate concerning the best approach for assessing normal narcissism because various subscales have emerged from factor analyses of the NPI with some of these subscales being relatively adaptive (e.g., those connected to leadership) and others being maladaptive (e.g., those connected to feelings of entitlement). Furthermore, some researchers argue that we should shift our focus to the specific facets of narcissism that are captured by the subscales of the NPI rather than continuing to focus so much attention on the composite measure of narcissism (see Brown, Budzek, & Tamborski, 2009, for a review of this issue). Due to our interest in the connection between narcissism and self-esteem, we utilize the subscales of the NPI in this study rather than the overall composite score. The reason for this decision is that the subscales of the NPI have been found to differ considerably in their associations with feelings of self-worth such that many of the subscales tend to have positive associations with self-esteem but the subscales concerning feelings of entitlement and a willingness to exploit others often have negative associations with self-esteem (Brown et al., 2009). This pattern of results suggests that additional research is necessary to gain a better understanding of the connection between the various facets of narcissism and self-esteem.

#### OVERVIEW AND PREDICTIONS

This study had three primary goals. The first goal was to examine the associations between self-esteem level and the facets of narcissism that are captured by the NPI and the PNI (i.e., Were certain facets of narcissism more closely associated with levels of self-esteem?). We expected to replicate previous findings by showing that self-esteem level was positively associated with certain facets of normal narcissism (e.g., those related to leadership) but that it was negatively associated with the facet of normal narcissism concerning feelings of entitlement and a willingness to exploit others. We also expected to replicate previous findings concerning the grandiose and vulnerable facets of pathological narcissism such that grandiose narcissism was not expected to be associated with self-esteem, whereas vulnerable narcissism was expected to be negatively correlated with self-esteem.

Our second goal was to examine the associations between each facet of narcissism and fluctuations in state self-esteem over time (i.e., Were certain facets of narcissism more closely associated with variations in state self-esteem?). Fluctuations in moment-to-moment feelings of self-worth are referred to as self-esteem instability, which is a marker of fragile self-esteem (Kernis, 2003, 2005). Individuals with fragile self-esteem possess feelings of self-worth that are uncertain and vulnerable to challenge. As a result of the tenuous nature of their positive self-views, individuals with fragile high self-esteem tend to be extremely sensitive to negative events and engage in a wide array of self-protective strategies (e.g., Myers & Zeigler-Hill, 2008; Zeigler-Hill, Chadha, & Osterman, 2008). Previous research has found important similarities between narcissistic individuals and those with unstable high self-esteem such as the possession of impoverished self-concepts (Rhodewalt et al., 1998; Zeigler-Hill & Showers, 2007) and a tendency to display

hostility and anger (Kernis, Grannemann, & Barclay, 1989). Despite these similarities, the association between narcissism and self-esteem instability has been inconsistent such that it emerges in some studies (e.g., Rhodewalt et al., 1998) but not in others (Bosson et al., 2008; Zeigler-Hill, 2006). We believe that this inconsistency can be explained by the possibility that only particular facets of narcissism are associated with self-esteem instability. That is, we expect the measures of narcissism that are relatively maladaptive to be associated with unstable feelings of self-worth (i.e., the grandiose and vulnerable facets of pathological narcissism as well as the facets of normal narcissism that capture feelings of entitlement and a willingness to exploit others). In contrast, the relatively adaptive facets of narcissism (e.g., those concerning leadership) are not expected to be associated with self-esteem instability.

The third goal of this study was to examine whether facets of normal or pathological narcissism influenced the within-person relationships that exist between daily events and state self-esteem (i.e., Do certain facets of narcissism moderate the association between daily events and feelings of self-worth?). Previous research has suggested that the confusion concerning the link between narcissism and self-esteem instability might have been due to narcissistic individuals possessing feelings of self-worth that are reactive to specific sorts of events rather than being generally unstable (e.g., Zeigler-Hill et al., 2010). That is, the relatively high levels of self-esteem that are often reported by narcissistic individuals might only change when they experience particular kinds of events such as achievement failures. To develop a better understanding of the link between daily events and the self-esteem of individuals with narcissistic personality features, we examined whether the state self-esteem of those who possess either normal or pathological forms of narcissism would change in accordance with the events they reported on any particular day. By linking state self-esteem and daily events, we are capturing a form of self-esteem reactivity that is more specific than the general form of self-esteem instability that does not account for specific experiences (Barnett & Gotlib, 1988; Butler, Hokanson, & Flynn, 1994). Our prediction was that the relatively maladaptive facets of narcissism (i.e., the grandiose and vulnerable facets of pathological narcissism as well as the facet of normal narcissism that concerns entitlement and exploitation) would moderate the association between negative daily events and state self-esteem such that individuals who possessed these facets of narcissism would be highly reactive to these sorts of events. Our predictions concerning positive daily events were less certain because previous research has shown that narcissistic individuals are not especially responsive to positive events (e.g., Zeigler-Hill et al., 2010). Based on these previous findings, we did not expect the facets of narcissism to moderate the association between positive daily events and state self-esteem.

## METHOD

### *Participants and Procedure*

Participation in this research involved two phases. Participants in Phase 1 of this study were 891 undergraduates (179 men and 712 women) at a university in the Southern region of the United States who participated in return for partial fulfillment of a research participation requirement. Participants completed measures of normal narcissism, pathological narcissism, and self-esteem level—along with other measures that are not rele-

vant to this study—via a secure Web site. Following the completion of these measures, participants were eligible to register for a second study (Phase 2) that asked them to complete measures of state self-esteem and their daily experiences via the Internet each evening at approximately 10 p.m. for 7 consecutive days. Of the 891 participants who participated in Phase 1, 323 participants did not register for Phase 2. Of the 568 participants who registered for Phase 2, 196 participants were excluded due to failure to complete daily measures for 4 or more days.<sup>1</sup> Analyses concerning daily measures were conducted using the remaining 372 participants (74 men, 298 women). The mean age of the final participants was 20.28 years ( $SD = 2.59$ ) and their racial and ethnic composition was 60% White, 33% Black, 2% Hispanic, and 5% other. In sum, these 372 participants contributed a total of 2,282 daily reports, which is an average of 6.13 reports for each participant. The 372 participants who contributed four or more daily measures did not differ from those participants who failed to complete this aspect of the study in terms of age ( $t < 1$ , *ns*), gender,  $\chi^2(1) = .02$ , *ns*; racial and ethnic background,  $\chi^2(6) = 1.54$ , *ns*; NPI Leadership/Authority,  $t(889) = 1.77$ , *ns*; NPI Grandiose Exhibitionism,  $t(889) = 1.30$ , *ns*; NPI Entitlement/Exploitativeness,  $t(889) = 1.33$ , *ns*; PNI Grandiosity,  $t(889) = 0.58$ , *ns*; PNI Vulnerability,  $t(889) = 0.81$ , *ns*; or Rosenberg Self-Esteem Scale,  $t(889) = 1.26$ , *ns*.

