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# Narcissism and Childhood Recollections: A Quantitative Test of Psychoanalytic Predictions

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*Different psychotherapeutic theories provide contradictory accounts of adult narcissism as the product of either parental coldness or excessive parental admiration during childhood. Yet, none of these theories has been tested systematically in a nonclinical sample. The authors compared four structural equation models predicting overt and covert narcissism among 120 United Kingdom adults. Both forms of narcissism were predicted by both recollections of parental coldness and recollections of excessive parental admiration. Moreover, a suppression relationship was detected between these predictors: The effects of each were stronger when modeled together than separately. These effects were found after controlling for working models of attachment; covert narcissism was predicted also by attachment anxiety. This combination of childhood experiences may help to explain the paradoxical combination of grandiosity and fragility in adult narcissism.*

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**Keywords:** narcissism; parenting; psychoanalytic theories; self-esteem

**N**arcissism is defined as a pervasive pattern of grandiosity and self-importance (American Psychiatric Association, 2000). Narcissistic individuals are preoccupied with dreams of success, power, beauty, brilliance, or ideal love. Such individuals appear to live as if they are on an interpersonal stage, showing exhibitionistic behavior and making demands for attention and admiration, but they respond to self-esteem threats with feelings of rage, defiance, shame, and humiliation. Narcissists also display a sense of entitlement, expecting special treatment from others. They are unwilling to return favors, show a lack of empathy, and are interpersonally exploitative. They have relationships that swing between idealization and devaluation (reviewed by Morf & Rhodewalt, 2001).

Although initially identified as a clinical syndrome, the construct of narcissism has recently gained prominence in the social psychological literature. Among nonclinical populations, individual differences in nar-

cissism have been found to predict a considerable range of outcomes, including aggression, aspects of sexual coercion, prejudice, belief in the paranormal, choice of romantic partners, and many different forms of self-enhancement (Bushman & Baumeister, 1998; Bushman, Bonacci, van Dijk, & Baumeister, 2003; Campbell, 1999; Roe & Morgan, 2002; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002; Twenge & Campbell, 2003). Yet, although these consequences of narcissism are increasingly well-documented, much less attention has been paid to explaining the underlying nature of narcissism or how narcissism arises.

Morf and Rhodewalt (2001) argue that narcissism is best thought of as a personality process rather than a fixed individual difference. Underlying narcissism, they propose, is a grandiose yet vulnerable self-concept. This fragile self-concept drives the narcissistic individual to seek constant self-affirmation: "The narcissistic self is perpetually 'under construction', as if the construction site were on quicksand" (p. 180). In a similar vein, Akhtar (1989) proposes a distinction between overt and covert features of narcissism. Overtly, he suggests, narcissists report a grandiose sense of self and are socially charming, although they are oblivious to the needs and feelings of others. Yet, covertly, they seem to experience symptoms of vulnerability: they are self-doubting, hypersensitive to criticism, and are unable to trust or depend on others. This tension between grandiosity and vulnerabil-

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ity can be seen in recent findings that, although generally high in explicit or conscious self-esteem, narcissists tend to be low in self-esteem on an implicit or nonconscious level (Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003) and they respond especially negatively in situations where their self-esteem is threatened (Bushman & Baumeister, 1998; Stucke & Sporer, 2002).

Subsequently, researchers have extended Akhtar's (1989) reasoning to distinguish between overt and covert subtypes of narcissism, supported by factor analyses of the relationships between diverse narcissism measures (Rathvon & Holmstrom, 1996; Rose, 2002; Wink, 1991). Overt and covert narcissists share a common core of arrogance and self-absorption; however, overt narcissists are typically more exhibitionistic and aggressive, whereas covert narcissists are more defensive, vulnerable, and anxious (Wink, 1991). Compared to covert narcissism, overt narcissism has more self-protective benefits, including higher self-esteem, happiness, and life satisfaction (Rose, 2002). Yet, despite these important differences, most social psychological research has focused on overt narcissism, and covert narcissism has been relatively neglected in the literature (but see Hendin & Cheek, 1997; Smolewska & Dion, 2005; Wiehe, 2003).

#### PSYCHOANALYTIC AND CLINICAL THEORIES OF NARCISSISM

Arguably, one of the reasons narcissistic individuals are so intriguing to both the layperson and the psychologist is because they appear to have adult versions of infantile characteristics (Morf & Rhodewalt, 2001). Many psychoanalytic and clinical writings have proposed that, owing to parental deficiencies of some form or other in childhood, narcissists seek to meet these unfulfilled needs in adulthood.

Freud's (1914/1957) essay *On Narcissism* was the origin of work in this area. Freud distinguished between anaclitic, or attachment, type individuals and narcissistic type individuals. He argued that the anaclitic type directs his or her love outward; initially, the love objects are parents and, later on, substitutes for parents. In contrast, the narcissistic individual directs his or her love inward. Freud viewed narcissism as the result of either parental overvaluation or rejection.

Kernberg (1975) also developed a theory of the etiology of narcissism based on his clinical experience as a psychoanalyst. He argued that narcissism is often the result of chronically cold parental figures who exhibit either indifference or covert but spitefully aggressive attitudes toward their children. This inadequate parenting results in the narcissistic adult seeking to maintain an inflated self-image in later relationships to protect the self. Kernberg viewed narcissism as a defense

against the feelings of rage and abandonment resulting from childhood rejection. Narcissists, as a result, have a deep mistrust of others and are completely unable to depend on anybody else. Their relationships are characterized by intense jealousy, control, and withdrawal.

Kohut (1977) argued that narcissism is a normal and adaptive aspect of infant development. The child's grandiose self is supported through mirroring and idealization between parents and child. However, if these needs are not met—usually attributed to unreliable, cold, distant, or insufficiently empathetic parenting (although Kohut also refers sometimes to “over-spoiling”)—maladaptive adult forms of narcissism may result. The narcissistic individual will try to meet his or her mirroring and idealization needs in the context of adult relationships. Children who were unable to idealize their parents because of their childhood experiences will seek idealized parental substitutes in adulthood who fail to live up to their impossible expectations.

Millon (1981) provides a contrasting perspective to those of Kernberg (1975) and Kohut (1977), each of whom focuses mainly on the rejecting and negative behavior of the parents of future narcissists. Millon argues that narcissism may instead be the result of an excess of parental indulgence and admiration. Parents show unrealistic overvaluation of the child's worth, creating an enhanced self-image within the child that cannot be sustained in the outer world. This theory can be related to Freud's (1914/1957) proposal that overvaluation in childhood may lead to adult narcissism.

Despite the variations between these theories of the origins of narcissism, they share the reasoning that it is owing to their dysfunctional early interactions with parents that narcissists' adult relationships are full of hostility and mistrust (Campbell, 1999). Narcissists drain out of their relationships the feedback they desire. Not only are such individuals mistrusting of others but they also do not like or really care for them; in fact, they often show contempt for those closest to them. Others are somehow not “real” to them and are only of value if they help to bolster the self (Sedikides et al., 2002).

