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# Trouble ahead, trouble behind: Narcissism and early maladaptive schemas<sup>☆</sup>

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#### ABSTRACT

Narcissism is a multifaceted construct that is inconsistently defined and assessed between clinical psychology and social-personality psychology. The purpose of the present study was to examine the similarities and differences in the cognitive schemas underlying various forms of narcissism. This was accomplished by examining the associations of normal and pathological forms of narcissism with the early maladaptive schemas. The results showed important similarities in these associations (e.g., all of the narcissism scales were positively associated with the entitlement schema) as well as differences (e.g., vulnerable narcissism was the only form of narcissism that was positively associated with subjugation). Discussion focuses on the implications of these results for the ways in which individuals with these forms of narcissism perceive and navigate their social environments.

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The personality construct of narcissism – which takes its name from the ancient Greek myth of Narcissus (Ellis, 1898) - refers to a pervasive pattern of grandiosity and self-importance. Narcissism is a construct that has been of considerable interest to both clinical and social-personality psychology in recent years. Attempts to integrate these bodies of literature, however, have been hampered by inconsistencies in the definition and measurement of narcissism between these disciplines (Cain, Pincus, & Ansell, 2008; Miller & Campbell, 2008; Pincus et al., 2009). Clinical psychologists tend to conceptualize narcissism as a personality disorder characterized by arrogant or haughty behaviors, feelings of entitlement, a lack of empathy, and a willingness to exploit other individuals (American Psychiatric Association, 2000). The form of narcissism studied by clinical psychologists is often associated with emotional instability and the tendency to experience negative emotions. In contrast, socialpersonality psychologists often consider subclinical levels of narcissism as a normally distributed personality feature. This form of narcissism tends to be more emotionally resilient and extraverted than the form of narcissism that is generally considered by clinical psychologists (Miller & Campbell, 2008). These differences lead clinical psychologists to emphasize the pathological elements of narcissism, whereas social-personality psychologists focus more of their attention on the somewhat "normal" aspects of narcissism (see Miller & Campbell, 2008 or Pincus & Lukowitsky, 2010, for extended

discussions). Consistent with the previous literature (e.g., Pincus & Lukowitsky, 2010), we will refer to these types of narcissism as pathological narcissism and normal narcissism, respectively. It is important to note that normal narcissism consists of both adaptive and maladaptive elements, so it is certainly not a completely "healthy" form of narcissism. That is, both normal and pathological forms of narcissism have maladaptive elements but they differ in terms of the emphasis that each places on these features.

The distinction between pathological and normal forms of narcissism is further complicated by the possibility that pathological narcissism may be a heterogeneous construct consisting of both a grandiose and a vulnerable form (e.g., Akhtar & Thompson, 1982; Cooper, 1998; Dickinson & Pincus, 2003; Gabbard, 1989, 1998; Gersten, 1991; Hendin & Cheek, 1997; Kohut, 1971; Pincus & Lukowitsky, 2010; Rathvon & Holmstrom, 1996; Rose, 2002; Rovik, 2001; Wink, 1991, 1996). Grandiose narcissism is the most easily recognized form of pathological narcissism because it is characterized by maladaptive self-enhancement strategies such as holding an overly positive self-image, exploiting others, and engaging in exhibitionistic behaviors (Pincus & Lukowitsky, 2010). This form of narcissism is clearly represented by the diagnostic criteria for Narcissistic Personality Disorder (American Psychiatric Association, 2000). Vulnerable narcissism is the second phenotypic expression of pathological narcissism and it may either be the primary form of expressed narcissism or displayed in alternation with the grandiose form of narcissism. The vulnerable form of pathological narcissism is characterized by self and emotional dysregulation including a negative self-image, self-criticism, negative affective experiences (e.g., anger, shame, dysphoria), interpersonal sensitivity, and social withdrawal (Pincus &

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Lukowitsky, 2010). The existence of grandiose and vulnerable phenotypic expressions of pathological narcissism has been supported by a number of studies using various measures of pathological narcissism (e.g., Rathvon & Holmstrom, 1996; Wink, 1991; see Pincus & Lukowitsky, 2010, for a review).

The development and maintenance of narcissistic personality features may be due, at least in part, to the cognitive schemas that individuals rely on to organize and make sense of the events that occur during the course of their lives (Beck, Freeman, & Davis, 2003). Along these lines, Young (1990) proposed a model in which circumstances that interfere with the development of autonomy, connectedness, worthiness, or realistic expectations and limits (e.g., markedly traumatic interactions or repeated negative interactions with caregivers) may lead individuals to develop schemas that support maladaptive styles of perceiving themselves, others, and relationships. For example, individuals may find relationships threatening (connectedness), become overly dependent on others (autonomy), feel defective (worthiness), or feel superior to others (unrealistic expectations and limits). Young developed the concept of early maladaptive schemas in an attempt to better understand the relationships between negative interactions early in life and the various manifestations of personality pathology that are expressed in adulthood. Early maladaptive schemas refer to deeply rooted negative beliefs about oneself, others, and the world that may develop during the earliest years of life and result in erroneous and dysfunctional perceptions, emotions, thoughts, and behaviors. Early maladaptive schemas influence the interpretation of subsequent events as these experiences are viewed through the negative lenses of schemas which serve to selectively incorporate corroborating information and discount conflicting information (McGinn & Young, 1996; Schmidt, Joiner, Young, & Telch, 1995). Once these schemas are formed, they are extended and elaborated throughout the course of the individual's life and often result in negative automatic thoughts and subjective distress because of their maladaptive nature. The concept of early maladaptive schemas retains the information-processing component that was central to earlier definitions of cognitive schemas (e.g., Beck, 1967) but places more focus on thematic content and early development (Young, 1990).

