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Development and Validation of the Childhood Narcissism Scale

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In this article, we describe the development and validation of a short (10 item) but comprehensive self-report measure of childhood narcissism. The Childhood Narcissism Scale (CNS) is a 1-dimensional measure of stable individual differences in childhood narcissism with strong internal consistency reliability (Studies 1–4). The CNS is virtually unrelated to conventional measures of self-esteem but is positively related to self-appraised superiority, social evaluative concern and self-esteem contingency, agentic interpersonal goals, and emotional extremity (Study 5). Furthermore, the CNS is negatively related to empathic concern and positively related to aggression following ego threat (Study 6). These results suggest that childhood narcissism has similar psychological and interpersonal correlates as adult narcissism. The CNS provides researchers a convenient tool for measuring narcissism in children and young adolescents with strong preliminary psychometric characteristics.

“So may he himself love, and not gain the thing he loves!” According to the Greek myth, it was this prayer by a nymph that destined handsome Narcissus to fall in love with his own reflection in the water. In modern times, the trait of narcissism involves grandiose yet ultimately vulnerable views of self. More often than not, these inflated self-views are associated with an adversarial orientation toward others. Narcissism should not be confused with self-esteem (e.g., Brown & Zeigler-Hill, 2004). Self-esteem (or *high* self-esteem) involves a positive appraisal of worth as a person, the feeling that one can be satisfied with the person one is. In current adult literature, much interest has revolved around the trait of narcissism and its distinctness from self-esteem. Unfortunately, the child literature still lags behind because a tool to assess narcissism in children is lacking. The purpose of this article is to develop and provide preliminary validity data on a short self-report measure of childhood narcissism. In doing so, we hope to provide researchers a tool to study an important dimension of children’s self-views that has largely been overlooked.

ADULT NARCISSISM

Having high self-esteem feels good, and having low self-esteem feels bad. Perhaps spurred by this experiential fact of life, generations of psychologists have studied the benefits of high self-esteem. Unfortunately, the data have shown that these benefits are much less powerful and straightforward than once assumed (Baumeister, Campbell, Krueger, & Vohs, 2003; DuBois & Tevendale, 1999). Based on the conviction that the self should somehow play a central role in psychological and interpersonal functioning, researchers have argued that one should stray beyond the narrow focus on level of self-esteem. They have shown

that favorable views of self can take qualitatively different forms, varying from secure and genuine to vulnerable and defensive (Crocker & Wolfe, 2001; Deci & Ryan, 1995; Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003; Kernis, 2003). With regard to vulnerable and defensive self-views, much research has focused on the trait of narcissism (e.g., Campbell, Foster, & Finkel, 2002; Morf & Rhodewalt, 2001; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Wallace & Baumeister, 2002). In its extreme form, narcissism is a personality disorder characterized by an exaggerated sense of self-importance and uniqueness, an unreasonable sense of entitlement, a craving for admiration, exploitative tendencies toward others, and arrogance (*Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.; American Psychiatric Association, 1994). Whereas early research focused on narcissism as a personality disorder, contemporary research has focused on narcissism as a trait on which people in the general population vary (e.g., Raskin & Terry, 1988).

An influential model of “normal narcissism” is the dynamic self-regulatory processing model, which defines narcissism in terms of motivated self-construction (Morf & Rhodewalt, 2001). In this model, the narcissistic self is grandiose but simultaneously vulnerable and highly contingent on the opinions of others. Whereas the classical Narcissus was so wrapped up in himself that he was indifferent to the admiration of others, modern narcissists¹ are preoccupied if not obsessed with the admiration of others. Narcissists constantly protect and promote their esteem using self-regulatory strategies. These self-regulatory strategies are manifest in internal cognitive-affective processes (e.g., overestimating own attributes and accomplishments, viewing the self as entitled to privileges) and in interpersonal behaviors (e.g., trying to impress others and garner admiration). In addition, narcissists disregard and lack concern for others. Many of the narcissistic characteristics are simultaneous manifestations of

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¹In this article, we focus on narcissism as a personality trait. When referring to *narcissists*, we do not (or not necessarily) refer to individuals who have a diagnosed personality disorder.

grandiose views of self on one hand and an adversarial interpersonal orientation on the other hand (Morf & Rhodewalt, 2001; Paulhus, 2001).