#### PARALLELS WITH ATTACHMENT THEORY

The psychoanalytic clinical literature on narcissism has some parallels with research into infant and adult attachment styles (Bowlby, 1969/1982). Attachment theory focuses attention on the importance of the bonds formed between children and their caregivers and suggests that these bonds may play a crucial role throughout the life cycle. According to attachment theory, from infancy to adolescence, expectations of the availability and responsiveness of attachment figures are incorporated into working models of attachment, which guide the individual's perception of, and behavior in, future

relationships. Ainsworth, Blehar, Waters, and Wall (1978) distinguished between three infant attachment styles: secure, anxious/ambivalent, and avoidant. Hamilton (2000) found that these styles were relatively stable throughout a 17-year period: 77% of participants were similarly classified as securely or insecurely attached at 1 year and at 17.5 years of age. These three attachment styles also can be conceptualized as regions in two-dimensional space, the underlying dimensions being avoidance and anxiety (Brennan, Clark, & Shaver, 1998). Bartholomew and Horowitz (1991) propose that a negative model of the self is closely related to anxiety about abandonment and that a negative model of others is closely related to avoidant behavior.

Hazan and Shaver (1987) used attachment theory to characterize adult romantic relationships. Just more than half of their participants classified themselves as secure, 24% as avoidant, and 20% as anxious/ambivalent. Consistent with attachment theory, adult attachment styles were predicted by participants' reports of their relationships with parents. Secure participants reported warmer relationships with and between both parents. In contrast, avoidant participants described their mothers as cold and rejecting and anxious/ambivalent participants perceived their fathers as unfair. Thus, parental coldness or rejection, associated above with the development of narcissism, appears also to be associated with an insecure—especially an avoidant—style of attachment.

Research also has begun to explore the relationship between adult attachment styles and forms of narcissism. In two studies using different methodologies, a link has been found between covert narcissism and anxious (or fearful) styles of adult attachment; a weaker link with avoidant attachment was found in one study only. On the other hand, overt narcissism showed no detectable relationship with attachment styles in either study (Dickinson & Pincus, 2003; Smolewska & Dion, 2005).<sup>1</sup>

#### AIMS AND DESIGN OF THE CURRENT RESEARCH

Although there has been much theoretical speculation from psychoanalysts on the etiology of narcissism, there is a distinct lack of systematic quantitative research in this area. For the most part, the theories reviewed above have been developed interpretively from qualitative case studies of therapeutic patients. Although this may have led to deeper and richer insights than would be possible using a quantitative approach, there are striking discrepancies between the theoretical accounts produced, which need to be resolved. Specifically, does narcissism result from cold, indifferent, and rejecting styles of parenting (Kernberg, 1975; Kohut, 1977), from excessive praise and admiration (Millon, 1981), or from some combination of the two (Freud, 1914/1957)?

Moreover, the focus on clinical case studies in psychoanalytic writings raises important concerns about generality, especially to nonclinical samples, which have been the main focus of recent social psychological interest in narcissism. Indeed, because narcissists typically report high levels of life satisfaction and happiness (Rose & Campbell, 2004), it seems likely that only a minority will ever present themselves for therapeutic attention and that those who do so may be unrepresentative of narcissists in the general population. Hence, we were especially concerned to evaluate the applicability of psychoanalytic theories of narcissism to a nonclinical sample.

On a related note, we were interested to examine whether different childhood experiences might be associated with different forms of narcissism. Perhaps analysts had developed conflicting theories because they were studying different syndromes. Given the more recent identification of overt and covert subtypes of narcissism (Rose, 2002; Wink, 1991), we considered the possibility that excessive praise and admiration (Millon, 1981) might be associated to a greater extent with overt narcissism, and parental coldness and indifference (Kernberg, 1975; Kohut, 1977) with covert narcissism.

We examined these questions using structural equation modeling among a nonclinical sample of United Kingdom adults. Participants completed measures of overt and covert narcissism, anxious and avoidant working models of attachment in their relationships, and recollections of parental coldness, indifference, implicit aggression and rejection, and of excessive parental praise and admiration during childhood. Although childhood recollections may be biased to some extent by reconstructive memory processes, they provide an important first line of evidence in research into family processes and are widely used in research into the adult consequences of childhood experiences (see, among many others, Buri, Louiselle, Misukanis, & Mueller, 1988; Chipman, Olsen, Klein, Hart, & Robinson, 2000; Gittleman, Klein, Smider, & Essex, 1998; Hazan & Shaver, 1987). Among various populations, measures of childhood recollections have been found to be reliable, valid, and stable indicators of actual parenting behavior (e.g., McLaughlin et al., 2000; Parker, 1981; Wilhelm & Parker, 1990).

Based on the psychotherapeutic perspectives reviewed above, we compared four models of possible relationships between childhood recollections and adult narcissism. In the first model, we hypothesized that recollections of cold and indifferent parenting would be associated with both overt and covert narcissism (after Kernberg, 1975; Kohut, 1977). In the second model, we hypothesized that recollections of excessive parental praise and admiration would be associated with both overt and covert narcissism (after Millon, 1981). In the

third model, we hypothesized that recollections of cold and indifferent parenting would be associated with covert narcissism, whereas recollections of excessive parental praise and admiration would be associated with overt narcissism (as suggested above). In the final model, we hypothesized that recollections of both cold/indifferent parenting and excessive admiration would be associated with both forms of narcissism (after Freud, 1914/1957).

In testing these models, we also were concerned to establish whether childhood recollections contributed to predictions of overt and covert narcissism after accounting for any possible contribution of working models of attachment. This would confirm that our predictions derived from psychoanalytic theory were not simply rephrasing aspects of attachment theory, given the parallels between these perspectives.

## METHOD

### *Participants and Procedure*

One hundred and twenty participants completed questionnaires individually. Participants included 60 men and 59 women between the ages of 18 and 52 years ( $M = 28.8$  years,  $SD = 7.7$ ); 92 were university students and 27 were full-time employees in jobs including social work, sales, and the building industry; regarding their ethnicity, 104 participants classified themselves as White European, 6 as White Other, 2 as Black Caribbean, 1 as Black African, 1 as Black Other, 2 as Mixed Race, and 1 as Indian.<sup>2</sup>

Most participants were approached in various parts of the university campus on weekdays, usually in bars,<sup>3</sup> restaurants, or coffee bars. A small minority were approached in their workplaces. Participants were asked if they would be willing to complete a questionnaire about their self-perception and relationships, which lasted approximately 15 min. Those who agreed to take part were asked to complete the questionnaire without conferring with others. They also were reminded of their right to withdraw from the study should they feel uncomfortable. None chose to do so. After completion, participants were thanked for their time and were given a written debriefing.

### *Measures*

**Narcissism.** Overt narcissism was measured using the 40-item version of the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988, adapted from Raskin & Hall, 1979). Participants were presented with 40 pairs of statements and were asked to choose in each case which statement was closer to their own feelings and beliefs. An example is the choice between "If I ruled the world it would be a much better place" (narcissistic response)

and "The thought of ruling the world frightens the hell out of me" (nonnarcissistic response). The NPI is the most frequently used measure of narcissism in psychological research and shows good reliability and validity (Raskin & Terry, 1988; Rhodewalt & Morf, 1995). In the current study, Cronbach's  $\alpha$  was .81.