Young (1990) originally identified 16 early maladaptive schemas but more recent research has suggested that there may actually be only 15 schemas (e.g., Lee, Taylor, & Dunn, 1999; Schmidt et al., 1995). Further analyses suggested that these early maladaptive schemas cluster within the following higher-order schema domains (Hoffart et al., 2005): disconnection (emotional deprivation, emotional inhibition, mistrust, social isolation, and defectiveness), impaired autonomy (subjugation, dependence, failure to achieve, vulnerability to harm, abandonment, and enmeshment), impaired limits (insufficient self-control and entitlement), and exaggerated standards (self-sacrifice and unrelenting standards). Table 1 presents a description of each domain and its associated schemas.

Young and his colleagues (Young & Flanagan, 1998; Young, Klosko, & Weishaar, 2003) have proposed that the core early maladaptive schemas underlying narcissism are entitlement, emotional deprivation, and defectiveness. The entitlement schema is located within the impaired limits domain and is believed to manifest in behaviors such as insisting that one should be able to do or have whatever one wants with little regard for the welfare of other individuals. These feelings of entitlement are thought to develop as a result of overly indulgent parents setting too few limits for their children or, perhaps, as overcompensation for feelings of defectiveness stemming from cold and rejecting parenting. The emotional deprivation and defectiveness schemas both fall within the disconnection domain. Schemas in the disconnection domain

Table 1

Early maladaptive schema domains.

Disconnection: The expectation that needs for security, safety, stability, nurturance, and acceptance will not be met.

- 1. Emotional deprivation: The belief that minimal levels of emotional support will not be received.
- 2. *Emotional inhibition*: The belief that the expression of emotions will result in negative consequences such as embarrassment or harm to others.
- 3. Mistrust: The belief that others will be abusive and manipulative.
- 4. *Social isolation*: The belief that one is alienated and somehow different from other people.
- 5. *Defectiveness*: The belief that one is defective and unlovable at some fundamental level.

*Impaired Autonomy*: Beliefs regarding one's ability to be separate from others and function independently.

- 6. *Subjugation*: Believing that the preferences of others are more important than personal desires.
- 7. *Dependence*: The belief that one needs considerable help from others to manage everyday responsibilities.
- 8. *Failure to achieve*: The belief that one is destined to fail in areas of achievement because of fundamental inadequacies.
- 9. *Vulnerability to harm*: Exaggerated fears concerning one's ability to prevent "random" catastrophes.
- 10. *Abandonment*: The belief that other individuals will be unable to provide emotional support because they are emotionally unstable or because these individuals will die or abandon the person.
- 11. Enmeshment: Excessive emotional involvement and closeness with one or more significant others at the expense of full individuation and normal social development.

Impaired Limits: Deficiencies in self-discipline and in setting emotional and interpersonal limits

- 12. *Insufficient self-control*: The belief that self-discipline is unimportant and that little restraint is required for emotions and impulses.
- 13. Entitlement: The belief that one should be able to do or have whatever one wants, regardless of what others consider reasonable or the cost to others. Exaggerated Standards: Beliefs concerning self-deprivation and perfectionism.
- 14. Self-sacrifice: Exaggerated beliefs of duty and responsibility to other individuals.
- 15. *Unrelenting standards*: The belief that one must meet unrealistically high standards.

*Note.* The descriptions of the early maladaptive schemas and domains are based on those presented in Young (1990), Hoffart et al. (2005), and Schmidt et al. (1995).

are thought to interfere with individuals developing the capacity to experience intimacy, love, and acceptance in their relationships with others. The emotional deprivation schema is thought to result from a lack of parental nurturance, empathy, and protection. This schema often results in individuals yearning for an emotional connection with others but, at the same time, being uncomfortable with closeness due to a fear that others will be unable or unwilling to meet their needs for continued emotional support. The defectiveness schema, in turn, concerns feelings of shame that stem from the individual believing that he or she is flawed in some fundamental manner. It is believed that this schema results from parenting that is severely critical or rejecting. Young et al. (2003) proposed a state of tension between emotional deprivation (craving contact) and defectiveness (withdrawing from contact) for narcissists which hinders their ability to form stable intimate relationships. Instead, narcissists may often try to fill their emotional needs through self-aggrandized demanding of attention (entitlement). These speculations concerning which early maladaptive schemas may be associated with narcissism are interesting and may provide additional insight into the cognitive structures underlying narcissistic tendencies. To our knowledge, the present study is the first attempt to empirically examine these predictions.