This study made use of an interval-contingent form of experience sampling that allows for the documentation of thoughts, feelings, and behaviors that occur during the everyday life of respondents rather than within a laboratory context. By reporting their experiences each day, systematic recall biases are minimized in participants because their experiences are reported much closer in time to the actual experience rather than being averaged across an extended period of time (Tennen & Affleck, 2002). Another important advantage of this interval-contingent experience-sampling technique is that the temporal covariation of internal states and events can be examined (Larsen, Billings, & Cutler, 1996; Larsen & Kasimatis, 1990; Tennen, Suls, & Affleck, 1991). That is, experience sampling allowed us to examine the extent to which state self-esteem changed in accordance with daily events.

### *Measures*

*Normal Narcissism.* The normal form of narcissism was measured using the NPI (Raskin & Hall, 1979, 1981; Raskin & Terry, 1988). The NPI was developed according to the diagnostic criteria for narcissistic personality disorder but appears to assess an emotionally resilient and extraverted form of narcissism (Miller & Campbell, 2008). The form of narcissism captured by the NPI is at least somewhat adaptive, with its maladaptive aspects being limited for the most part to feelings of entitlement and the tendency to exploit others. The 40-item

<sup>1</sup>To measure self-esteem instability, it is essential that participants complete multiple measures of state self-esteem. As a result, some minimum number of state self-esteem measures must be completed for participants to be included in the analyses. The decision to only include participants in the final analyses who contributed data for at least 4 of the 7 days was established prior to data collection and follows the convention used in previous research (e.g., Zeigler-Hill, 2006; Zeigler-Hill & Showers, 2007). We found similar results when we included the 42 participants who completed three daily measures, which is the absolute minimum number of observations that could be utilized for these sorts of analyses. We were unable to conduct similar analyses for those participants who only contributed one ( $n = 74$ ) or two ( $n = 80$ ) daily reports.

version of the NPI was used in this study. This version of the NPI is the most commonly used and it employs a forced-choice format such that participants are made to decide between a narcissistic alternative and a nonnarcissistic alternative for each item (e.g., "I really like to be the center of attention" vs. "It makes me uncomfortable to be the center of attention"). There has been a great deal of debate concerning the factor structure of the NPI (see Brown et al., 2009, for a review), but Ackerman et al. (2011) recently provided compelling evidence for the following three factors: Leadership/Authority (11 items; e.g., "If I ruled the world it would be a much better place";  $\alpha = .73$ ), Grandiose Exhibitionism (10 items; e.g., "I know that I am good because everybody keeps telling me so";  $\alpha = .70$ ), and Entitlement/Exploitativeness (4 items; e.g., "I find it easy to manipulate people";  $\alpha = .48$ ). The low level of internal consistency for the Entitlement/Exploitativeness subscale is similar to what has been observed in previous studies (e.g., internal consistency for this subscale was .44 in Ackerman et al., 2011).

**Pathological Narcissism.** The PNI (Pincus et al., 2009) was used to assess grandiose and vulnerable aspects of pathological narcissism. The PNI is a 52-item measure for which responses were made on scales ranging from 0 (*not at all like me*) to 5 (*very much like me*). This instrument captures seven basic dimensions of pathological narcissism: Contingent Self-Esteem (12 items; e.g., "It's hard for me to feel good about myself unless I know other people like me"), Exploitative Tendencies (5 items; e.g., "I can make anyone believe anything I want them to"), Self-Sacrificing Self-Enhancement (6 items; e.g., "I try to show what a good person I am through my sacrifices"), Hiding of the Self (7 items; e.g., "When others get a glimpse of my needs, I feel anxious and ashamed"), Grandiose Fantasy (7 items; e.g., "I often fantasize about being recognized for my accomplishments"), Devaluing (7 items; e.g., "When others don't meet my expectations, I often feel ashamed about what I wanted"), and Entitlement Rage (8 items; e.g., "It irritates me when people don't notice how good a person I am"). As outlined in recent studies (Tritt, Ryder, Ring, & Pincus, 2010; Wright, Lukowitsky, Pincus, & Conroy, 2010), these seven dimensions, in turn, load onto two higher order factors referred to as Narcissistic Grandiosity (i.e., Exploitative Tendencies, Self-Sacrificing Self-Enhancement, and Grandiose Fantasy;  $\alpha = .89$ ) and Narcissistic Vulnerability (i.e., Contingent Self-Esteem, Hiding of the Self, Devaluing, and Entitlement Rage;  $\alpha = .96$ ). Initial information concerning the reliability and validity of the PNI has shown that its factors are correlated in the expected directions with other measures of narcissism and related constructs such as self-esteem level (e.g., Pincus et al., 2009).

**Self-Esteem Level.** The Rosenberg Self-Esteem Scale (Rosenberg, 1965) served as the measure of self-esteem level. The Rosenberg Self-Esteem Scale is a well-validated measure of global self-esteem (Blaskovich & Tomaka, 1991) that consists of 10 items (e.g., "I feel that I have a number of good qualities"). Participants were instructed to complete the scale according to how they typically or generally feel about themselves. Responses were made on scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). For this study, the internal consistency of this measure was high ( $\alpha = .90$ ).

**State Self-Esteem and Self-Esteem Instability.** The method for measuring self-esteem instability was adapted from the procedure developed by Kernis and his colleagues (e.g., Kernis et al., 1989). Participants were asked to complete a modified version of the Rosenberg Self-Esteem Scale via the Internet at the end of each day for 7 consecutive days. This instrument was modified to capture state self-esteem by instructing participants to provide the response that best reflected how they felt at the moment they completed the measure. Responses were made on scales ranging from 1 (*strongly disagree*) to 10 (*strongly agree*). The within-subject standard deviation across the repeated assessments of state self-esteem served as the index of self-esteem instability such that higher standard deviations indicated self-esteem that was more unstable. For this study, the internal consistency of state self-esteem (averaged across the 7 days) was  $\alpha = .92$ .

**Daily Experiences.** Participants were asked to record their daily experiences via the Internet at 10 p.m. each evening for 7 consecutive days using a modified version of the Daily Events Survey (Butler et al., 1994). The modifications to the Daily Events Survey employed in this study were based on those used in previous research (e.g., Nezlek & Gable, 2001; Nezlek & Plesko, 2003). The 26 items included in the Daily Events Survey include Positive Achievement Events (7 items; e.g., "Completed work on an interesting project or assignment";  $\alpha = .79$ ), Negative Achievement Events (6 items; e.g., "Did poorly on schoolwork task [e.g. test, assignment, job duty]";  $\alpha = .75$ ), Positive Interpersonal Events (7 items; e.g., "Had especially good interactions with friend[s] or acquaintances";  $\alpha = .77$ ), and Negative Interpersonal Events (6 items; e.g., "Did something awkward or embarrassing in a social situation";  $\alpha = .80$ ). Participants rated the occurrence and importance of each event using the following scale: 0 (*did not occur*), 1 (*occurred and not important*), 2 (*occurred and somewhat important*), 3 (*occurred and pretty important*), and 4 (*occurred and extremely important*). The final score for each of the four types of daily events was the sum of corresponding items that were endorsed for that particular day.