Raskin and Terry (1988) also identified seven subscales within the NPI, which have been shown to have somewhat differing implications for adjustment (Cramer, 1995; Raskin, Novacek, & Hogan, 1991; Watson & Biderman, 1993). However, internal consistency was poor for many of these scales: authority (.69), self-sufficiency (.42), superiority (.52), exhibitionism (.67), exploitativeness (.49), vanity (.68), and entitlement (.45). Hence, for our main analyses, we treated the NPI as a single-dimensional measure. Nevertheless, we present some post hoc analyses distinguishing between NPI subscales.

Covert narcissism was measured using the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997). The HSNS is composed of 10 items that are rated using a 5-point Likert-type scale (1 = *very uncharacteristic or untrue, strongly disagree*, 5 = *very characteristic or true, strongly agree*). These items were selected from a narcissism scale originally developed by Murray (1938, as cited by Hendin & Cheek, 1997) so as to converge closely with a composite of two MMPI scales identified as measures of covert narcissism (see Rathvon & Holmstrom, 1996; Rose, 2002; Wink, 1991). This convergence has been replicated in subsequent studies independent of the original item selection (Cheek, McMullin, Hendin, & Wink, 1999; Luglio, 2002). However, compared to the MMPI measures, the HSNS has much greater face validity, reflecting the original source of the items. Items measure recognizable features of covert narcissism, such as self-absorption (e.g., "I can easily become entirely absorbed in thinking about my personal affairs, my health, my cares, or my relations to others") and hypersensitivity (e.g., "My feelings are easily hurt by ridicule or the slighting remarks of others"). Moreover, the HSNS shows predictable associations with measures of social anxiety, self-doubt/inauthenticity, dispositional envy, and defensive separation from others (Gleason, Jarudi, & Cheek, 2003; Luglio, 2002; Schurman, 2001) and discriminates perpetrators from nonperpetrators of both child abuse and intimate partner violence (Meier, 2004; Wiehe, 2003). In this study, Cronbach's  $\alpha$  was acceptable at .69. Consistent with previous studies of overt and covert narcissism, HSNS and NPI scores were unrelated ( $r = .10$ ).<sup>4</sup>

**Childhood recollections.** We developed 15 items to measure recollections of parental indifference, coldness, rejection, dependability, and overvaluation during childhood derived closely from psychoanalytic accounts

TABLE 1: Component Loadings of Items Measuring Childhood Recollections

Item	Component	
	I	II
Component I: Parental coldness		
When I was a child I often felt my parents were "cold" toward me.	.896	.098
When I was a child I sometimes felt that my parents wished I wasn't around.	.835	.022
<i>When I was a child my parents were always there for me.</i>	-.811	.010
<i>When I was a child I knew that my parents could always be depended on to provide love.</i>	-.796	.096
When I was a child I sometimes wondered if my parents secretly felt spiteful toward me.	.753	.076
<i>When I was a child I never felt rejected by my parents.</i>	-.746	.085
When I was a child I did not receive much warmth or affection from my parents.	.728	.005
When I was a child my parents often acted in an indifferent manner to me.	.723	.021
When I was a child my parents sometimes acted in an aggressive way to me.	.708	.015
When I was a child my parents often did not seem aware of my presence.	.651	-.120
<i>When I was a child my parents thought I was very special and important.</i>	-.549	.358
Component II: Parental overvaluation		
Looking back, I feel that my parents sometimes put me on a pedestal.	.160	.826
When I was a child my parents believed I had exceptional talents and abilities.	-.059	.777
When I was a child my parents praised me for virtually everything I did.	-.118	.679
When I was a child my parents rarely criticized me.	-.135	.461

NOTE: Reverse-loading items are italicized.

of the origins of narcissism (Freud, 1914/1957; Kernberg, 1975; Kohut, 1977; Millon, 1981). Items were rated on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). To explore the structure of these items, we conducted a principal components analysis with oblique rotation. Initially, three factors were extracted with eigenvalues greater than 1. However, only one item loaded on the third factor, and this item loaded adequately within a two-factor solution. This solution accounted for 57.8% of the variance in these items and showed an almost simple structure. Item loadings on the two rotated components are in Table 1.

On the first rotated component, seven items measuring parental indifference, coldness, and rejection loaded positively, whereas three items measuring parental dependability and acceptance loaded negatively. These 10 items formed a highly reliable subscale measuring recollections of parental coldness (Cronbach's  $\alpha = .92$ ).<sup>5</sup>

The second rotated component was defined by four items measuring parental overvaluation. These four items formed an acceptably reliable subscale measuring recollections of parental overvaluation (Cronbach's  $\alpha = .68$ ).

*Adult attachment styles.* The two dimensions of adult attachment—avoidance and anxiety—were measured using the Experiences in Close Relationships Inventory (ECR; Brennan et al., 1998). The ECR is composed of 36 items, 18 of which measure each dimension. An example avoidance item is "I am nervous when partners get too close to me." An example anxiety item is "When I'm not involved in a relationship, I feel somewhat anxious and

insecure." Participants responded to all items using a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Cronbach's  $\alpha$  was highly acceptable for both subscales at .92 for avoidance and .87 for anxiety.

## RESULTS

### *Measurement of Latent Variables*

For all analyses, we tested structural equation models of latent variables using the EQS software package. Because our main interest was in the relations between constructs rather than the relations between items within each construct, we used item parceling to create indicators for our models (Little, Cunningham, Shahar, & Widaman, 2002). As recommended by Little et al., we created three indicators of each construct so that all latent variables would be just-identified locally. Items within each scale or subscale were alternately assigned to each of the three indicators for that construct. Means, standard deviations, and correlations of the indicators created are reported in Table 2. None of the indicators showed unacceptable levels of skew (range:  $-.61$  to  $1.4$ ) or kurtosis (range:  $-.80$  to  $1.7$ ). Mardia's coefficient for multivariate kurtosis was highly acceptable at .96.<sup>6</sup>

Using EQS, we tested a measurement model including covarying latent factors for overt narcissism, covert narcissism, parental coldness, parental overvaluation, attachment avoidance, and attachment anxiety, each represented by three indicators. Variance estimates for each factor were fixed at 1 so that all loadings could be left unconstrained. This model showed an excellent fit to the data,  $\chi^2(120) = 142.45$ ,  $p = .08$ , Non-Normed Fit

TABLE 2: Means, Standard Deviations, and Zero-Order Correlations Between Indicators Used in the Structural Equation Models