By incorporating narcissism in their work, researchers have significantly furthered the understanding of how the self is involved in adults' social behavior. A good example is aggression. For decades, researchers had been unable to find evidence for the traditional and intuitive belief that aggression and violence are caused by low self-esteem (for a review, see Baumeister, Smart, & Boden, 1996). By shifting the focus away from the simple level of self-esteem, they have been able to show that aggression and violence instead are related to the inflated feelings of superiority that characterize narcissism (e.g., Bushman & Baumeister, 1998; Twenge & Campbell, 2003).

CHILDHOOD NARCISSISM

In contrast to the adult literature, the child (self-) literature has still focused almost exclusively on level of self-esteem. Other dimensions of children's self-views, such as the extent to which they are secure and genuine versus vulnerable and defensive, are largely overlooked. Thus, psychologists may have an incomplete picture of children's sense of self and its impact on psychological and interpersonal functioning. For example, the literature on the relation between self-esteem and aggression in children has been plagued by weak and inconsistent results as in the adult literature (e.g., East & Rook, 1992; Hymel, Rubin, Rowden, & LeMare, 1990; Zakriski & Coie, 1996). Incorporating the construct of childhood narcissism in developmental research on aggression may clarify many of these inconsistent results.

There is also an incomplete picture of how vulnerable and defensive self-views develop. Thus far, empirical data on the developmental roots of narcissism have been lacking. What is known is that the grandiose and inflated self-views that characterize narcissism are part of normative self-development in young children. Young children typically are unable to differentiate their actual self-views from their ideal self-views (Harter, 1999, 2006), which causes their self-views to be unrealistically positive (e.g., Marsh, Craven, & Debus, 1998). After children are about 7 or 8 years old, they start to develop self-views in which both positive and negative attributes coexist. Because during this same age period children start to base their self-views on social comparisons, their self-views typically become more realistic (Harter, 1999, 2006). Theory suggests that meaningful individual differences in narcissism emerge from this age.

What factors influence the development of narcissism? Clinical theorists have long noted that narcissism can be rooted in dysfunctional interactions with parents. In particular, narcissism may emerge in response to either lack of parental attention and guidance (Kernberg, 1975; Kohut, 1971) or excessive parental admiration (Millon, 1981). Recent empirical work found some support for both notions (Otway & Vignoles, 2006). Perhaps narcissistic individuals learned in early life to put themselves on a pedestal either to live up to parental expectations or to compensate for a lack of parental warmth. Longitudinal research is needed, however, to identify the developmental pathways of narcissism and the factors that promote or protect against it. A measure of childhood narcissism is a prerequisite to conducting such research.

There are at least two reasons to believe that narcissism can be reliably measured in childhood. First, its central components of grandiose self-regard (e.g., Brendgen, Vitaro, Turgeon, Poulin, & Wanner, 2004; Hughes, Cavell, & Grossman, 1997) and adversarial interpersonal orientation (e.g., D. Cohen & Strayer, 1996; Hawley, 2003; Salmivalli, Ojanen, Haanpää, & Peets, 2005; Woodall & Matthews, 1993) are commonly identified in children. Second, narcissism is a key component of psychopathy, which has received considerable attention in the developmental literature (e.g., Frick, O'Brien, Wootton, & McBurnett, 1994; Salekin & Frick, 2005).

PREVIOUS RESEARCH

Thus far, research on childhood narcissism has been very rare. One cause of this dearth of research is the absence of a childhood measure of narcissism. Two studies on narcissism in children (Barry, Frick, & Killian, 2003; Washburn, McMahan, King, Reinecke, & Silver, 2004) have used the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), which was developed to measure narcissistic traits in adults. Unfortunately, psychometric complications arose in both studies. Due to poor internal consistencies, items and even entire subscales had to be dropped from final analyses. Furthermore, hard to interpret factor structures emerged that were different from those obtained with adults. Apparently, the NPI does not measure the same construct in children as it does in adults. The underlying problem is that the age appropriateness of the NPI for children is limited. Items such as "People always seem to recognize my authority," "I rarely depend on anyone else to get things done," and "If I ruled the world, it would be a better place" are insufficiently geared toward children's social reality. Simplifying the wording of the items (as Barry et al., 2003, did) does not solve that problem either. Another undesirable feature of the NPI is that it contains 40 items, which can make completion of the scale time consuming and tedious for children. Given these empirical, conceptual, and practical concerns, we deemed it desirable to develop an age-appropriate instrument to assess narcissism in children and young adolescents.