#### Data Analyses

The associations that the facets of narcissism had with self-esteem level and self-esteem instability were examined using multiple regression analyses in which the criterion variable (e.g., self-esteem level) was regressed onto the predictors (e.g., NPI Leadership/Authority, NPI Grandiose Exhibitionism, NPI Entitlement/Exploitativeness, PNI Grandiosity, PNI Vulnerability). A series of multilevel models were used to examine whether particular facets of narcissism moderated the associations between daily events and state self-esteem. The data here made up a multilevel data structure because observations at one level of analysis were nested within another level of analysis (i.e., daily measures were nested within individuals; Bryk, Raudenbush, & Congdon, 1998). At a conceptual level, these models involved two steps. In the first step, a regression equation was estimated for each individual at Level 1 (the within-person level) to yield intercept and slope coefficients that serve as an index of the association between variables at the daily level (e.g., Does state self-esteem tend to be lower on days when negative interpersonal events occur?). For the second step, Level 2 analyses (the between-persons level) examined whether the regression slopes

TABLE 1.—Intercorrelations and descriptive statistics for the facets of narcissism, self-esteem level, and self-esteem instability.

	1	2	3	4	5	6	7	8	9	10	11	12
1. NPI Leadership/Authority	—											
2. NPI Grandiose Exhibitionism	.42***	—										
3. NPI Entitlement/Exploitativeness	.11*	.27***	—									
4. PNI Grandiosity	.15**	.29***	.20***	—								
5. PNI Vulnerability	-.16**	.14**	.27***	.62***	—							
6. Self-Esteem Level	.31***	.16**	-.12*	-.09	-.36***	—						
7. Self-Esteem Instability	-.08	.04	.16**	.11*	.30***	-.18***	—					
8. Average State Self-Esteem	.22***	.03	-.26***	-.08	-.46***	.62***	-.35***	—				
9. Average Positive Interpersonal Events	.10	.24***	.02	.12	.14*	.03	-.06	-.04	—			
10. Average Negative Interpersonal Events	-.02	.17**	.25***	.05	.28***	-.12*	.16*	-.49***	.56***	—		
11. Average Positive Achievement Events	.19**	.16**	.06	.10	.05	.15*	-.08	.01	.76***	.56***	—	
12. Average Negative Achievement Events	.01	.20***	.20***	.02	.23***	-.11	.16**	-.43***	.55***	.83***	.54***	—
<i>M</i>	5.43	3.57	0.77	3.54	2.93	4.11	0.54	8.07	1.39	0.65	1.38	0.91
<i>SD</i>	2.72	2.33	0.95	0.87	0.92	0.76	0.49	1.61	0.75	0.69	0.77	0.75

Note. NPI = Narcissistic Personality Inventory; PNI = Pathological Narcissism Inventory.  
\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

obtained from the Level 1 analyses differed across individuals depending on their level of narcissism (e.g., Are individuals with high scores on PNI Vulnerability especially likely to report lower levels of state self-esteem on days when they experience negative interpersonal events?). These models were specified as follows:

$$\text{Level 1: State Self-Esteem}_{ij} = \beta_{0j} + \beta_{1j}\text{DAILY EVENTS} + r_{ij}$$

$$\text{Level 2: } \beta_{0j} = \gamma_{00} + \gamma_{01}(\text{NPI Leadership/Authority}) + \gamma_{02}(\text{NPI Grandiose Exhibitionism}) + \gamma_{03}(\text{NPI Entitlement/Exploitativeness}) + \gamma_{04}(\text{PNI Grandiosity}) + \gamma_{05}(\text{PNI Vulnerability}) + \gamma_{06}(\text{Self-Esteem Level}) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{NPI Leadership/Authority}) + \gamma_{12}(\text{NPI Grandiose Exhibitionism}) + \gamma_{13}(\text{NPI Entitlement/Exploitativeness}) + \gamma_{14}(\text{PNI Grandiosity}) + \gamma_{15}(\text{PNI Vulnerability}) + \gamma_{16}(\text{Self-Esteem Level}) + u_{1j}$$

In the Level 1 (within-person level) model, State Self-Esteem<sub>ij</sub> represents the state self-esteem for person *j* on day *i*, β<sub>0j</sub> is a random coefficient representing the intercept for person *j*, β<sub>1j</sub> is a random coefficient for daily events (i.e., positive interpersonal events, negative interpersonal events, positive achievement events, or negative achievement events), and *r*<sub>ij</sub> represents error. The within-persons intercepts and slopes are then modeled at Level 2 such that γ<sub>00</sub> represents the expected level of state self-esteem for a person who did not experience the particular type of daily event being modeled and the γ<sub>01</sub>, γ<sub>02</sub>, γ<sub>03</sub>, γ<sub>04</sub>, γ<sub>05</sub>, and γ<sub>06</sub> coefficients represent the between-persons associations that the facets of narcissism and self-esteem level have with state self-esteem. The γ<sub>10</sub> coefficient represents the average within-person association that daily events have with state self-esteem and the γ<sub>11</sub>, γ<sub>12</sub>, γ<sub>13</sub>, γ<sub>14</sub>, γ<sub>15</sub>, and γ<sub>16</sub> coefficients reflect the extent to which the facets of narcissism and self-esteem level moderate the within-person association between daily events and state self-esteem. The residual variances that are unexplained by between-person differences are represented by *u*<sub>0j</sub> and *u*<sub>1j</sub>.

RESULTS

Descriptive Statistics

Table 1 presents the means, standard deviations, and intercorrelations for the facets of narcissism, self-esteem level, and

self-esteem instability. Four of the facets of narcissism were significantly correlated with self-esteem level. Self-esteem level was positively correlated with NPI Leadership/Authority (*r* = .31, *p* < .001) and NPI Grandiose Exhibitionism (*r* = .16, *p* < .01) but it was negatively correlated with NPI Entitlement/Exploitativeness (*r* = -.12, *p* < .05) and PNI Vulnerability (*r* = -.36, *p* < .001). Although the association between narcissism and self-esteem instability has been inconsistent in previous studies (see Bosson et al., 2008, for a review), three facets of narcissism were correlated with self-esteem instability in this sample: NPI Entitlement/Exploitativeness (*r* = .16, *p* < .01), PNI Grandiosity (*r* = .11, *p* < .05), and PNI Vulnerability (*r* = .30, *p* < .001). Gender differences were examined for the facets of narcissism, self-esteem level, and self-esteem instability, but no differences reached conventional levels of significance. The inclusion of gender in the preliminary analyses also failed to qualify the results that are reported in the following sections. As a result, gender is not discussed further.