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
NPI1	1.37	.18	—																	
NPI2	1.37	.18	.60	—																
NPI3	1.30	.19	.56	.61	—															
HSNS1	2.70	.60	.11	.20	.11	—														
HSNS2	2.74	.77	-.00	-.01	.12	.53	—													
HSNS3	3.21	.81	-.00	.06	-.01	.55	.38	—												
ANX1	3.66	1.00	.05	-.03	-.03	.35	.43	.37	—											
ANX2	3.83	.98	-.05	-.19	-.14	.25	.32	.26	.74	—										
ANX3	3.84	1.04	.06	-.07	-.04	.23	.35	.24	.77	.78	—									
AVOI1	3.17	1.09	.00	.04	-.01	.04	.04	.02	.04	.15	.12	—								
AVOI2	3.03	1.13	.03	.10	.05	.00	.06	.02	.04	.19	.10	.87	—							
AVOI3	3.72	1.11	-.01	.04	-.01	-.03	-.03	-.04	-.05	.10	.05	.81	.83	—						
OVER1	3.72	1.46	.14	.19	.22	.01	.12	-.06	-.03	-.12	-.02	-.09	-.06	-.05	—					
OVER2	4.83	1.59	.16	.25	.22	.04	.05	.02	.00	-.14	-.05	-.07	-.03	-.07	.58	—				
OVER3	3.90	1.83	.10	.16	.11	.04	-.11	-.17	-.22	-.20	-.17	-.10	-.12	-.04	.31	.33	—			
COLD1	2.23	1.21	.02	.06	-.07	.18	-.01	.23	.10	.05	.09	.13	.10	.10	-.42	-.40	-.26	—		
COLD2	2.61	1.41	.11	.01	-.04	.16	-.05	.28	.06	.04	.05	.16	.14	.16	-.43	-.40	-.38	.78	—	
COLD3	2.20	1.33	.09	-.02	-.06	.10	-.06	.23	.04	.06	.07	.21	.19	.19	-.38	-.45	-.35	.84	.86	—

NOTE: NPI1, NPI2, and NPI3 are indicators of overt narcissism; HSNS1, HSNS2, and HSNS3 are indicators of covert narcissism; ANX1, ANX2, and ANX3 are indicators of attachment anxiety; AVOI1, AVOI2, and AVOI3 are indicators of attachment avoidance; OVER1, OVER2, and OVER3 are indicators of parental overvaluation; COLD1, COLD2, and COLD3 are indicators of parental coldness.

Index (NNFI) = .976, Comparative Fit Index (CFI) = .981, root mean square error of approximation (RMSEA) = .040 (90% confidence interval: .000 to .063). All indicators loaded strongly and significantly on their respective factors, with standardized loadings from .47 to .95 and all  $p$ s < .00001. Thus, our measurement model was supported.

#### *Attachment and Narcissism*

Our initial analyses were designed to detect any significant effects of avoidant and anxious working models of attachment on overt and covert narcissism so as to control for these effects in subsequent models. To do this, we first computed a model including all four possible paths from attachment anxiety and avoidance to overt and covert narcissism. The two attachment dimensions were allowed to covary, as were the two dimensions of narcissism. This model showed excellent fit indices,  $\chi^2(48) = 61.86$ ,  $p = .09$ , NNFI = .976, CFI = .982, RMSEA = .049 (90% confidence interval: .000 to .081). However, only one of the four paths—from attachment anxiety to covert narcissism—was statistically significant ( $\beta = .474$ ,  $p < .0001$ ). None of the other three paths was approaching conventional levels of statistical significance, and removing all three resulted in a negligible loss of fit,  $\Delta\chi^2(3) = 1.10$ ,  $p = .78$ . Thus, attachment anxiety was a predictor of covert narcissism but there were no other relationships between working models of attachment and forms of narcissism. Hence, in our main analyses, we controlled for the path from attachment anxiety to covert narcissism.

#### *Childhood Recollections and Narcissism*

Our main analyses compared four possible models of the relationship between childhood recollections and narcissism against a baseline model, controlling for the attachment path identified above:

- Our baseline model included a single path, from attachment anxiety to covert narcissism. The two forms of narcissism were allowed to covary; the attachment dimensions and the two dimensions of childhood recollections were all allowed to covary with each other. However, this model included no direct paths from childhood recollections to narcissism. Any statistical improvement over this model would mean that childhood recollections contributed to predictions of narcissism independently of working models of attachment.
- To test the perspective of Kernberg (1975) and Kohut (1977), we added direct paths from parental coldness to both overt and covert narcissism (Model 1).
- To test the perspective of Millon (1981), we replaced these with direct paths from parental overvaluation to both overt and covert narcissism (Model 2).

**TABLE 3: Fit Indices for Compared Models**

<i>Model</i>	$\chi^2$	df	p	NNFI	CFI	RMSEA	90% CI for RMSEA
Baseline	160.19	127	.025	.967	.973	.047	.018-.068
Model 1	158.43	125	.023	.966	.972	.047	.019-.068
Model 2	153.53	125	.042	.971	.976	.044	.009-.065
Model 3	152.61	125	.047	.972	.977	.043	.005-.065
Model 4	143.36	123	.101	.979	.983	.037	.000-.061

NOTE: NNFI = Non-Normed Fit Index; CFI = Comparative Fit Index; RMSEA = root mean square error of approximation; CI = confidence interval.

- To test the possibility that these different perspectives reflected different forms of narcissism, we replaced these with direct paths from parental overvaluation to overt narcissism and from parental coldness to covert narcissism (Model 3).
- Finally, we added direct paths from parental coldness to overt narcissism and from parental overvaluation to covert narcissism, thus covering all possible paths from childhood recollections to overt and covert narcissism (Model 4).

Fit indices and structural parameters for these models are shown in Tables 3 and 4, respectively. All five models showed acceptable fit. Model 1 provided no significant improvement over the baseline model,  $\Delta\chi^2(2) = 1.75$ ,  $p = .42$ , thus failing to support the Kernberg-Kohut perspective. On the other hand, Models 2 and 3 both provided significant improvements over the baseline model,  $\Delta\chi^2(2) = 6.66$  and  $7.57$ , respectively, both  $p$ s < .05, lending some support both to the Millon perspective (Model 2) and to the model with differing predictors of overt and covert forms of narcissism (Model 3). However, Model 4 provided a significant improvement in fit over each of the preceding models, all  $\Delta\chi^2(2) \geq 9.25$ , all  $p$ s < .01. Fit indices for this model were excellent,  $\chi^2(123) = 143.36$ ,  $p = .10$ , NNFI = .979, CFI = .983, RMSEA = .037 (90% confidence interval: .000 to .061). Thus, recollections of childhood were significantly associated with adult levels of narcissism after accounting for the effects of attachment styles but none of the simpler models (Models 1 to 3) appeared to provide an adequate account of these associations.

Standardized parameters of Model 4 are summarized in Figure 1. The superiority of this model is especially apparent from the estimates of modeled variance shown at the bottom of Table 4. Models 1 to 3 accounted for between 0% and 8.8% of variance in overt narcissism; yet, Model 4 accounted for 20.8% of variance in overt narcissism, more than double that of its nearest competitor. An inspection of the standardized path coefficients in Table 4 helps to explain this surprising difference. Modeled separately, parental coldness did not predict overt narcissism ( $\beta = .00$ ) and parental overvaluation

**TABLE 4: Standardized Paths and Covariances Between Latent Variables and Estimates of Modeled Variance in Compared Models**