CHILDHOOD NARCISSISM SCALE

In line with the research literature (e.g., Morf & Rhodewalt, 2001), we believe that at the core of the narcissistic personality is a grandiose yet vulnerable view of self and an adversarial interpersonal orientation. Importantly, these core components are often simultaneously manifest in narcissistic characteristics. For example, narcissists do not simply have positive self-views, but they view themselves as "superior to others" (Brown & Zeigler-Hill, 2004). Accordingly, we approach narcissism as a constellation of characteristics that are reflective of a single underlying personality dimension. Our objective was to develop a short and comprehensive self-report measure of childhood narcissism: The Childhood Narcissism Scale (CNS). Many items of the CNS reflect the dynamics between a grandiose or entitled self versus inferior or undeserving others. The CNS assesses childhood narcissism as a personality trait (not as a personality disorder) in the general population. Extreme scores are not necessarily reflective of a pathological personality. The CNS can be used in a broad developmental range from middle childhood through adolescence. Items are positively worded so children do not feel they are rating negative or socially undesirable traits.

OVERVIEW OF STUDIES

We conducted six studies to develop and provide validity data on the CNS. Participants were 8 to 14 years old. Study 1 involved selection of items. In Studies 2 (Dutch participants) and 3 (American participants), we cross-validated the scale. In Study 4, we examined the test–retest reliability over 2- and 6-month time intervals. In Study 5, we focused on the relationship between childhood narcissism and self-esteem and how both traits relate to important indexes of children’s psychological and interpersonal functioning. In Study 6, we examined the link between childhood narcissism and empathy as well as the link between childhood narcissism and aggression in response to ego threat.

STUDY 1: SCALE DEVELOPMENT

The purpose of Study 1 was to select items for the final version of the CNS from a pool of possible items. In addition, we wanted to empirically explore the possible factor structure of the final version of the CNS.

Method

Participants. Participants were 300 children (51% boys) 10 to 13 years old ($M = 11.3$, $SD = 0.6$). We recruited them from six randomly selected public schools in the Netherlands (parental consent rate = 92%). Most children (91%) were White; 9% had other (e.g., North African, Turkish) or mixed ethnical/cultural origins.

Initial item pool. The initial item-pool contained 48 items that (a) describe age-appropriate cognitions, affects, and behaviors and (b) tap a comprehensive range of characteristics central to narcissism. We wrote the items based on the narcissistic characteristics cited in the literature (e.g., Morf & Rhodewalt, 2001) or used in existing measures of narcissism or related constructs (i.e., the NPI: Raskin & Terry, 1988; Psychological Entitlement Scale: Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; and the Youth Psychopathic Traits Inventory: Andershed, Kerr, Stattin, & Levander, 2002). Consistent with the literature, many items tapped both grandiose self-views and an adversarial interpersonal orientation. Consistent with other self-view measures (e.g., Self-Esteem Scale; Rosenberg, 1965), items were scored on a 4-point Likert-type response scale with 0 = *not at all true*, 1 = *not really true*, 2 = *sort of true*, and 3 = *completely true*.

Procedure. Children completed the scale in their classrooms during school hours. A research assistant introduced the study, emphasized confidentiality of responses, and encouraged children to ask questions if they had difficulty understanding any items.

Results and Discussion

We selected items from the initial item pool to create a short measure of childhood narcissism covering a comprehensive range of narcissistic characteristics. As a first step, we selected items on empirical grounds. We selected items that had high (>.50) item-total correlations but that did not correlate more than .60 with any of the other selected items. The last criterion was used to ensure nonredundancy among the selected items. After this first step in the selection procedure, we retained 20 items. As a second step, we selected items on concep-

tual grounds. S. Thomaes, H. Stegge, B. Bushman, and T. Olthof individually indicated what remaining items they considered essential to the content domain of narcissism. We excluded items not mentioned by at least two authors. The final scale consisted of 10 items (see Appendix). Careful examination of the retained and the deleted items suggested that no aspects of narcissism were lost in the selection process. Indeed, the unit-weighted sum of the 10 items in the final scale correlated almost perfectly with the unit-weighted sum of the 48 items in the initial item pool, $r(298) = .91$, $p < .0001$.