# 1. Overview and predictions

The purpose of the present study was to examine how normal and pathological forms of narcissism would compare in their associations with the early maladaptive schema domains. Our prediction for the grandiose form of narcissism - which was consistent with the speculation of Young and Flanagan (1998) was that it would be positively associated with a range of early maladaptive schemas including those reflecting entitlement, emotional deprivation, and defectiveness. We predicted that vulnerable narcissism would be positively associated with an even broader array of early maladaptive schemas because previous observations have shown that vulnerable narcissists have a tendency to report a variety of problems and resist improvement in order to maintain the special status conferred on them as a result of their suffering (Pincus et al., 2009; Sarasohn, 2004). Our prediction for normal narcissism was that it would have less consistent associations with the early maladaptive schemas compared to the pathological forms of narcissism because normal narcissism has been shown to be associated with a combination of adaptive (e.g., positive beliefs about the self, social dominance) and maladaptive outcomes (e.g., turbulent interpersonal relationships, aggression; see Morf & Rhodewalt, 2001, for a review).

#### 2. Method

#### 2.1. Participants and procedure

Participants were 442 students (94 men and 348 women) enrolled in undergraduate psychology courses who participated in return for partial fulfillment of a research participation requirement. The mean age of participants was 20.92 years (SD=4.78). The racial/ethnic composition was 56% White, 40% Black, and 4% Other. Participants completed measures of normal narcissism, grandiose narcissism, vulnerable narcissism, and early maladaptive schemas.

#### 2.2. Measures

## 2.2.1. Normal narcissism

Normal narcissism was measured using the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981). The NPI was developed according to diagnostic criteria 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 version of the NPI used in the present research contains 37 true-false items that Morf and Rhodewalt (1993) adapted from Emmons's (1987) factor analysis of the original, 54item instrument. This version of the NPI consists of the following four factors: leadership/authority ( $\alpha = .75$ ), self-absorption/selfadmiration ( $\alpha = .71$ ), superiority/arrogance ( $\alpha = .70$ ), and exploitation/entitlement ( $\alpha = .68$ ). Despite their low levels of internal consistency, we used the individual subscale scores rather than the overall composite score due to the fact that the exploitation/entitlement subscale often has a different pattern of associations with related constructs (e.g., self-esteem) than is observed for the other subscales or the total NPI score (see Brown, Budzek, & Tamborski, 2009, for a review). The construct validity and internal consistency of the NPI has been previously demonstrated (Emmons, 1987; Raskin & Hall, 1981; Raskin & Terry, 1988).

#### 2.2.2. Pathological narcissism

The Pathological Narcissism Inventory (PNI; Pincus et al., 2009) is a 52-item measure developed to assess the grandiose and vulnerable aspects of pathological narcissism. Responses for the PNI were made on scales ranging from 1 (not at all like me) to 6 (very much like me). The PNI measures seven dimensions of pathological narcissism: contingent self-esteem (e.g., "It's hard for me to feel

good about myself unless I know other people like me"), exploitative (e.g., "I can make anyone believe anything I want them to"), self-sacrificing self-enhancement (e.g., "I try to show what a good person I am through my sacrifices"), hiding the self (e.g., "When others get a glimpse of my needs, I feel anxious and ashamed"), grandiose fantasy (e.g., "I often fantasize about being recognized for my accomplishments"), devaluing (e.g., "When others don't meet my expectations, I often feel ashamed about what I wanted"), and entitlement rage (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, in press), these seven dimensions load onto the two higher-order factors of grandiose narcissism (exploitative, selfsacrificing self-enhancement, and grandiose fantasy) and vulnerable narcissism (contingent self-esteem, hiding the self, entitlement rage, and devaluing). Initial information concerning the reliability and validity of the PNI has shown that it is correlated in the expected direction with other measures of narcissism (e.g., NPI) as well as related constructs such as self-esteem level, interpersonal style, clinical outcomes, and contingent self-esteem (Pincus et al., 2009; Zeigler-Hill, Clark, & Pickard, 2008). The internal consistencies of the PNI grandiosity and vulnerability subscales were .86 and .95, respectively.