Parameters	Model				
	Baseline	Model 1	Model 2	Model 3	Model 4
Standardized path coefficients					
Parental coldness → overt narcissism	—	-.00	—	—	.37*
Parental overvaluation → overt narcissism	—	—	.30*	.28*	.58**
Attachment anxiety → covert narcissism	.48***	.47***	.48***	.46***	.49***
Parental coldness → covert narcissism	—	.13	—	.11	.32*
Parental overvaluation → covert narcissism	—	—	.05	—	.29†
Standardized covariance estimates					
Attachment anxiety ↔ attachment avoidance	.11	.11	.11	.11	.11
Attachment anxiety ↔ parental coldness	.08	.07	.08	.07	.07
Attachment anxiety ↔ parental overvaluation	-.13	-.12	-.13	-.12	-.14
Attachment avoidance ↔ parental coldness	.20*	-.20*	.20*	.20*	.20*
Attachment avoidance ↔ parental overvaluation	-.10	-.10	-.09	-.09	-.10
Parental coldness ↔ parental overvaluation	-.62***	-.62***	-.59***	-.60***	-.62***
Overt narcissism ↔ covert narcissism	.22†	.22†	.21†	.20	.12
Estimates of modeled variance ( $R^2$ )					
Overt narcissism	—	0.0%	8.8%	7.7%	20.8%
Covert narcissism	22.9%	24.3%	22.7%	23.4%	29.1%

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

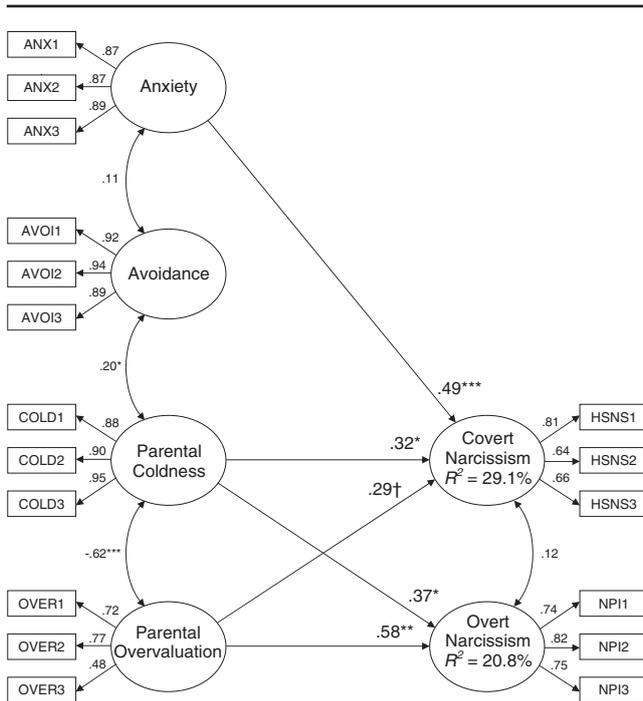
provided a relatively weak prediction ( $\beta = .30$ ). Yet, when these paths were modeled together, parental coldness made a significant positive contribution ( $\beta = .37$ ) and the contribution of parental overvaluation was considerably strengthened ( $\beta = .58$ ). Thus, we had found a suppression effect between these predictors: Parental overvaluation predicted overt narcissism better to the extent that it was not associated with parental warmth and parental coldness predicted overt narcissism only to the extent that it was not associated with an absence of excessive praise and admiration.

A similar, albeit weaker, pattern of effects also was apparent in predictions of covert narcissism. Compared to the baseline model, Models 1 to 3 accounted for between 0% and 1.4% of additional variance in covert narcissism, but Model 4 accounted for a further 4.8% compared to its nearest competitor. Modeled separately, neither parental coldness nor parental overvaluation significantly predicted covert narcissism ( $\beta = .13$  and  $.05$ , respectively). Yet, both paths were stronger when they were modeled together: Parental coldness became a significant predictor and parental overvaluation a marginally significant predictor of covert narcissism ( $\beta = .32$  and  $.29$ , respectively). Thus, despite weaker effects than in predictions of overt narcissism—especially the path from parental overvaluation—we found the same suppression relationship between the two predictors: parental overvaluation predicted covert narcissism to the extent that it was not associated with parental warmth and parental coldness predicted covert narcissism to the extent that it was not associated with an absence of praise and admiration.

*Testing for Sex Differences*

We were interested to explore post hoc whether the pattern of effects described above might be masking the presence of differing effects among men and women in our sample. To test this, we computed a series of multigroup analyses, treating male and female participants as two independent samples. Our first model replicated the structure of Model 4 above, with all parameters free to vary between men and women. Unsurprisingly, this model showed acceptable fit indices,  $\chi^2(246) = 291.05$ ,  $p = .03$ , NNFI = .955, CFI = .963, RMSEA = .040 (90% confidence interval: .015 to .056). We then tested the effects of progressively constraining groups of model parameters to be equal among men and women, following a logical sequence (Bentler, in press).

First, we imposed equality constraints on all factor loadings to test for invariance of our latent constructs. This resulted in no detectable loss of fit compared to the fully unconstrained model,  $\Delta\chi^2(12) = 11.88$ ,  $p = .46$ . Hence, it was reasonable to test for invariance of the five structural paths in our model, from attachment anxiety to covert narcissism and from parental coldness and overvaluation to both forms of narcissism. Constraining all of these paths to be identical for men and women also resulted in no detectable loss of fit,  $\Delta\chi^2(5) = .84$ ,  $p = .97$ , and fit indices for this model remained acceptable,  $\chi^2(263) = 303.76$ ,  $p = .04$ , NNFI = .962, CFI = .967, RMSEA = .036 (90% confidence interval: .007 to .053). A Lagrange Multiplier Test indicated that none of the constraints in this model were problematic (all  $ps > .23$ ). Thus, there was no evidence whatsoever to suggest that the paths



**Figure 1** Structural equation model showing relations between childhood recollections, working models of attachment, and overt and covert narcissism (Model 4).

NOTE: Numbers are standardized factor loadings, structural paths, and covariances. For clarity of presentation, error terms are not displayed. Also not displayed are three nonsignificant covariance paths between childhood recollections and working models of attachment (reported in Table 4). Unstandardized factor loadings of ANX1 (attachment anxiety), AVOI1 (attachment avoidance), COLD1 (parental coldness), OVER1 (parental overvaluation), HSNS1 (covert narcissism), and NPI1 (overt narcissism) were constrained to 1. Factor loadings of all remaining indicators were significant at  $p < .00001$ .

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

reported in Figure 1 were masking the presence of different effects among male and female participants in our sample.

We then imposed equality constraints on all factor variances and covariances. This, too, resulted in no detectable loss of fit,  $\Delta\chi^2(10) = 4.46$ ,  $p = .92$ . Finally, we imposed equality constraints on all residual variances and covariances. Imposing these constraints resulted in a significant loss of fit, compared to the preceding model,  $\Delta\chi^2(3) = 11.28$ ,  $p < .05$ . A Lagrange Multiplier Test indicated that one of the new constraints was problematic: The covariance between residuals for overt and covert narcissism was significantly different among men and women. Relaxing this constraint resulted in a significant improvement in fit,  $\Delta\chi^2(1) = 9.46$ ,  $p < .01$ , and excellent overall fit indices,  $\chi^2(275) = 310.05$ ,  $p = .07$ , NNFI = .968, CFI = .972, RMSEA = .033 (90% confidence interval: .000 to .050). Within this model, all five structural paths reported in Figure 1 were significant (all  $ps < .05$ ),

as were the covariances between parental coldness and overvaluation and between parental coldness and avoidance. However, the residual variances of overt and covert narcissism showed a significant positive correlation among female participants ( $r = .51$ ,  $p < .01$ ) but not among male participants ( $r = -.29$ ,  $p = .13$ ).