To empirically explore the factor structure of the CNS, we conducted principal components analysis. Results revealed a single-factor solution (based on a criterion eigenvalue of 1.0 and an inspection of the scree plot). Factor 1 had an eigenvalue of 4.12 and explained 41% of the total variance in the set of 10 items. Results from a parallel analysis (Glorfeld, 1995; Zwick & Velicer, 1986) with 100 random data sets containing 300 participants and 10 variables indicated that the eigenvalue of Factor 1 was significantly higher than expected by chance (1.39), which was not the case for any additional factors. The item loadings on the single factor ranged from .53 to .74. Cronbach’s alpha for the scale was .84. Skewness (.76) and kurtosis (.10) estimates indicated adequate normality for the scale. The mean score was 0.63 ($SD = 0.49$). In summary, the results from Study 1 suggest that the final version of the CNS is an internally consistent, normally distributed, single-factor measure of childhood narcissism.

STUDY 2: DUTCH CROSS-VALIDATION

The purpose of Study 2 was to confirm in a separate sample that a one-dimensional factor structure best represents the variability in the CNS items.

Method

Participants. Participants were 1,020 children (51% boys) 8 to 13 years old ($M = 11.5$, $SD = 0.8$). We recruited them from 24 randomly selected public schools throughout the Netherlands (parental consent rate = 86%). The level of urbanization and socioeconomic status of the regions where the schools were located are representative of the Netherlands. Most children were White (81%); 19% had other (e.g., North African, Turkish, Surinam, Dutch Antillean) or mixed ethnical/cultural origins.

Procedure. Children completed the CNS in their classrooms during school hours.

Results and Discussion

Descriptive statistics for the items are presented in Table 1 (Panel A). Cronbach’s alpha was .82. CNS scores were normally distributed (skewness = 0.48; kurtosis = –0.12). The mean score was 0.81 ($SD = 0.51$).

Based on the results from Study 1, we tested a single-factor model for the CNS by means of confirmatory factor analysis using M-Plus (Muthén & Muthén, 1998–2004). We freely estimated all factor loadings, and we did not allow residual correlations between items. We set the metric of the latent variable at 1 for the loading of the first item. The observed correlations between the item scores of the 10 CNS items constituted the matrix of analysis. Although the chi-square statistic was significant, $\chi^2(35, N = 1,020) = 140.40$, $p < .001$, significant chi-square values are often found in large samples (Bollen, 1989; Kline, 1998). Better measures of model fit in large samples are the

TABLE 1.—Descriptive statistics of CNS items in Study 2 and Study 3.

	CNS1	CNS2	CNS3	CNS4	CNS5	CNS6	CNS7	CNS8	CNS9	CNS10
Panel A: Study 2										
<i>M</i>	0.76	0.49	0.65	0.67	1.39	1.08	0.69	0.71	0.90	0.76
<i>SD</i>	0.82	0.76	0.79	0.77	0.98	0.91	0.82	0.77	0.82	0.81
Item-total <i>r</i> ^a	.45	.43	.54	.44	.57	.48	.52	.52	.56	.52
Panel B: Study 3										
<i>M</i>	1.73	0.72	0.99	1.06	1.68	1.07	1.88	1.80	1.49	1.29
<i>SD</i>	1.00	0.87	0.96	0.85	0.96	0.92	0.92	0.82	0.80	0.80
Item-total <i>r</i> ^a	.37	.48	.46	.43	.50	.38	.47	.28	.54	.32

Note. CNS = Childhood Narcissism Scale.

^aCorrelation between the item of interest and the remaining nine items.

root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the non-normed fit index (NFI). For the RMSEA, lower values indicate better fit; the reverse is true for the CFI and NFI (Hu & Bentler, 1999). These indexes indicated that a single-factor model provided adequate fit to the data, RMSEA = .05 (90% confidence interval = .05–.06); CFI = .95; NFI = .94. Standardized factor loadings ranged from .47 to .64 and were significant at the .05 level in all cases. In summary, consistent with the results of Study 1, Study 2 shows that a one-dimensional factor structure underlies the CNS. The single-factor model for the CNS is presented in Figure 1 (Panel A).