Narcissism and Self-Esteem Level

The goal of this analysis was to examine the association between the facets of narcissism and self-esteem level by regressing self-esteem level onto these facets. This was accomplished using a multiple regression analysis in which NPI Leadership/Authority, NPI Grandiose Exhibitionism, NPI Entitlement/Exploitativeness, PNI Grandiosity, and PNI Vulnerability were entered simultaneously. The results of this analysis are presented in Table 2. Each facet of narcissism was found to be a significant and unique predictor of self-esteem level: NPI Leadership/Authority (β = .19, *t* = 3.49, *p* < .001, *d* = .36), NPI Grandiose Exhibitionism (β = .13, *t* = 2.41, *p* < .05, *d* = .25), NPI Entitlement/Exploitativeness (β = -.12, *t* = -2.14, *p* < .05, *d* = -.22), PNI Grandiosity (β = .12, *t* = 2.13, *p* < .05, *d* = .22), and PNI Vulnerability (β = -.39, *t* = -6.15, *p* < .001, *d* = -.64). The pattern of these results indicates that individuals tend to report higher levels of self-esteem if they have higher scores for NPI Leadership/Authority, NPI Grandiose Exhibitionism, and PNI Grandiosity, or lower scores for NPI Entitlement/Exploitativeness and PNI Vulnerability. These results suggest that there are important differences in the associations between the facets of narcissism and feelings of self-worth.

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TABLE 2.—Regression of self-esteem level onto the facets of narcissism.

	Self-Esteem Level		
	$R^2$	$\beta$	$d$
Total model	.30***		
NPI Leadership/Authority		.19**	.36
NPI Grandiose Exhibitionism		.13*	.25
NPI Entitlement/Exploitativeness		-.12*	-.22
PNI Grandiosity		.12*	.22
PNI Vulnerability		-.39**	-.64

Note. NPI = Narcissistic Personality Inventory; PNI = Pathological Narcissism Inventory.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

### Narcissism and Self-Esteem Instability

This analysis examined the associations between the facets of narcissism and self-esteem instability. This was accomplished using a multiple regression analysis in which self-esteem instability was regressed onto NPI Leadership/Authority, NPI Grandiose Exhibitionism, NPI Entitlement/Exploitativeness, PNI Grandiosity, PNI Vulnerability, and self-esteem level. The results of this analysis are presented in Table 3. The only significant predictor of self-esteem instability that emerged from this analysis was PNI Vulnerability ( $\beta = .32$ ,  $t = 4.37$ ,  $p < .001$ ,  $d = .46$ ).<sup>2</sup> This suggests that the vulnerable facet of pathological narcissism is the only facet of narcissism that is uniquely associated with day-to-day fluctuations in feelings of self-worth.

### State Self-Esteem and Daily Events

Two-level models were used to examine the within-person relationships that exist between daily events and state self-esteem. Descriptive statistics for the daily measures of state self-esteem and daily events are presented in Table 4. For these analyses, the daily events scores were person-mean centered (Raudenbush & Bryk, 2002). This technique was used because there was considerable variability in the number of events reported across days (i.e., participants reported more events on some days than others) as well as the number of events reported across participants (i.e., some participants reported more events than were reported by other participants). Person-mean centering reduces the influence of habituation to the average number of certain types of events in the lives of participants and adjusts for possible self-report biases. The use of person-mean centering for daily events allowed us to examine the association between state self-esteem and deviations from the normal daily experiences of the participant (e.g., Do participants report lower levels of state self-esteem on those days when they report more negative interpersonal events than is typical for them?). Analyses concerning the four types of daily events were conducted separately due to the associations between these types of events.

<sup>2</sup>Preliminary analyses found that similar results emerged if self-esteem level was not included in the model (i.e., PNI was also the only significant predictor in the model without self-esteem level,  $\beta = .34$ ,  $t = 4.95$ ,  $p < .001$ ,  $d = .52$ ). This suggests that the results reported here are not due to self-esteem level suppressing the associations that other facets of narcissism might have with self-esteem instability. The multilevel models concerning self-esteem reactivity that are reported in later sections also did not differ if self-esteem level was excluded.

TABLE 3.—Regressions of self-esteem instability onto the facets of narcissism and self-esteem level.

	Self-Esteem Instability		
	$R^2$	$\beta$	$d$
Total model	.11***		
NPI Leadership/Authority		-.02	
NPI Grandiose Exhibitionism		.03	
NPI Entitlement/Exploitativeness		.09	
PNI Grandiosity		-.11	
PNI Vulnerability		.32***	.46
Self-Esteem Level		-.06	

Note. NPI = Narcissistic Personality Inventory; PNI = Pathological Narcissism Inventory.

\*\*\* $p < .001$ .

Initial analyses examining the association between daily events and state self-esteem were conducted across all participants without accounting for narcissism or self-esteem level. As expected, participants reported higher levels of state self-esteem on the days when they experienced more positive interpersonal events ( $B = .12$ ,  $t = 3.71$ ,  $p < .001$ ,  $d = .39$ ) and more positive achievement events ( $B = .08$ ,  $t = 2.63$ ,  $p < .01$ ,  $d = .27$ ) but reported lower levels of state self-esteem when they experienced more negative interpersonal events ( $B = -.18$ ,  $t = -3.10$ ,  $p < .01$ ,  $d = -.32$ ) and more negative achievement events ( $B = -.15$ ,  $t = -3.67$ ,  $p < .001$ ,  $d = -.38$ ). Not surprisingly, these results show that individuals tend to report feeling better about themselves on the days when positive events occur and report feeling worse about themselves on days when negative events occur.

### Narcissism and Daily Events

The Level 2 (between-person) analyses first examined whether the facets of narcissism and self-esteem level were associated with reports of daily events (e.g., Do individuals with high scores for PNI Vulnerability tend to report more negative interpersonal events than other individuals?). This type of analysis is referred to as a *means as outcomes* analysis (Bryk & Raudenbush, 1992; Nezlek & Zyzanski, 1998). The only facets of narcissism that were uniquely associated with positive interpersonal events were NPI Grandiose Exhibitionism ( $B = .13$ ,  $t = 2.84$ ,  $p < .01$ ,  $d = .30$ ) and NPI Entitlement/Exploitativeness ( $B = -.08$ ,  $t = -2.03$ ,  $p < .05$ ,  $d = .21$ ), such that more positive interpersonal events were reported by those with higher scores for NPI Grandiose Exhibitionism and lower scores for NPI Entitlement/Exploitativeness. Elevated levels of negative interpersonal events were reported by

TABLE 4.—Descriptive statistics for state self-esteem and daily events.