#### 2.2.3. Early maladaptive schemas

Internal representations of self and other were assessed using the Young Schema Questionnaire - Short Form (YSQ-SF; Young, 1998). The YSQ-SF is a 75-item questionnaire that is designed to assess 15 early maladaptive schemas: emotional deprivation (e.g., "In general, people have not been there to give me warmth, holding, and affection";  $\alpha = .91$ ), emotional inhibition (e.g., "I control myself so much that people think I am unemotional";  $\alpha = .89$ ), mistrust (e.g., "It is only a matter of time before someone betrays me";  $\alpha =$ .92), social isolation (e.g., "I feel alienated from other people";  $\alpha =$ .93), defectiveness (e.g., "I am too unacceptable in very basic ways to reveal myself to other people";  $\alpha = .94$ ), subjugation (e.g., "I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account";  $\alpha = .89$ ), dependence (e.g., "I do not feel capable of getting by on my own in everyday life";  $\alpha = .83$ ), failure to achieve (e.g., "Most other people are more capable than I am in areas of work and achievement";  $\alpha = .95$ ), vulnerability to harm (e.g., "I can't seem to escape the feeling that something bad is about to happen";  $\alpha = .90$ ), abandonment (e.g., "I worry that people I feel close to will leave me or abandon me";  $\alpha = .93$ ), enmeshment (e.g., "I often feel that I do not have a separate identity from my parent[s] or partner";  $\alpha = .83$ ), insufficient self-control (e.g., "I can't force myself to do things I don't enjoy, even when I know it's for my own good";  $\alpha = .85$ ), entitlement (e.g., "I feel that I shouldn't have to follow the normal rules and conventions other people do";  $\alpha = .81$ ), self-sacrifice (e.g., "I am a good person because I think of others more than of myself";  $\alpha = .86$ ), and unrelenting standards (e.g., "I feel there is constant pressure for me to achieve and get things done";  $\alpha = .88$ ). Responses to the YSQ-SF were made on scales ranging from 1 (completely untrue of me) to 6 (describes me perfectly) with higher scores indicating more dysfunctional levels of the schemas. The YSQ-SF has demonstrated adequate test-retest reliability and internal consistency as well as convergent and discriminant validity (Lee et al., 1999; Schmidt et al., 1995; Stopa, Thorne, Waters, & Preston, 2001).

#### 3. Results

Table 2 presents the means, standard deviations, and intercorrelations for the measures in the present study. Men were found to report higher scores than women for the following measures of

	as.
	<b>Aaladaptive Schema</b>
	ssism and Early N
	Statistics for Narci
	nd Descriptive 5
1able 2	Correlations a

	2.55 2.66 3.58 3.77 1.14 1.10 1.25 1.28
.51*** - .22*** .18*** - .22*** .48***	2.66
.51***22***	
48 <sup>4</sup> 30, <sup>4</sup> 21, <sup>4</sup>	1.95 2
	, ,
·	5 2.66 2 1.47
	2.26
'	2.03
l l	1.98
	2.13
	1.82
	2.30
	2.92
	2.29
	2.10
	3.42
- 220 200 300 446 119 119 119 119 119 119 119 119 119 11	4.54
	3.31 4
	.,.
	6.02
_	5.56 2.36
. L/A . S/S . S/S . S/A . E/E . Grandiose narcissism . Undreable narcissism . Wulnerable narcissism . Emotional deprivation . Mistrust O. Social isolation 1. Defectiveness 2. Subjugation 3. Dependence 4. Failure to achieve 5. Vulnerability to harm 5. Abandonment 7. Enmeshment 7. Enmeshment 8. Insufficient self-control 9. Entitlement 1. Self-sacrifice 1. Onrelenting standards	Mean Standard deviation
	- 40"

narcissism: leadership/authority (t[440] = 3.25, p < .001), superiority/arrogance (t[440] = 3.94, p < .001), exploitation/entitlement (t[440] = 2.34, p < .05), and grandiose narcissism (t[440] = 2.17, p < .05).05). Gender differences also emerged for a number of the early maladaptive schemas such that men reported higher scores than women for emotional deprivation (t[440] = 2.63, p < .01), emotional inhibition (t[440] = 3.25, p < .001), mistrust (t[440] = 2.71, p < .01), defectiveness (t[440] = 4.05, p < .001), subjugation (t [440] = 3.23, p < .001), and failure to achieve (t[440] = 2.74, p < .001.01). Despite these differences between men and women, the inclusion of gender in the preliminary analyses did not qualify any of the results reported in later sections so gender will not be dis-

The leadership/authority and self-absorption/self-admiration subscales from the NPI were both correlated with grandiose narcissism (rs > .20, ps < .001) but not vulnerable narcissism (|rs| < .001) .05, ns). In contrast, the superiority/arrogance and exploitation/ entitlement subscales from the NPI were correlated with both grandiose narcissism (rs > .19, ps < .001) and vulnerable narcissism (rs > .40, ps < .001). This suggests that the form of normal narcissism captured by the NPI clearly has grandiose elements but that the link between normal narcissism and vulnerable narcissism is more complex such that certain elements of normal narcissism are associated with vulnerable narcissism (i.e., superiority/arrogance and exploitation/entitlement) but others are not (i.e., leadership/authority and self-absorption/self-admiration).

We began our examination of the associations between these forms of narcissism and the early maladaptive schemas by inspecting their zero-order correlations. These correlations revealed that both grandiose narcissism and vulnerable narcissism had significant associations with all 15 of the schemas which suggest that the pathological forms of narcissism were associated with broad, undifferentiated cognitive styles indicative of distress. In contrast, the subscales of the NPI had a more complex pattern of associations with the early maladaptive schemas which suggests somewhat greater specificity in terms of cognitive distortions. For example, the only early maladaptive schema for which all four subscales of the NPI had similar associations was the entitlement schema.