STUDY 3: ENGLISH CROSS-VALIDATION

The purpose of Study 3 was to test the psychometric properties of the English version of the CNS.

Method

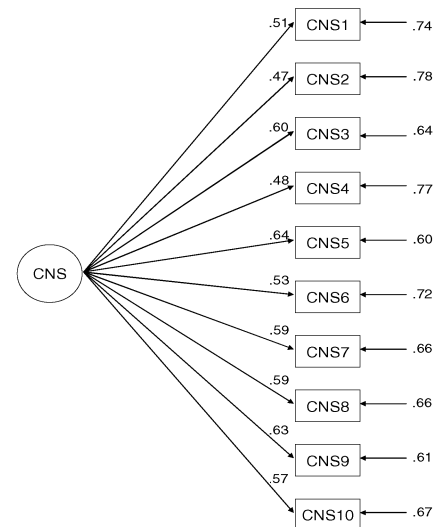
Participants. Participants were 249 American children (53% boys) 10 to 14 years old ($M = 12.5$, $SD = 0.9$). They were recruited from two public middle schools in Michigan (parental consent rate = 28%). Most children were White (96%); 4% had other (e.g., Hispanic, Asian) or mixed ethnical/cultural origins.

Procedure. The original Dutch version of the CNS was translated into English by a bilingual professional translator. A bilingual psychologist translated the English version back into Dutch to verify that all items had retained their original meaning. The Flesch Kinkaid score was 4.6, suggesting a fourth to fifth grade reading level for the scale. Children completed the CNS at their schools.

Results and Discussion

Descriptive statistics for the items are presented in Table 1 (Panel B). The mean CNS score in the U.S. sample ($M = 1.37$; $SD = 0.50$) was significantly higher than the mean CNS score in the combined Dutch samples in Studies 1 and 2, $F(1, 1567) = 296.76$, $p < .001$, $d = 1.21$. Although it is difficult to directly compare narcissism scores from Dutch and American children, this result is consistent with the finding that adult narcissism is highest in societies that place more emphasis on individualism, independence, and standing out (Foster, Campbell, & Twenge, 2003). Cronbach's alpha for the scale was .76. CNS scores were normally distributed (skewness = -0.02 ; kurtosis = -0.45). Confirmatory factor analysis revealed that again, a single-factor model provided adequate fit to the data, $\chi^2(35, N = 248) =$

Panel A



Panel B

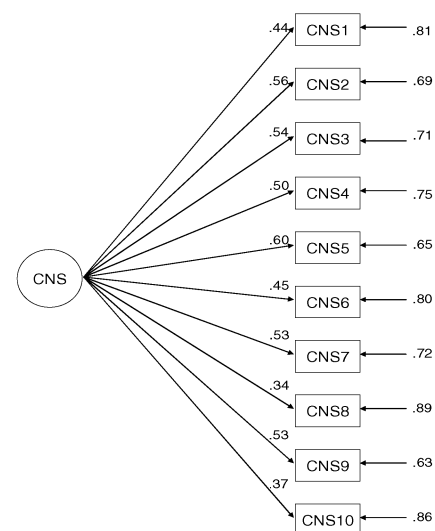


FIGURE 1.—Standardized factor loadings and standardized unique error variances for the Dutch version (Panel A; Study 2) and the English version (Panel B; Study 3) of the Childhood Narcissism Scale (CNS). All loadings were significant.

54.60, $p = .02$; RMSEA = .05 (90% confidence interval = .02–.07); CFI = .95; NFI = .93. Standardized factor loadings ranged from .34 to .60 and were significant in all cases. In summary, the English CNS is a normally distributed, one-dimensional measure of childhood narcissism with good internal consistency. The single-factor model for the English CNS is presented in Figure 1 (Panel B).²

STUDY 4: TEST–RETEST RELIABILITY

The purpose of Study 4 was to examine the test–retest reliability of the CNS over short-term (2-month) and medium-term (6-month) time intervals.