	Within-Persons		Between-Person	Reliability
	$M$	$SD$	$SD$	
State self-esteem	8.07	0.68	1.61	0.97
Positive interpersonal events	1.39	0.69	0.75	0.86
Negative interpersonal events	0.65	0.44	0.69	0.92
Positive achievement events	1.38	0.66	0.77	0.87
Negative achievement events	0.91	0.52	0.75	0.90

participants with high scores for NPI Grandiose Exhibitionism ( $B = .10, t = 2.44, p < .05, d = .26$ ), high scores for NPI Entitlement/Exploitativeness ( $B = .10, t = 2.48, p < .05, d = .26$ ), low scores for PNI Grandiosity ( $B = -.15, t = -3.95, p < .001, d = -.41$ ), and high scores for PNI Vulnerability ( $B = .21, t = 4.34, p < .001, d = .45$ ). The only facet of narcissism that was associated with daily positive achievement events was NPI Leadership/Authority ( $B = .13, t = 2.80, p < .01, d = .29$ ), such that participants with high scores for this facet of narcissism reported experiencing more positive achievement events than other individuals. Reports of negative achievement events were associated with high scores for NPI Grandiose Exhibitionism ( $B = .11, t = 2.57, p < .05, d = .27$ ), low scores for PNI Grandiosity ( $B = -.16, t = -3.34, p < .001, d = -.35$ ), and high scores for PNI Vulnerability ( $B = .18, t = 3.51, p < .001, d = .37$ ). These results further show that the facets of narcissism have very different associations with daily experiences. For example, the facet of narcissism captured by PNI Vulnerability was associated with reports of more negative daily events, whereas the facet of narcissism represented by PNI Grandiosity was associated with the denial of negative events.

*Narcissism as a Moderator of the Associations Between State Self-Esteem and Daily Events*

The second purpose of the Level 2 (between-person) analyses was to examine whether the facets of narcissism moderated the associations that exist between daily events and state self-esteem (e.g., Do individuals with high scores for PNI Vulnerability report especially low levels of state self-esteem on the days when they report experiencing more negative interpersonal events than is typical for them?). This type of analysis is referred to as a *slopes as outcomes* analysis (Bryk & Raudenbush, 1992). The results of these analyses are presented in Table 5. PNI Vulnerability emerged as the only significant moderator of the association between state self-esteem and positive interpersonal events ( $B = .10, t = 2.22, p < .05, d = .23$ ). The predicted values for this cross-level interaction are presented in Figure 1. To examine the pattern of this interaction, simple slopes tests were employed that have been adapted for multilevel models (Curran, Bauer, & Willoughby, 2006). These analyses showed that individuals with higher scores for PNI Vulnerability experienced a significant increase in state self-esteem on days when they reported relatively high numbers of positive interpersonal events ( $B = .23, t = 3.44, p < .001, d = .36$ ), whereas the state self-esteem of those with lower score for PNI Vulnerability was unrelated to positive interpersonal events ( $B = .02, t < 1, ns$ ). These results suggest that the vulnerable facet of pathological narcissism might increase the self-esteem reactivity of individuals to positive social events such that individuals who possess this facet of narcissism report feeling better about themselves on the days when they experience positive interpersonal events.

The association between daily negative interpersonal events and state self-esteem was moderated by the following facets of narcissism: NPI Leadership/Authority ( $B = .13, t = 2.14, p < .05, d = .22$ ), NPI Grandiose Exhibitionism ( $B = .17, t = 2.53, p < .05, d = .26$ ), and NPI Entitlement/Exploitativeness ( $B = -.13, t = -2.18, p < .05, d = .23$ ). The predicted values for these cross-level interactions are presented in Figure 2. Simple slopes tests for NPI Leadership/Authority showed that participants with high scores for this facet of narcissism reported

TABLE 5.—The facets of narcissism and self-esteem level as moderators of the within-persons association between state self-esteem and daily experiences.

	Unstandardized Coefficient	SE	t	d
Positive interpersonal events				
NPI Leadership/Authority	.02	.04	0.63	
NPI Grandiose Exhibitionism	.00	.03	-0.04	
NPI Entitlement/Exploitativeness	-.03	.05	-0.68	
PNI Grandiosity	-.03	.04	-0.71	
PNI Vulnerability	.10	.05	2.22*	.23
Self-Esteem Level	-.05	.04	-1.20	
Negative interpersonal events				
NPI Leadership/Authority	.13	.06	2.14*	.22
NPI Grandiose Exhibitionism	.17	.07	2.53*	.26
NPI Entitlement/Exploitativeness	-.13	.06	-2.18*	.23
PNI Grandiosity	-.09	.08	-1.09	
PNI Vulnerability	.08	.09	0.93	
Self-Esteem Level	.09	.06	1.59	
Positive achievement events				
NPI Leadership/Authority	.04	.03	1.14	
NPI Grandiose Exhibitionism	.04	.03	1.19	
NPI Entitlement/Exploitativeness	.02	.04	0.69	
PNI Grandiosity	.00	.04	-0.27	
PNI Vulnerability	.05	.05	1.04	
Self-Esteem Level	-.02	.04	-0.59	
Negative achievement events				
NPI Leadership/Authority	.05	.04	1.12	
NPI Grandiose Exhibitionism	.07	.05	1.22	
NPI Entitlement/Exploitativeness	.01	.04	0.18	
PNI Grandiosity	-.02	.06	-0.33	
PNI Vulnerability	.02	.07	0.23	
Self-Esteem Level	.11	.05	2.24	.23

Note. NPI = Narcissistic Personality Inventory; PNI = Pathological Narcissism Inventory.  
\* $p < .05$ .

moderately high levels of state self-esteem even when they experienced negative interpersonal events ( $B = -.07, t < 1, ns$ ), whereas those with low scores for NPI Leadership/Authority reported a significant drop in state self-esteem when they

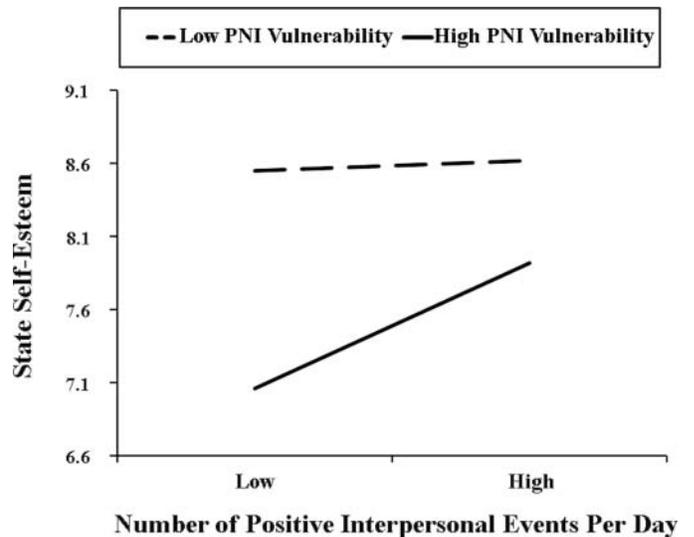


FIGURE 1.—Predicted values for state self-esteem, illustrating the cross-level interaction of Pathological Narcissism Inventory (PNI) Vulnerability (1 SD above and below the grand mean) and positive interpersonal events per day (1 SD above and below the group mean).