A series of hierarchical multiple regression analyses were used to gain a clearer understanding of the associations between narcissism and the early maladaptive schemas. These analyses allowed us to determine the unique associations between each of the schemas and the forms of narcissism. Each form of narcissism was examined in a separate regression model with the early maladaptive schemas serving as predictors. The main effects for the 15 early maladaptive schemas were entered simultaneously so that any observed effects would reflect the unique association between that particular schema and narcissism rather than merely reflecting cognitive styles indicative of distress. The results of these analyses are presented in Table 3.

## 3.1. Leadership/authority

The following early maladaptive schemas emerged as significant predictors of leadership/authority: social isolation ( $\beta = -.35$ , p <.001), subjugation ( $\beta = -.13$ , p < .05), dependence ( $\beta = .15$ , p < .05), failure to achieve ( $\beta = -.14$ , p < .05), enmeshment ( $\beta = .19$ , p < .01), insufficient self-control ( $\beta = -.14$ , p < .05), entitlement ( $\beta = .35$ , p < .05) .001), and unrelenting standards ( $\beta = -.12$ , p < .05). That is, leadership/authority was positively associated with three early maladaptive schemas (i.e., dependence, enmeshment, and entitlement) and negatively associated with five schemas (i.e., social isolation, subjugation, failure to achieve, insufficient self-control, and unrelenting standards). The results of the regression analysis differed from the zero-order correlations in that the associations between

**Table 3**Hierarchical Multiple Regression Analysis of Narcissism onto the Early Maladaptive Schemas.

	NPI Leadership/ Authority		NPI Self-Absorption/ Self-Admiration		NPI Superiority/ Arrogance		NPI Exploitation/ Entitlement		PNI Grandiose Narcissism		PNI Vulnerable Narcissism	
	$R^2$	β	$R^2$	β	$R^2$	β	$R^2$	β	$R^2$	β	$R^2$	β
Predictors	.23***		.25***		.28***		.28***		.33***		.47***	
Emotional Deprivation		.04		.03		.07		.14*		07		05
Emotional Inhibition		.08		.06		.14*		06		.10		.07
Mistrust		.07		.15*		.15*		.20**		.31***		.20***
Social Isolation		35***		08		22***		.01		09		.06
Defectiveness		03		$20^{**}$		.20**		.01		10		11
Subjugation		$13^{*}$		03		.05		04		.08		.19**
Dependence		.15*		.17*		.08		01		01		$16^{*}$
Failure to Achieve		$14^{*}$		29***		- <b>.</b> 35***		23***		.06		.09
Vulnerability to Harm		03		06		03		.00		04		.03
Abandonment		.04		.17**		06		.12*		.11		.23***
Enmeshment		.19**		.07		.24***		.08		.07		.07
Insufficient Self-Control		$14^{*}$		28***		$12^{*}$		.00		$14^{*}$		.09
Entitlement		.35***		.40***		.37***		.36***		.12*		.13*
Self-Sacrifice		.10		.12*		.04		09		.18**		03
Unrelenting Standards		12 <sup>*</sup>		21***		14**		.01		.13*		.07

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

leadership/authority and schemas reflecting dependence, enmeshment, and insufficient self-control reached conventional levels of significance in the regression even though their zero-order correlations were not significant. In contrast, the correlation between leadership/authority and defectiveness was not significant in the regression despite their significant zero-order correlation.

#### 3.2. Self-absorption/Self-admiration

Mistrust ( $\beta = .15$ , p < .05), defectiveness ( $\beta = -.20$ , p < .01), dependence ( $\beta$  = .17, p < .05), failure to achieve ( $\beta$  = -.29, p < .001), abandonment ( $\beta = .17, p < .01$ ), insufficient self-control ( $\beta = -.28, p$ < .001), entitlement ( $\beta$  = .40, p < .001), self-sacrifice ( $\beta$  = .12, p <.05), and unrelenting standards ( $\beta = -.21$ , p < .001) were significant predictors of self-absorption/self-admiration. Positive associations emerged for five early maladaptive schemas (i.e., mistrust, dependence, abandonment, entitlement, and self-sacrifice) and negative associations emerged for four schemas (i.e., defectiveness, failure to achieve, insufficient self-control, and unrelenting standards). The results of the regression analysis differed from the zero-order correlations in that the associations between self-absorption/selfadmiration and schemas reflecting mistrust, dependence, selfsacrifice, and unrelenting standards reached conventional levels of significance in the regression even though their zero-order correlations were not significant. The association between self-absorption/self-admiration and social isolation was not significant in the regression despite their significant zero-order correlation.