Method

Participants. We computed test–retest reliability estimates in two samples of Dutch children. Sample 1 (2-month interval) consisted of 142 children (57% boys; M age at Time 1 = 11.7, $SD = 1.0$; parental consent = 88%). Sample 2 (6-month interval) consisted of 160 children (54% boys; M age at Time 1 = 10.8, $SD = 1.0$; parental consent = 85%).

Results and Discussion

Sample 1: Two-month interval. At Time 1, the mean CNS score was 0.79 ($SD = 0.53$). Cronbach's alpha was .85. At Time 2 (2 months later), the mean CNS score was 0.77 ($SD = 0.55$). Cronbach's alpha was .87. Most important, the 2-month test–retest correlation was $r(140) = .76, p < .0001$.

Sample 2: Six-month interval. At Time 1, the mean CNS score was 0.85 ($SD = 0.63$). Cronbach's alpha was .87. At Time 2 (6 months later), the mean CNS score was 0.68 ($SD = 0.57$). Cronbach's alpha was .87. Most important, the 6-month test–retest correlation was $r(158) = .69, p < .0001$.

Summary

The results from both samples indicate that the CNS has good test–retest reliability.

STUDY 5: SELF-ESTEEM AND CHILDREN'S PSYCHOLOGICAL AND INTERPERSONAL FUNCTIONING

Study 5 had two purposes. First, we examined the relationship between the CNS and other measures of children's self-views including self-esteem and self-appraised superiority. Second, we examined the possible differential relationships of the CNS and self-esteem to some important indexes of children's psychological and interpersonal functioning (i.e., social evaluative concern and self-esteem contingency, interpersonal goals, and emotionality).

Because narcissists are self-aggrandizing and feel superior to others, it is often thought that narcissism is simply excessively high self-esteem. Contrary to this idea, the link between narcissism and self-esteem in adults is moderate at best (correlations

< .30). Adult narcissism is only strongly correlated with self-view measures that capture the extent to which one sees the self as superior to others or as interpersonally dominant (Brown & Zeigler-Hill, 2004).

More evidence for the distinctiveness of narcissism and self-esteem is that both constructs have different psychological and interpersonal correlates. Three critical differences have been identified in the empirical literature. First, narcissistic self-views are highly contingent on external evaluations. Narcissists gain and lose self-worth quickly according to how others view them. This might explain the apparent paradox that narcissists are self-obsessed but at the same time greatly concerned about external evaluations (Morf & Rhodewalt, 2001). In contrast, normal, healthy forms of self-esteem are stable and relatively independent of the appraisals of others (e.g., Rudolph, Caldwell, & Conley, 2005). Second, narcissistic self-views reflect agentic but not communal concerns (Campbell, Bosson, Goheen, Lakey, & Kernis, 2007; Campbell, Rudich, & Sedikides, 2002; Paulhus, 2001). Narcissists attach importance to gaining admiration and establishing dominance over others (i.e., agentic concerns); they care less about establishing close relationships with others (i.e., communal concerns). In contrast, individuals with high self-esteem have a more communal orientation (Salmivalli et al., 2005). Third, narcissistic individuals tend to experience high levels of both positive (e.g., euphoria, pride) and negative (e.g., anger, shame) affect, particularly in response to self-relevant feedback (Morf & Rhodewalt, 2001). In contrast, individuals with high self-esteem are prone to experience positive but not negative affect. Indeed, emotional well-being probably is the greatest asset of self-esteem (Baumeister et al., 2003).

Because a basic assumption underlying our research was that narcissism is a similar construct in children and adults (Barry et al., 2003; Frick, Bodin, & Barry, 2000; Washburn et al., 2004), we predicted that CNS-measured childhood narcissism and self-esteem would be relatively independent. We also predicted that childhood narcissism and self-esteem would be differentially associated with self-esteem contingency and social evaluative concerns, interpersonal goals, and emotionality.

Method

Participants. Participants were 238 children (47% boys) 8 to 13 years old ($M = 11.5, SD = 0.9$). We recruited them from six randomly selected public schools in the Netherlands (parental consent rate = 82%). Most children were White (81%); 19% had other (e.g., North African, Surinam) or mixed ethnic/cultural origins.