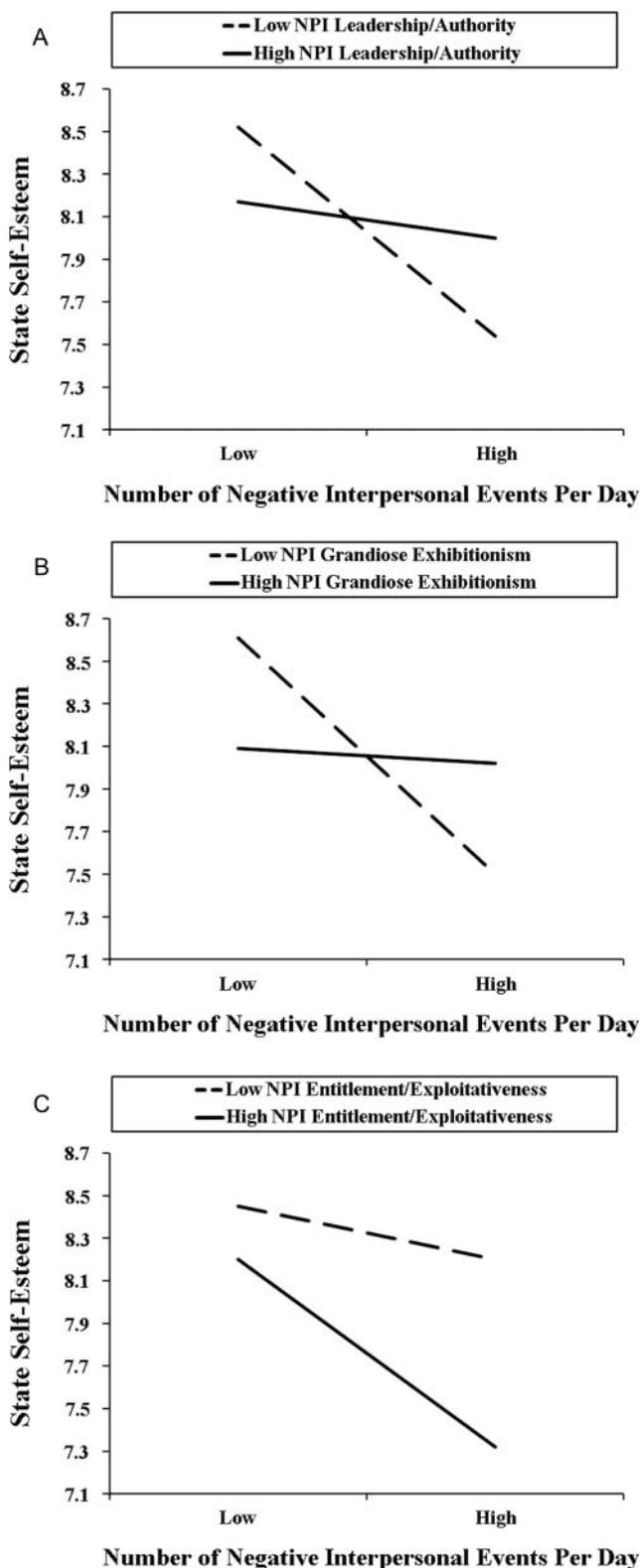


FIGURE 2.—Predicted values for state self-esteem, illustrating the cross-level interactions of (A) Narcissistic Personality Inventory (NPI) Leadership/Authority, (B) NPI Grandiose Exhibitionism, and (C) NPI Entitlement/Exploitativeness with negative interpersonal events per day (1 *SD* above and below the group mean).

experienced negative interpersonal events ( $B = -.32, t = -4.29, p < .001, d = -.45$ ). Similar results emerged for NPI Grandiose Exhibitionism such that participants with high scores for this facet reported moderately high levels of state self-esteem even when they experienced negative interpersonal events ( $B = -.03, t < 1, ns$ ) whereas those with low scores for this facet reported lower levels of state self-esteem when they experienced negative interpersonal events ( $B = -.37, t = -4.34, p < .001, d = .45$ ). The pattern of the results for NPI Leadership/Authority and NPI Grandiose Exhibitionism suggest that the relatively adaptive facets of normal narcissism buffer individuals from negative interpersonal events. That is, the state self-esteem of individuals with these facets of normal narcissism remained moderately high even when they experienced negative interpersonal events. In contrast, individuals who did not possess these facets of narcissism responded with decreases in self-esteem when they felt rejected by others. This is consistent with previous suggestions that these subscales of the NPI capture relatively resilient facets of narcissism (e.g., Miller & Campbell, 2008).

The moderating results of NPI Entitlement/Exploitativeness for the connection between negative interpersonal events and state self-esteem were quite different than what was found for NPI Leadership/Authority and NPI Grandiose Exhibitionism. That is, participants with high scores for NPI Entitlement/Exploitativeness were highly sensitive to negative interpersonal events such that their feelings of self-worth dropped precipitously when they had these sorts of experiences ( $B = -.30, t = -3.70, p < .001, d = .39$ ). In contrast, participants with low scores for NPI Entitlement/Exploitativeness maintained relatively high levels of state self-esteem even when they experienced negative interpersonal events ( $B = -.09, t = -1.51, ns$ ). In essence, NPI Entitlement/Exploitativeness appears to increase the sensitivity of individuals to negative interpersonal events such as social rejection.

None of the facets of narcissism emerged as significant moderators of the association between daily positive achievement events and state self-esteem. That is, even though individuals tend to report feeling better about themselves on the days when they experience successes, these reactions do not appear to depend on the narcissistic features or self-esteem levels possessed by the individual. This pattern is consistent with the argument that narcissistic individuals often expect to experience success in their daily lives, so the sorts of minor events measured in this study might not have been strong enough to affect the feelings of self-worth experienced by these individuals.