# 3.3. Superiority/arrogance

The following early maladaptive schemas emerged as significant predictors of superiority/arrogance: emotional inhibition ( $\beta=.14,p<<.05$ ), mistrust ( $\beta=.15,p<.05$ ), social isolation ( $\beta=-.22,p<.001$ ), defectiveness ( $\beta=.20,p<.01$ ), failure to achieve ( $\beta=-.35,p<<.001$ ), enmeshment ( $\beta=.24,p<.001$ ), insufficient self-control ( $\beta=-.12,p<.05$ ), entitlement ( $\beta=.37,p<.001$ ), and unrelenting standards ( $\beta=-.14,p<.01$ ). Superiority/arrogance was positively associated with five early maladaptive schemas (i.e., emotional inhibition, mistrust, defectiveness, enmeshment, and entitlement) and negatively associated with four schemas (i.e., social isolation, failure to achieve, insufficient self-control, and unrelenting standards). The regression results differed from the basic correlations in that the associations between superiority/arrogance and schemas

reflecting social isolation and failure to achieve were significant in the regression but their associations did not reach conventional levels of significance in the zero-order correlations. The associations between superiority/arrogance and the schemas reflecting emotional deprivation, subjugation, dependence, vulnerability to harm, abandonment, and self-sacrifice were not significant in the regression despite the fact that they had significant zero-order correlations. Interestingly, the associations between superiority/arrogance and schemas reflecting insufficient self-control and unrelenting standards shifted from positive associations in the zero-order correlations to negative associations in the regression which suggests that the systematic variance associated with these schemas that was not accounted for by the other schemas was negatively associated with superiority/arrogance.

## 3.4. Exploitation/entitlement

The early maladaptive schemas that were significant predictors of exploitation/entitlement were emotional deprivation ( $\beta = .14$ , p < .05), mistrust ( $\beta$  = .20, p < .01), social isolation ( $\beta$  = -.22, p <.001), failure to achieve ( $\beta = -.23$ , p < .001), abandonment ( $\beta = .12$ , p<.05), and entitlement ( $\beta=.36, p<.001$ ). Exploitation/entitlement was positively associated with four early maladaptive schemas (i.e., emotional deprivation, mistrust, abandonment, and entitlement) and negatively associated with the failure to achieve schema. The results of the regression analysis differed from the zero-order correlations in that the associations between exploitation/entitlement and schemas reflecting failure to achieve was significant in the regression even though their zero-order correlation was not significant. The associations between exploitation/ entitlement and the schemas reflecting emotional inhibition, social isolation, defectiveness, subjugation, dependence, vulnerability to harm, enmeshment, insufficient self-control, and unrelenting standards were not significant in the regression despite their significant zero-order correlations.

#### 3.5. Grandiose narcissism

Early maladaptive schemas reflecting mistrust ( $\beta=.31, p<.001$ ), insufficient self-control ( $\beta=-.14, p<.05$ ), entitlement ( $\beta=.12, p<.05$ ), self-sacrifice ( $\beta=.18, p<.01$ ), and unrelenting standards ( $\beta=.13, p<.05$ ) emerged as significant predictors of grandiose narcissism. Grandiose narcissism was positively associated

with four early maladaptive schemas (i.e., mistrust, entitlement, self-sacrifice, and unrelenting standards) and negatively associated with the insufficient self-control schema. These results differed from the correlations because the associations between grandiose narcissism and the schemas reflecting emotional deprivation, emotional inhibition, social isolation, defectiveness, subjugation, dependence, failure to achieve, vulnerability to harm, abandonment, and enmeshment were not significant in the regression despite their significant zero-order correlations.

#### 3.6. Vulnerable narcissism

Vulnerable narcissism was associated with the following early maladaptive schemas: mistrust ( $\beta$  = .20, p < .001), subjugation ( $\beta$  = .19, p < .01), dependence ( $\beta = -.16$ , p < .05), abandonment ( $\beta = .23$ , p < .001), and entitlement ( $\beta = .13$ , p < .05). These results show that vulnerable narcissism was positively associated with four early maladaptive schemas (i.e., mistrust, subjugation, abandonment, and entitlement) and negatively associated with the dependence schema. Unlike the zero-order correlations, a negative association emerged between the dependence schema and vulnerable narcissism in the regression analysis rather than the positive association that was observed in the zero-order correlations. In addition, 10 schemas that were significantly correlated with vulnerable narcissism did not reach conventional levels of significance in the regression analysis (i.e., emotional deprivation, emotional inhibition, social isolation, defectiveness, failure to achieve, vulnerability to harm, enmeshment, insufficient self-control, self-sacrifice, and unrelenting standards).

#### 4. Discussion

The purpose of the present study was to extend what is currently known about the cognitive schemas associated with narcissism by examining how normal and pathological forms of narcissism are associated with the early maladaptive schemas. We were interested in examining these schemas because similarities and differences in the associations between these forms of narcissism and the early maladaptive schemas may help us understand how individuals with narcissistic personality features perceive and navigate their social environments. The observed results suggest that the associations between narcissism and the early maladaptive schemas are much more complex than was initially proposed by Young and his colleagues (Young & Flanagan, 1998; Young et al., 2003). That is, entitlement was found to be associated with all aspects of narcissism but the associations between narcissism and schemas reflecting emotional deprivation or defectiveness were less consistent than expected.