*Analyses Predicting NPI Subscales*

Finally, we were interested to explore post hoc whether the suppression effects we had found might be masking differing effects on particular facets of overt narcissism, as defined by the seven NPI facets identified by Raskin and Terry (1988). As in preceding analyses, we modeled each construct as a latent variable loading on three indicators, created by item parceling. A measurement model, including covarying latent factors for each of the seven NPI facets, showed an excellent fit to the data,  $\chi^2(168) = 172.87$ ,  $p = .38$ , NNFI = .985, CFI = .988, RMSEA = .016 (90% confidence interval: .000 to .045). All indicators loaded significantly on their respective factors (all  $ps < .05$ ), although some loadings were relatively weak (standardized loadings ranged from .24 to .78).

To explore for suppression effects, we compared three models. Model 1 included paths from parental coldness to each of the seven NPI facets. Model 2 instead included paths from parental overvaluation to each facet. Model 3 included paths from both parental coldness and overvaluation to each facet. In all three models, the two dimensions of childhood recollections were allowed to covary, as were the seven NPI facets. Results are shown in Table 5. Model 3 provided a significant improvement in fit compared to both Models 1 and 2,  $\Delta\chi^2(7) = 14.88$  and 14.11, respectively, both  $ps < .05$ . Fit indices for this model were acceptable, although not excellent,  $\chi^2(288) = 350.23$ ,  $p = .01$ , NNFI = .913, CFI = .929, RMSEA = .043 (90% confidence interval: .024 to .058).

Predictions of at least four of the seven NPI subscales were consistent with suppression effects between parental coldness and overvaluation. This was most apparent in predictions of authority and exhibitionism: Both parental coldness and overvaluation were significant positive predictors of these subscales when paths were modeled together in Model 3, despite inconsistent and weaker effects when these paths were modeled separately in Models 1 and 2. Moreover, Model 3 accounted for more than 15% of variance in both subscales, more than double the proportion accounted for by Model 1 (6.5% of exhibitionism) or Model 2 (6.2% of authority). Predictions of superiority and exploitativeness showed a similar, albeit weaker, pattern. Although only the path from parental overvaluation to superiority reached statistical significance, all paths were stronger when modeled together than separately, and Model 3 accounted

**TABLE 5: Standardized Paths Between Latent Variables and Estimates of Modeled Variance in Models Predicting NPI Subscales**

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>		
	<i>Coldness</i>	<i>R<sup>2</sup> (%)</i>	<i>Overvaluation</i>	<i>R<sup>2</sup> (%)</i>	<i>Coldness</i>	<i>Overvaluation</i>	<i>R<sup>2</sup> (%)</i>
Authority	.00	0.0	.25*	6.2	.34*	.51**	16.0
Entitlement	-.20	3.8	.43**	18.4	.17	.56**	22.3
Exhibitionism	.26*	6.5	-.02	0.0	.49**	.37*	15.1
Exploitativeness	.01	0.0	.16	2.5	.24	.36	7.9
Self-sufficiency	-.19	3.7	.31 <sup>†</sup>	9.7	-.00	.30	9.0
Superiority	.00	0.0	.22	4.9	.28	.43*	11.1
Vanity	-.07	0.1	.11	1.2	-.00	.11	1.3

NOTE: NPI = Narcissistic Personality Inventory.  
<sup>†</sup>*p* < .10. \**p* < .05. \*\**p* < .01.

for more than double the variance in both subscales compared to Models 1 or 2.

There also was some evidence for suppression in predictions of entitlement. Although this subscale was predicted significantly by parental overvaluation and not by parental coldness across the three models, the path from parental overvaluation was somewhat stronger in Model 3 than in Model 2, whereas the nonsignificant path from parental coldness was negative in Model 1 but became positive in Model 3, when parental overvaluation was taken into account. On the other hand, there was no evidence of suppression effects in predictions of the remaining two subscales, self-sufficiency and vanity. Self-sufficiency was predicted marginally by parental overvaluation in Model 2, but this effect was not enhanced by including parental coldness in Model 3. Vanity showed little relation with either dimension of childhood recollections.

DISCUSSION

The aim of this study was to conduct a systematic quantitative test of psychotherapeutic speculations about the origins of narcissism among a nonclinical adult sample. Recollections of both parental overvaluation (after Millon, 1981) and parental coldness (after Kernberg, 1975; Kohut, 1977) contributed positively to predictions of narcissism, supporting the relevance of these psychoanalytic constructs to the explanation of individual differences in nonclinical adult narcissism. These effects did not differ among men and women and were found after controlling for the influence of working models of attachment, ruling out an explanation in terms of already established principles of attachment theory. Moreover, the suppression relationship between these predictors was not an artifact of divergent effects on different facets of overt narcissism: Consistent results were found in predictions of five of the seven NPI subscales.<sup>7</sup>

The fact that both dimensions of childhood recollections contributed significantly to predictions of overt

narcissism may help to explain the paradoxical combination of grandiosity and fragility that is so characteristic of adult narcissists. Seemingly, the future narcissist receives constant praise from his or her caregiver, but this is accompanied by implicit messages of coldness and rejection rather than warmth and acceptance and, thus, we speculate, the praise—which is also indiscriminate—may come to seem unreal. It seems entirely credible that such a pattern of parent-child interactions would lead to the ambivalent and defensive patterns of self-evaluation characteristic of adult narcissism (e.g., Jordan et al., 2003; Morf & Rhodewalt, 2001; Sedikides et al., 2002).

Although our predictions were derived initially from psychoanalytic theory, these findings resonate with concerns about the possible emergence of an “age of narcissism” in Western countries throughout the past few decades (Lasch, 1979; Roberts & Helson, 1997). With the growth of the “self-esteem movement” in the United States and similar schools of thought elsewhere, the view has become almost axiomatic in Western society that increasing the positive valence of people’s self-views is a good thing—not only for the individual but also for society (Baumeister, Smart, & Boden, 1996). Yet, research has increasingly questioned the assumption that all praise is inevitably beneficial, whether in child rearing, education, therapy, or self-help techniques (e.g., Baumeister, Campbell, Krueger, & Vohs, 2003; Mueller & Dweck, 1998). The current findings linking parental overvaluation to adult narcissism lend further weight to these arguments.

There has been very little previous research into the link between narcissism and parenting styles. Two studies (Ramsey, Watson, Biderman, & Reeves, 1996; Watson, Little, & Biderman, 1992) have shown that college students scoring higher on narcissism were more likely to recall their parents having used permissive or authoritarian styles of parenting, as opposed to authoritative styles, although effects were weaker than those in the current study. Future research should explore how authoritarian and permissive styles of parenting relate to perceptions of parental coldness and overvaluation.

Our findings also help to illuminate the relationship between overt and covert forms of narcissism (Rose, 2002). Although the distinction between these constructs was made more than 10 years ago (Wink, 1991), most subsequent research has focused on overt narcissism and little attention has been paid to covert narcissism. Consistent with previous studies (e.g., Hendin & Cheek, 1997; Rose, 2002; Smolewska & Dion, 2005; Wink, 1991), measures of overt and covert narcissism were only weakly and marginally correlated with each other. Nevertheless, both forms of narcissism appeared to share common origins in childhood, at least to some extent. Notably, we did not find a simple correspondence of parental overvaluation with overt narcissism and parental coldness with covert narcissism. On the contrary, the suppression effects we found indicate that the combination of parental overvaluation and coldness—as discussed above—was a key factor in predictions of both overt and covert narcissism.