Self-esteem level was the only significant moderator of the association between state self-esteem and negative achievement events ( $B = .11, t = 2.24, p < .05, d = .23$ ). The predicted values for this cross-level interaction are presented in Figure 3. Simple slopes analyses show that individuals with high levels of self-esteem continued to report high levels of state self-esteem even when they experienced negative achievement events ( $B = -.04, t < 1, ns$ ). In contrast, individuals with low levels of self-esteem always reported relatively low levels of state self-esteem but their feelings of self-worth were even lower on those days when they experienced negative achievement events ( $B = -.26, t = -4.22, p < .001, d = .44$ ). This pattern of results suggests that high levels of self-esteem serve as a buffer that protects individuals from the loss of self-worth that often accompanies failure for those with low self-esteem.

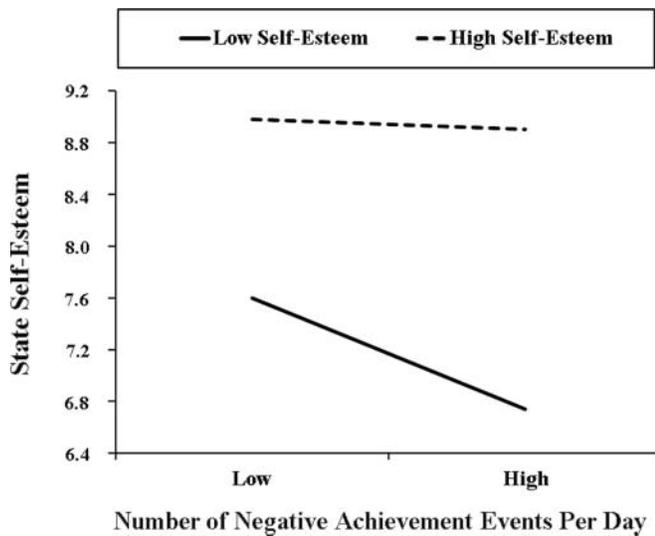


FIGURE 3.—Predicted values for state self-esteem, illustrating the cross-level interaction of self-esteem level (1 *SD* above and below the grand mean) and negative achievement events per day (1 *SD* above and below the group mean).

#### Examining Alternative Explanations

Our previous multilevel models provided support for the idea that specific facets of narcissism might moderate the association between state self-esteem and daily events (e.g., NPI Entitlement/Exploitativeness exacerbated the self-esteem reactivity of individuals to negative interpersonal events). Our goal for these analyses was to eliminate alternative explanations for these results by incorporating additional explanatory variables in the multilevel models. More specifically, we controlled for the day of the week when each daily measure was submitted (i.e., we included six day-of-the-week dummy variables [Sunday, Monday, Tuesday, Wednesday, Thursday, Friday] with Saturday serving as the reference day) as well as carryover effects from the previous day (i.e., we included the state self-esteem from the previous day as well as the appropriate daily events from the previous day for each analysis). In essence, the goal of these analyses was to remove any time-structured variation from the present data. These analyses found that state self-esteem was generally lower on Thursday than on Saturday (the reference day;  $B = -.14, t = -2.39, p < .05, d = -.25$ ). There was no evidence of carryover effect for the previous day's state self-esteem ( $B = .01, t = 0.25, ns$ ), positive interpersonal events ( $B = -.01, t = -0.63, ns$ ), negative interpersonal events ( $B = .01, t = 0.31, ns$ ), positive achievement events ( $B = -.02, t = -0.89, ns$ ), or negative achievement events ( $B = .00, t = -0.14, ns$ ). Most important, the previously reported associations emerged from these detrended analyses such that PNI vulnerability moderated the association between state self-esteem and positive interpersonal events ( $B = .10, t = 2.55, p < .05, d = .27$ ), the subscales of the NPI continued to moderate the association between state self-esteem and negative interpersonal events (NPI Leadership/Authority:  $B = .10, t = 2.08, p < .05, d = .22$ ; NPI Grandiose Exhibitionism:  $B = .13, t = 2.38, p < .05, d = .25$ ; NPI Entitlement/Exploitativeness:  $B = -.11, t = -2.15, p < .05, d = -.23$ ), and self-esteem level continued to moderate the

association between state self-esteem and negative achievement events ( $B = .11, t = 2.22, p < .05, d = .23$ ).

#### DISCUSSION

This study was guided by three primary questions concerning the connection between the facets of narcissism and feelings of self-worth. Our first question was whether the facets of narcissism differed in their associations with self-esteem level. The second question driving this research concerned whether the facets of narcissism differed in their associations with fluctuations in state self-esteem over time. The third question we addressed was whether the facets of narcissism differed in the extent to which they moderated the association between state self-esteem and daily events.

In answer to our first research question, the results showed that the facets of narcissism clearly differed in their associations with self-esteem level such that a positive association emerged for some facets (i.e., NPI Leadership/Authority and NPI Grandiose Exhibitionism), but not for others (i.e., NPI Entitlement/Exploitativeness and PNI Vulnerability were negatively associated with self-esteem, whereas PNI Grandiosity was not associated with self-esteem). This pattern of results is consistent with previous studies (e.g., Pincus et al., 2009), which is important because it suggests essential differences in the feelings of self-worth that are experienced by individuals who possess different facets of narcissism. For example, the facets of narcissism that are captured by the subscales of the NPI have different—and opposing—associations with self-esteem. This is consistent with the argument that NPI Entitlement/Exploitativeness captures a maladaptive facet of narcissism, whereas the other subscales appear to tap into relatively adaptive facets of narcissism (e.g., Watson & Biderman, 1993). These findings join a rapidly growing body of evidence suggesting that it might be necessary to utilize more nuanced measurement approaches to gain a better understanding of the dynamics surrounding narcissistic personality features. Alternate approaches to measuring narcissism include using the subscales of the NPI to complement its total score as well as utilizing measures such as the PNI, which captures the more pathological aspects of this construct.

Our second research question concerned the connection between the facets of narcissism and self-esteem instability. The results of this study suggest that the vulnerable facet of pathological narcissism is the only facet of narcissism that is uniquely associated with day-to-day fluctuations in feelings of self-worth. Although similar associations were noted for NPI Entitlement/Exploitativeness and PNI Grandiosity in the zero-order correlations, these associations did not reach conventional levels of significance when entered along with PNI Vulnerability and the other facets of narcissism. This might be due to these relatively maladaptive facets of narcissism having a common core that is best captured by pathological vulnerability. The emergence of vulnerable narcissism as the strongest predictor of self-esteem instability might provide at least a partial explanation for the complex and inconsistent associations that have been noted between narcissism and self-esteem instability (e.g., Bosson et al., 2008). That is, the fragile feelings of self-worth that are believed to characterize individuals with narcissistic personality features might only apply to those who possess the vulnerable facet of pathological narcissism. This association

might be due, at least in part, to the fact that PNI Vulnerability captures aspects of narcissism related to contingent self-esteem and hiding the self. This pattern is most likely due to the pathological features shared by these facets of narcissism (e.g., feelings of entitlement; Pincus et al., 2009). This issue requires further study because questions concerning how narcissistic individuals feel about themselves are generally believed to be central to our ability to understand the interpersonal strategies and intrapsychic processes that characterize these individuals.