In partial support of our hypotheses, the zero-order correlations showed that the scales representing normal and pathological forms of narcissism differed to some degree in their associations with the early maladaptive schemas. More specifically, these correlations showed that both grandiose and vulnerable forms of pathological narcissism were associated with each of the 15 early maladaptive schemas. These correlations revealed that the pathological forms of narcissism were associated with a wide array of maladaptive cognitive styles which may reflect the underlying distress experienced by these individuals. In contrast, the subscales of the NPI differed considerably in their associations with the early maladaptive schemas. The superiority/arrogance and exploitation/entitlement subscales were positively associated with the majority of the early maladaptive schemas (i.e., 13 and 14 schemas, respectively). However, the leadership/authority subscale was positively associated with the entitlement schema but negatively associated with four other schemas and the self-absorption/self-admiration subscale was positively correlated with the abandonment and entitlement schemas but negatively correlated with four other schemas. These patterns of correlations show that the subscales of the NPI had very different associations with the early maladaptive schemas which is consistent with previous research showing that certain subscales of the NPI appear to capture relatively adaptive aspects of narcissism (e.g., leadership/authority) whereas other subscales capture aspects of narcissism that are largely maladaptive (e.g., exploitation/entitlement; Brown et al., 2009). These results show that researchers who employ the NPI are forced to choose between using the total composite score which is problematic given that it consists of subscales that have quite different associations with relevant outcomes or they can use the individual subscale scores which is less than ideal because they have relatively weak psychometric properties (e.g., the internal consistency for the exploitation/entitlement subscale was less than .70 in the present study).

Regression analyses were also conducted to examine the unique associations that each schema had with normal and pathological forms of narcissism. These results revealed a more nuanced view of the links between these forms of narcissism and the early maladaptive schemas. The only early maladaptive schema that had significant associations with each indicator of narcissism was the entitlement schema. The observed associations for the entitlement schema are consistent with the predictions of Young and his colleagues (Young & Flanagan, 1998; Young et al., 2003) as well as previous arguments that feelings of entitlement are at the very core of narcissism (e.g., Bishop & Lane, 2002; Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; Dickinson & Pincus, 2003; Morf & Rhodewalt, 2001).

The mistrust schema was positively associated with both phenotypic expressions of pathological narcissism and three of the subscales from the NPI (i.e., self-absorption/self-admiration, superiority/arrogance, and exploitation/entitlement). These associations suggest the intriguing possibility that narcissism may largely serve as a defensive reaction for those who feel disconnected from others. This lack of connection may provide at least a partial explanation for the willingness of these individuals to use their interpersonal relationships to regulate their feelings of self-worth (Campbell, 1999; Campbell, Foster, & Finkel, 2002; Campbell, Reeder, Sedikides, & Elliot, 2000; Morf, 2006; Morf & Rhodewalt, 2001). The lack of trust that narcissistic individuals have in others may explain some of their interpersonal strategies such as their game-playing romantic styles (Campbell et al., 2002) and their tendency to serve their own self-interest rather than making sacrifices for the common good (e.g., Campbell, Bush, Brunell, & Shelton, 2005). That is, narcissistic individuals may treat others poorly because they anticipate being treated this way by others.

A number of differences also emerged in the associations between the forms of narcissism and the early maladaptive schemas. For example, each of the four subscales of the NPI was negatively associated with the failure to achieve schema, whereas neither expression of pathological narcissism was associated with this particular schema. This suggests that normal narcissists may be relatively confident concerning their abilities and social standing. Interestingly, the confidence associated with normal narcissism is accompanied by the recognition that they are at least somewhat dependent on others as seen in the associations of various NPI subscales with schemas such as dependence and enmeshment. This pattern may reflect an underlying tension for normal narcissists such that the self-confidence they express to others may occur in the broader context of an uneasy sense of reliance on others.

The grandiose and vulnerable forms of pathological narcissism were similar in that they were both associated with the entitlement and mistrust schemas but these expressions of pathological narcissism also had unique associations with the early maladaptive

schemas. Grandiose narcissism was the only form of narcissism associated with unrelenting standards which may suggest that individuals with high levels of grandiose narcissism may be at least somewhat perfectionistic in the goals they set for themselves. Grandiose narcissism was also positively associated with the selfsacrifice schema which may be a subtle means for individuals with high levels of grandiose narcissism to express their grandiosity because they may perceive experiences of self-sacrifice as reflecting their special status or superior capabilities while showing that others are inferior and require their help and guidance (e.g., Nurse, 1998). This interpretation is supported by the positive association between the self-absorption/self-admiration subscale of the NPI and the self-sacrifice schema. Grandiose narcissism also had a negative association with the insufficient self-control schema which suggests that individuals with high levels of grandiose narcissism place a great deal of importance on self-discipline and emotional regulation. Similar associations were found between the insufficient self-control schema and three of the subscales from the NPI (i.e., leadership/authority, self-absorption/self-admiration, and superiority/arrogance).

In contrast to grandiose narcissism, vulnerable narcissism was positively associated with the subjugation schema and negatively associated with the dependence schema which suggests that individuals with high levels of vulnerable narcissism believe that the needs and desires of others are more important than their own at the same time that they deny being overly reliant on others. This is very different from the pattern that emerged for the leadership/ authority subscale of the NPI which found that individuals with high levels of this aspect of normal narcissism reported relatively little concern for the desires of others but recognized their dependence on other individuals. This suggests that individuals with high levels of vulnerable narcissism may differ considerably in how they view their connections with others compared to individuals who possess certain aspects of normal narcissism. Vulnerable narcissism was also positively associated with the abandonment schema which may provide a partial explanation for the high levels of interpersonal sensitivity and reactivity that is exhibited by individuals with high levels of this form of pathological narcissism (e.g., Pincus & Lukowitsky, 2010). Similar associations with the abandonment schema were observed for the selfabsorption/self-admiration and exploitation/entitlement scales of the NPI. This is consistent with previous suggestions that one developmental pathway for narcissistic personality features may be early experiences with cold and rejecting caregivers (Kernberg, 1975; Kohut, 1977).