Measurement instruments. Children completed self-report and peer-report measures in their classrooms. We assessed narcissism using the CNS. We assessed self-esteem using the 10-item Self-Esteem Scale (Rosenberg, 1965). A sample item includes "On the whole, I am satisfied with myself." Items are rated on a 4-point scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). Responses are summed, with higher scores indicating higher levels of self-esteem. Cronbach's alpha was .84. Self-esteem was also assessed using the 6-item Global Self-Worth subscale of the Self-Perception Profile for Children (Harter, 1985). A sample item includes "Some kids like the kind of person they are. How much are you like these kids?" Following others (e.g., Brendgen et al., 2004), we used a 4-point scale response format ranging from 0 (*I am not like these kids at*

²In addition to our main purpose of examining the psychometric properties of the English CNS, we also tested the extent to which the factor structure of the CNS is invariant across language versions. We first estimated language-specific models and then constrained factor loadings to be equal across languages. The resulting difference was significant, $\Delta\chi^2(9, N = 1269) = 23.54, p < .01$. Closer inspection indicated that this was due to higher factor loadings for Items 8 and 10 in the Dutch solution; when these loadings were freed, the difference in fit was no longer significant, $\Delta\chi^2(7, N = 1269) = 8.92, p = .26$.

all) to 3 (*I am exactly like these kids*). Responses are summed. Cronbach's alpha was .87. Because neither Rosenberg's Self-Esteem Scale and Harter's Global Self-Worth subscale allows for claims of superiority, we expected childhood narcissism to be only weakly associated with self-esteem.

We assessed self-appraised superiority with the Me Versus Other Scale (Campbell et al., 2004), which measures how one sees the self relative to others. It consists of seven images, each containing a "me" circle and several "other" circles. The other circles are the same size in all 7 images. The me circle varies in size from about one fifth of the size of the other circles in Image 1 to about three times the size of the other circles in Image 7. Children select the image that reflects best how they see themselves compared to others. Thus, this scale explicitly allows for claims of superiority (i.e., me bigger than other). We expected childhood narcissism to be positively associated with the size of the me image selected.

We assessed social evaluative concerns with the eight-item Fear of Negative Evaluation subscale of the Social Anxiety Scale-Revised (LaGreca & Stone, 1993). A sample item includes "I worry what other kids say about me." Items are rated along a 5-point scale ranging from 0 (*not at all*) to 4 (*all the time*), and responses are summed. Cronbach's alpha was .90. The extent to which children's self-views are contingent on others' appraisals was assessed with the 8-item Need for Approval Questionnaire (Rudolph et al., 2005). This questionnaire includes a subscale for positive self-esteem contingency (sample item: "When other kids like me, I feel happier about myself") and a subscale for negative self-esteem contingency (sample item: "When other kids don't like me, I feel down on myself"). Items are rated on a 5-point scale ranging from 0 (*not at all*) to 4 (*very much*), and responses are summed to create total scale as well as subscale scores. Cronbach's alpha was .89 for the total scale, .87 for the Positive Self-Esteem Contingency subscale, and .89 for the Negative Self-Esteem Contingency subscale. We expected childhood narcissism to be positively associated with both social evaluative concerns and self-esteem contingency.

We assessed social goals with the 33-item Interpersonal Goals Inventory for Children (Ojanen, Gronroos, & Salmivalli, 2005), which is based on the interpersonal circumplex model (Gurtman, 1992; Locke, 2000). The measure comprises eight goal subscales representing different blends of agentic goals (sample item: "When with your age-mates, how important is it for you that the others respect and admire you?") and communal goals (sample item: "When with your age-mates, how important is it for you that real friendship develops between you?"). Items are rated along a 4-point scale ranging from 0 (*not important to me*) to 3 (*very important to me*), and responses are summed. Cronbach's alphas for the individual goal scales ranged from .58 to .72. We computed vector scores for the dimensions of agency (i.e., striving for power and getting admiration vs. submissively going along with others expectations) and communion (i.e., striving for closeness and affiliation with peers vs. concealing one's thoughts and feelings) from the individual goal scales (Ojanen et al., 2005). We expected childhood narcissism to be positively associated with agentic goals and to be negatively associated with communal goals.