The third research question dealt with the possibility that the facets of narcissism would differ in the role they played in moderating the state self-esteem reactions of individuals to daily events. We found that the vulnerable facet of narcissism increased the reactivity of individuals to positive interpersonal events. That is, individuals who possessed the vulnerable facet of narcissism felt better about themselves when they felt liked and accepted by others. It is possible that the feelings of uncertainty that characterize those with the vulnerable facet of pathological narcissism could explain their strong responses to positive social events that serve as potential signals that they are liked and accepted by others. This result for vulnerable narcissism provides additional support for the important differences that exist for the various facets of narcissism because previous studies have failed to produce evidence suggesting that narcissistic individuals—as identified by measures such as the total score of the NPI—are especially responsive to positive events (e.g., Zeigler-Hill et al., 2010).

The expectation that narcissism would exacerbate the reactivity of individuals to negative events was only supported for NPI Entitlement/Exploitativeness. This particular subscale of the NPI was found to moderate the association between state self-esteem and negative interpersonal experiences such that individuals with high scores reported especially low levels of state self-esteem on days when they felt rejected or experienced conflict with those close to them. This pattern is consistent with previous research demonstrating the reactivity of narcissistic individuals to various sorts of negative events (e.g., Besser & Priel, 2009, 2010; Besser & Zeigler-Hill, 2010; Bushman & Baumeister, 1998; Heiserman & Cook, 1998; Rhodewalt & Eddings, 2002; Rhodewalt & Morf, 1998; Zeigler-Hill et al., 2010). In contrast to the pattern that emerged for NPI Entitlement/Exploitativeness, the facet of narcissism captured by NPI Leadership/Authority moderated the association between state self-esteem and negative interpersonal events by protecting the self-esteem of narcissistic individuals from these negative events. In other words, the facet of narcissism that concerns leadership appears to preserve the self-esteem of individuals in the face of social rejection or exclusion. Similar results emerged for NPI Grandiose Exhibitionism such that participants with high scores for this facet reported moderately high levels of state self-esteem even when they experienced negative interpersonal events, whereas the state self-esteem of those with low scores for this facet of narcissism tended to drop significantly when they experienced negative interpersonal events. The resilience displayed by those with high scores for NPI Leadership/Authority and NPI Grandiose Exhibitionism might suggest that these individuals do not care a great deal about the sort of negative interpersonal events that we assessed. It is important to note, however, that we focused on negative interpersonal events that are largely communal in nature (e.g., concerned rejection and conflict) that might not impact their feelings of self-worth as

much as interpersonal events with a stronger agentic foundation (e.g., concerning respect and admiration). Future research concerning the reactions of narcissistic individuals to daily events could benefit from the inclusion of a broader sample of daily experiences that address agentic concerns as well as those rooted in communal issues.

The fact that the expected pattern of results only emerged for a single facet of narcissism—and that opposing results emerged for some of the other facets—suggests that future research should address the specific facets of narcissism rather than attending only to the composite narcissism scores that result from collapsing these facets together. The tendency for researchers to rely on composite narcissism measures (e.g., the total NPI score) rather than utilizing subscales that capture more specific facets of narcissism might explain many of the inconsistent results that have emerged concerning narcissism. We believe that it is important for future researchers to be attentive to the important differences that exist between the facets of normal narcissism as well as those differences that exist between normal and pathological forms of narcissism. We are not suggesting that researchers should never use composite measures of narcissism such as the total NPI score. Rather, we are arguing that it is important for researchers to consider the complex and multifaceted nature of narcissism that might sometimes lead to the use of different strategies—such as focusing on the NPI subscales or including measures of pathological narcissism such as the PNI—when addressing certain issues.

There are important limitations associated with this study. The first limitation is that we relied exclusively on self-report measures. As a result, it is possible that some participants might have provided socially desirable responses rather than accurate responses. This leaves open the possibility that some of the responses provided by the participants might have been biased. More specifically, participants might have portrayed themselves more favorably—or less favorably in some cases—than is warranted. This is an important limitation because a recent study found that individuals with narcissistic personality features tended to report relatively low levels of self-esteem when they believed that others would know if they were lying about their feelings of self-worth (Myers & Zeigler-Hill, 2012). The second limitation is that the correlational nature of this study precludes the determination of causality. That is, this study cannot provide a definitive answer concerning the direction of the observed effects. Although this research was based on a process model that assumed the possession of certain facets of narcissism would lead to changes in self-esteem, the correlational nature of the data does not allow us to rule out other possible causal relationships such as the association being bidirectional or reversed. For example, it is not unreasonable to speculate that individuals with unstable self-esteem might develop the vulnerable facet of pathological narcissism rather than vulnerable narcissism causing self-esteem to be unstable. Further research is needed to develop a clearer understanding of the causal processes that link the various facets of narcissism to feelings of self-worth. The third limitation concerns the time scale of the state self-esteem assessments. We utilized daily assessments of state self-esteem, which is consistent with a number of previous studies (e.g., Zeigler-Hill et al., 2010; Zeigler-Hill & Showers, 2007). However, it is an open empirical question as to what the optimal time scale actually is for capturing self-esteem reactivity. For example, it is possible that more frequent assessments (e.g.,

multiple times per day) might be even better for capturing shifts in state self-esteem among individuals with narcissistic personality features because the assessments might take place before the individuals have an opportunity to engage in self-protective processes intended to bolster and maintain their tenuous feelings of self-worth. An argument could also be made for the possible advantage of less frequent assessment (e.g., once per week) because this would allow life events to accumulate. This is certainly an important issue for future research. The fourth limitation concerns the extent to which we can generalize these results beyond our undergraduate student sample. To address this limitation, it would be helpful for future research to replicate these findings in community and clinical samples. This is important because the participants in our study were relatively young and their feelings of self-worth might be less certain than would be the case during later periods of life. As a result, it is possible that the associations that we observed between facets of narcissism and self-esteem might be somewhat different in older samples that were beyond emerging adulthood.

Despite these limitations, this study made use of an interval-contingent form of experience sampling that allows for the documentation of thoughts, feelings, and behaviors that occur during the everyday life of respondents. As a result, this study represents a naturalistic and ecologically valid approach to understanding connections between various facets of narcissism and feelings of self-worth that complements previous studies utilizing other methods (e.g., laboratory manipulations) and extends our knowledge regarding the dynamics of the narcissistic personality. These results provide additional support for treating the various facets of narcissism as distinct constructs that are worthy of further research to examine their potential importance and clinical relevance.

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