The results of the present study offer further support for the distinction between normal and pathological forms of narcissism by showing that each form had a somewhat different pattern of associations with the early maladaptive schemas. These patterns of associations may have implications for the conceptualization of both normal and pathological narcissism. For example, each measure of narcissism was positively associated with entitlement which appears to be at the very core of both normal and pathological forms of narcissism. However, the measures of narcissism in the present study differed widely in their associations with the other schemas. This suggests that these different aspects of narcissism are associated with different ways of perceiving and navigating social environments.

Although not explicitly tested here, our underlying process model was that the early maladaptive schemas contribute to the development of narcissistic characteristics. The present data, however, merely allowed us to examine the association between narcissism and these schemas rather than allowing for any sort of determination concerning causality. This correlational data cannot rule out the possibility that the direction of causality may be either bidirectional

or reversed. For example, it is possible that the retrospective abilities of narcissists may be biased (e.g., McCullough, Emmons, Kilpatrick, & Mooney, 2003; Rhodewalt & Eddings, 2002) and, as a result, the early maladaptive schemas reported by narcissists may reflect this bias rather than the actual experiences of narcissists. That is, narcissism may actually cause these cognitive distortions rather than being a consequence of such distortions. It is also possible that narcissism and early maladaptive schemas may both be by-products of some third variable such as childhood temperament which may independently account for the development of both narcissistic tendencies and early maladaptive schemas.

A limitation of the present study is that it relied exclusively on self-report measures. Future researchers may want to extend these findings by including data from multiple reporters and incorporating behavioral information. Potential biases in the cognitive distortions reported by narcissists are important to consider given that these individuals are characterized by overly positive self-representations. For example, this sort of bias may explain why the expected effects for the emotional deprivation and defectiveness schemas were weaker than predicted by Young and Flanagan (1998). That is, narcissists may be selective in their acknowledgement of negative thoughts or emotions concerning themselves (e.g., feeling defective) on a face-valid measure such as the YSQ-SF (see Klonsky, Oltmanns, & Turkheimer, 2002, for a similar suggestion). Different results may have emerged if the measure of early maladaptive schemas had avoided self-presentational concerns through a less direct method of assessment such as the use of an implicit measure to capture these schemas. It is also possible that narcissism may be associated with early maladaptive schemas that are not adequately captured by the YSQ-SF. The schemas captured by this instrument are clearly not exhaustive and the current schemas appear to be more closely associated with early experiences of rejection rather than those reflecting overvaluation. One potential direction for future research would be to examine the degree to which these forms of narcissism are associated with schemas that are not included in the YSO-SF such as those concerning parental overvaluation or aggression. By extending the scope of the schemas that are examined, future researchers may gain an even better understanding of the distorted cognitions that underlie these forms of narcissism. It is also important to mention that some of the observed effects may have been inflated as a result of overlapping constructs at the measurement level. For example, both the NPI and the PNI contain subscales that are specifically concerned with entitlement. As a result, it may not be terribly surprising that these measures would be associated with a schema that taps into feelings of entitlement. One final limitation involves the interpretation of the regression equations where the coefficients for certain schemas were negative while the zero-order correlations involving these predictors were positive. It is possible that this sign-reversal was due to systematic variance in the predictor that was negatively related to narcissism after variance already accounted for by the other predictors was controlled. If such is the case, then it may suggest that some of the schemas are actually multidimensional in nature. However, it is also possible that this reversal was merely a statistical artifact of multicollinearity and that the statistical significance of the non-multicollinear variance was due to sample-specific measurement error (Thompson & Borrello, 1985). The only way to determine whether these reversals were due to the former or latter explanation would be to evaluate whether this pattern of results would replicate in a new sample.

#### 5. Conclusion

The results of the present study found that aspects of normal and pathological narcissism differed in their associations with the early maladaptive schemas. These results are consistent with previous distinctions between normal and pathological forms of narcissism as well as providing additional support for the existence of two expressions of pathological narcissism (i.e., grandiose narcissism and vulnerable narcissism). Normal narcissism had somewhat inconsistent associations with these schemas which is consistent with previous findings showing that some of the NPI subscales reflect adjustment whereas others capture maladjustment (e.g., Miller & Campbell, 2008; Pincus & Lukowitsky, 2010). In contrast, the pathological forms of narcissism had more consistent associations with these early maladaptive schemas which may suggest that individuals with high levels of pathological narcissism may experience conflicting motivations concerning their interactions with others that may result in elevated levels of distress and uncertainty. These results provide additional support for treating these different facets of narcissism as distinct constructs that are worthy of further research examining their importance and clinical relevance.

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