Nevertheless, there was some difference of emphasis: Recollections of parental overvaluation were weaker predictors of covert than of overt narcissism. It is possible that the excessive parental admiration reported by participants with higher scores of overt narcissism in this study may lead to some of the self-protective benefits characteristic of overt narcissism (Rose, 2002). Intriguingly, after accounting for effects of childhood recollections and attachment styles, overt and covert narcissism were positively related among women but not among men in our sample. This unexpected finding needs replicating but suggests that the relationship between overt and covert narcissism may be more complex than previously thought and may reflect issues of gender identity.

Covert narcissism, unlike overt narcissism, was strongly associated also with an anxious working model of attachment. This replicates previous findings concerning the relationship between these dimensions (Dickinson & Pincus, 2003; Smolewska & Dion, 2005). Covert narcissists have been portrayed as socially anxious people who have little confidence in themselves (Rose, 2002) and often feel profoundly inferior to others (Hendin & Cheek, 1997). Thus, it is unsurprising that covert narcissism was so closely related to an anxious working model of attachment, which is associated with a negative image of the self and concerns about abandonment (Brennan et al., 1998). But we should reiterate that covert narcissism also was predicted by a similar pattern of childhood recollections to overt narcissism after accounting for its relationship with attachment anxiety. Hence, covert narcissism cannot simply be equated with anxiety.

The pattern of associations of childhood recollections with attachment styles also supports the construct validity of our new measures. The significant covariation

of parental coldness with an avoidant working model of attachment reflects previous research in which attachment avoidance was associated with recollections of maternal coldness (Hazan & Shaver, 1987), indicating convergent validity; however, the fact that our measures of parental coldness and overvaluation predicted adult narcissism after accounting for the two dimensions of attachment styles shows that our findings are not simply repackaging ideas already present in attachment theory.

An evident limitation of this study is its reliance on retrospective reports of childhood experiences. This limitation is shared with the psychoanalytic literature, which has also typically relied on adult patients' recollections of childhood. Thus, we cannot rule out the possibility that our findings reflect differences in recollection rather than differences in the original childhood experience. To do so conclusively would require a much more extensive longitudinal study following individuals over many years through childhood to adulthood and including parents' own perspectives on their child-rearing practices as well as the perspectives of their children. Nevertheless, the current study has provided a significant advance on previous literature by testing predictions from diverse accounts of the childhood origins of narcissism in a systematic quantitative study among a nonclinical sample. We reiterate that childhood recollections provide an important and well-validated first line of evidence into adult consequences of childhood experience (e.g., Chipman et al., 2000; Hazan & Shaver, 1987; Parker, 1981).

In conclusion, we hope that the current study paves the way for a more concerted effort to understand the origins of narcissistic traits in the general population and not solely their consequences. Narcissists are notoriously difficult people to intervene with because of the potential threat posed by any attempted engagement. Yet, further research along the current lines could lead to an improved understanding of how parenting affects the initial development of narcissistic traits. Thus, psychologists might identify effective parenting strategies to promote secure, rather than defensive, positive self-views among future generations (Baumeister et al., 2003; Kernis, 2003).

#### NOTES

1. Dickinson and Pincus report only an omnibus  $\chi^2$  test for the relationship between narcissism (three groups: overt narcissists, covert narcissists, nonnarcissists/control) and attachment styles (four categories: secure, dismissive, fearful, preoccupied), concluding that overt narcissists tended to report secure and dismissive styles, whereas covert narcissists tended to report fearful and preoccupied styles. However, a secondary analysis of their frequency data shows that only covert narcissists' attachment styles differed significantly from those of nonnarcissists ( $p < .05$ )—in particular, covert narcissists were more likely than nonnarcissists to categorize themselves as fearfully rather

than securely attached. Attachment styles of overt narcissists and nonnarcissists did not differ significantly.

2. One participant did not provide any demographic details and 3 did not provide their ethnic backgrounds, accounting for the missing frequencies.

3. Data were collected in the daytime and none of the participants was drinking alcohol at the time of responding.

4. An alternative approach to the measurement of maladaptive or vulnerable forms of narcissism has been to distinguish between more and less adaptive subscales of the Narcissistic Personality Inventory (NPI; e.g., see Cramer, 1995; Dickinson & Pincus, 2003; Raskin, Novacek, & Hogan, 1991; Rhodewalt & Morf, 1995; Watson & Biderman, 1993). However, studies suggest that the NPI subscales provide only very partial coverage of the construct of covert narcissism as identified in factor analytic studies of diverse narcissism measures (e.g., Rose, 2002). In addition, a distinction between more and less adaptive facets did not appear useful in describing the pattern of results found across the NPI subscales in this study.

5. The final item loading on this component had been intended originally to measure parental overvaluation. However, conceptually, this item did not capture the excessive or arbitrary positive evaluation indicated by the other items measuring this dimension. Because this item loaded greater than .35 on both components, we did not include it in our derived measures.

6. Admittedly, our sample size was relatively small by conventional standards for structural equation modeling. Nevertheless, Boomsma (1982) proposes that samples of 100 or more are sufficient for models with 3 or 4 indicators per factor. Moreover, we encountered no problems of nonconvergence or improper solutions—common difficulties with small sample sizes in structural equation modeling (Boomsma & Hoogland, 2001).

7. Although not all paths reached significance in predictions of entitlement, exploitativeness, or superiority, note that these facets suffered from relatively poor reliabilities (from .45 to .52) compared to authority ( $\alpha = .69$ ) and exhibitionism ( $\alpha = .67$ ), which did show significant effects of both predictors. On the other hand, the vanity subscale showed adequate reliability ( $\alpha = .68$ ) but was not detectably associated with either dimension of childhood recollections; one interpretation of this discrepancy is that the NPI items measuring this facet are not so clearly representative of narcissism per se, as opposed to high body-esteem (see also Ames, Rose, & Anderson, in press).

## REFERENCES

- Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Oxford, UK: Lawrence Erlbaum.
- Akhtar, S. (1989). Narcissistic personality disorder: Descriptive features and differential diagnosis. *Psychiatric Clinics of North America*, *12*, 505-529.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th Rev. ed.). Washington, DC: Author.
- Ames, D., Rose, P., & Anderson, C. (in press). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*, 226-244.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, *4*, 1-44.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, *103*, 5-33.
- Bentler, P. M. (in press). *EQS 6 for Windows program manual*. Encino, CA: Multivariate Software.
- Boomsma, A. (1982). The robustness of LISREL against small sample sizes in factor analysis models. In K. G. Jöreskog & H. Wold (Eds.), *Systems under indirect observation: Causality, structure, prediction* (Part 1, pp. 149-173). Amsterdam: North-Holland.
- Boomsma, A., & Hoogland, J. J. (2001). The robustness of LISREL modeling revisited. In R. Cudeck, S. du Toit, & D. Sörbom (Eds.), *Structural equation models: Present and future. A Festschrift in honor of Karl Jöreskog* (pp. 139-168). Chicago: Scientific Software International.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). London: Hogarth. (Original work published 1969)
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult romantic attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford.
- Buri, J. R., Louiselle, P. A., Misukanis, T. M., & Mueller, R. A. (1988). Effects of parental authoritarianism and authoritarianism on self-esteem. *Personality and Social Psychology Bulletin*, *14*, 271-282.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, *75*, 219-229.
- Bushman, B. J., Bonacci, A. M., van Dijk, M., & Baumeister, R. F. (2003). Narcissism, sexual refusal, and aggression: Testing a narcissistic reactance model of sexual coercion. *Journal of Personality and Social Psychology*, *84*, 1027-1040.
- Campbell, W. K. (1999). Narcissism and romantic attraction. *Journal of Personality and Social Psychology*, *77*, 1254-1270.
- Cheek, J. M., McMullin, K. L., Hendin, H. M., & Wink, P. (1999, August). *Body image and the two faces of narcissism revisited*. Poster presented at the annual meeting of the American Psychological Association, Boston.
- Chipman, S., Olsen, S. F., Klein, S., Hart, C. H., & Robinson, C. C. (2000). Differences in retrospective perceptions of parenting of male and female inmates and non-inmates. *Family Relations*, *49*, 5-11.
- Cramer, P. (1995). Identity, narcissism, and defense mechanisms in late adolescence. *Journal of Research in Personality*, *29*, 341-361.
- Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders*, *17*, 188-207.
- Freud, S. (1957). On narcissism: An introduction. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 14, pp. 67-104). London: Hogarth. (Original work published 1914)
- Gittleman, M. G., Klein, M. H., Smider, N. A., & Essex, M. J. (1998). Recollections of parental behaviour, adult attachment and mental health: Mediating and moderating effects. *Psychological Medicine*, *28*, 1443-1455.
- Gleason, T. R., Jarudi, R. N., & Cheek, J. M. (2003). Imagination, personality, and imaginary companions. *Social Behavior and Personality*, *31*, 721-738.
- Hamilton, C. E. (2000). Continuity and discontinuity of attachment from infancy through adolescence. *Child Development*, *71*, 690-694.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511-524.
- Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's Narcism Scale. *Journal of Research in Personality*, *31*, 588-599.
- Jordan, C. H., Spencer, S. J., Zanna, M. P., Hoshino-Browne, E., & Correll, J. (2003). Secure and defensive high self-esteem. *Journal of Personality and Social Psychology*, *85*, 969-978.
- Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism*. New York: Aronson.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, *14*, 1-26.
- Kohut, H. (1977). *The restoration of the self*. Madison, CT: International Universities Press.
- Lasch, C. (1979). *The culture of narcissism: American life in an age of diminishing expectations*. New York: Norton.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, *9*, 151-173.

- Luglio, C. L. (2002). *The mediating role of personality in the association between relational ethics and dispositional envy*. Unpublished doctoral dissertation, Georgia State University.
- McLaughlin, T. L., Heath, A. C., Bucholz, K. K., Madden, P. A. F., Bierut, L. J., Slutske, W. S., et al. (2000). Childhood sexual abuse and pathogenic parenting in the childhood recollections of adult twin pairs. *Psychological Medicine*, *30*, 1293-1302.
- Meier, M. J. (2004). Exploring narcissism in a group of male batterers. *Dissertation Abstracts International*, *64*(10-A), 3846.
- Millon, T. (1981). *Disorders of personality: DSM III: Axis II*. Chichester, UK: John Wiley.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, *12*, 177-196.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, *75*, 33-52.
- Parker, G. (1981). Parental reports of depressives: An investigation of several explanations. *Journal of Affective Disorders*, *3*, 131-140.
- Ramsey, A., Watson, P. J., Biderman, M. D., & Reeves, A. L. (1996). Self-reported narcissism and perceived parental permissiveness and authoritarianism. *Journal of Genetic Psychology*, *157*, 227-238.
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, *45*, 590.
- Raskin, R. N., Novacek, J., & Hogan, R. (1991). Narcissism, self-esteem, and defensive self-enhancement. *Journal of Personality*, *59*, 19-38.
- Raskin, R. N., & Terry, H. (1988). A principal components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, *54*, 890-902.
- Rathvon, N., & Holmstrom, R. W. (1996). An MMPI-2 portrait of narcissism. *Journal of Personality Assessment*, *66*, 1-19.
- Rhodewalt, F., & Morf, C. C. (1995). Self and interpersonal correlates of the Narcissistic Personality Inventory: A review and new findings. *Journal of Research in Personality*, *29*, 1-23.
- Roberts, B. W., & Helson, R. (1997). Changes in culture, changes in personality: The influence of individualism in a longitudinal study of women. *Journal of Personality and Social Psychology*, *72*, 641-651.
- Roe, C. A., & Morgan, C. L. (2002). Narcissism and belief in the paranormal. *Psychological Reports*, *90*, 405-411.
- Rose, P. (2002). The happy and unhappy faces of narcissism. *Personality and Individual Differences*, *33*, 379-392.
- Rose, P., & Campbell, W. K. (2004). Greatness feels good: A telic model of narcissism and subjective well-being. In S. P. Shohov (Ed.), *Advances in psychology research* (Vol. 31, pp. 1-15). Hauppauge, NY: Nova Science.
- Schurman, C. L. (2001). Social phobia, shame and hypersensitive narcissism. *Dissertation Abstracts International*, *61*(9-B), 5004.
- Sedikides, C., Campbell, W. K., Reeder, G., Elliot, A. J., & Gregg, A. P. (2002). Do others bring out the worst in narcissists? The "others exist for me" illusion. In Y. Kashima, M. Foddy, & M. Platow (Eds.), *Self and identity: Personal, social, and symbolic* (pp. 103-123). Mahwah, NJ: Lawrence Erlbaum.
- Smolewska, K., & Dion, K. L. (2005). Narcissism and adult attachment: A multivariate approach. *Self and Identity*, *4*, 59-68.
- Stucke, T. S., & Sporer, S. L. (2002). When a grandiose self-image is threatened: Narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *Journal of Personality*, *70*, 509-532.
- Twenge, J. M., & Campbell, W. K. (2003). "Isn't it fun to get the respect that we're going to deserve?" Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin*, *29*, 261-272.
- Watson, P. J., & Biderman, M. D. (1993). Narcissistic Personality Inventory factors, splitting, and self-consciousness. *Journal of Personality Assessment*, *61*, 41-57.
- Watson, P. J., Little, T., & Biderman, M. D. (1992). Narcissism and parenting styles. *Psychoanalytic Psychology*, *9*, 231-244.
- Wiehe, V. R. (2003). Empathy and narcissism in a sample of child abuse perpetrators and a comparison sample of foster parents. *Child Abuse and Neglect*, *27*, 541-555.
- Wilhelm, K., & Parker, G. (1990). Reliability of the parental bonding instrument and intimate bond measure scales. *Australian and New Zealand Journal of Psychiatry*, *24*, 199-202.
- Wink, P. M. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, *61*, 590-597.

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