We assessed children's emotionality with the 30-item Positive and Negative Affect Schedule for Children (Laurent et al., 1999). This measure assesses the extent to which children experience positive affect (Cronbach's $\alpha = .83$; sample items: "happy," "ac-

tive," "proud") and negative affect (Cronbach's $\alpha = .91$; sample items: "sad," "lonely," "ashamed") in their day-to-day lives as emotional traits rather than as emotional states. Items are rated along a 5-point scale ranging from 0 (*very slightly or not at all*) to 4 (*extremely*), and responses are summed. Because narcissists tend to experience emotional extremes, we expected childhood narcissism to be positively associated with both positive and negative emotionality.

We assessed social desirability with the 9-item Lie scale of the Revised Child Manifest Anxiety Scale (Reynolds & Richmond, 1978; Cronbach's $\alpha = .73$; sample item: "I never lie"). Responses are given using a dichotomous (yes-no) response format and summed. We expected childhood narcissism to be uncorrelated with social desirability (e.g., Watson, Grisham, Trotter, & Biderman, 1984).

Results and Discussion

The mean CNS score was 0.82 ($SD = 0.47$). Cronbach's alpha was .80. Importantly, we found no significant correlation between childhood narcissism and social desirability, $r(236) = -.07$, $p < .26$, suggesting that children's CNS scores are little influenced by their tendencies toward socially desirable responding.

Self-esteem and self-appraised superiority. As expected, childhood narcissism was only weakly correlated with the measures of self-esteem [Harter's Global Self-Worth subscale: $r(236) = .08$, $p < .24$; Rosenberg's Self-Esteem Scale: $r(236) = .14$, $p < .04$]. A positive correlation was found between childhood narcissism and the size of the me circle children choose on the Me Versus Other Scale, $r(236) = .34$, $p < .001$, suggesting that narcissistic children tend to view themselves as superior to others.

Vulnerability to external evaluations. Because the two self-esteem measures (i.e., Harter's Global Self-Worth subscale and Rosenberg's Self-Esteem Scale) were highly correlated ($r = .69$) and had highly similar correlates, we created an aggregate self-esteem score by summing the 16 self-esteem items (Cronbach's $\alpha = .90$). The self-esteem findings we report following are based on this aggregate score. Results are presented in Table 2.

As expected, childhood narcissism was positively correlated with children's concern with being negatively evaluated by peers. Childhood narcissism was also positively correlated with self-esteem contingency. Children high in narcissism tended to

TABLE 2.—Zero-order correlations between childhood narcissism, self-esteem, and the other variables.

Measure	CNS	Self-Esteem Aggregate
Fear of negative evaluation	.21***	-.43***
Self-esteem contingency	.37***	-.29***
Positive self-esteem contingency	.37***	-.09
Negative self-esteem contingency	.24***	-.41***
Agentic goals	.33***	.05
Communal goals	-.16*	.25***
Positive affect	.23***	.42***
Negative affect	.18**	-.46***

Note. CNS = Childhood Narcissism Scale.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

report greater increase in self-feelings when receiving positive peer evaluations and greater decrease in self-feelings when receiving negative peer evaluations. In contrast, individuals with high self-esteem reported less social evaluative concern and less self-esteem contingency. These results are consistent with the view that narcissistic self-views are relatively vulnerable to external evaluations, whereas normal, healthy forms of self-esteem are not.

Interpersonal goals. As expected, childhood narcissism was positively correlated to agentic interpersonal goals and tended to be negatively associated with communal interpersonal goals, although the magnitude of the last correlation was small. These results suggest that childhood narcissism reflects children's investments in getting respect and establishing dominance over others rather than in establishing close relationships with others. Self-esteem was positively associated with communal goals but not with agentic goals.

Emotionality. Small but significant positive correlations were found between childhood narcissism and both positive and negative affect, which suggests that narcissistic children tend to experience more "emotional highs" and "emotional lows" than others. Narcissism therefore appears to be a mixed blessing in terms of emotional well-being. In contrast, self-esteem was positively associated with positive affect and negatively associated with negative affect.

Summary

CNS-measured childhood narcissism and self-esteem are largely independent constructs that are differentially related to social evaluative concern and self-esteem contingency, interpersonal goals, and emotionality. Together, these results suggest that the CNS may be a valuable tool for researchers interested in the functioning of children's self.

STUDY 6: EMPATHY AND AGGRESSION

The purpose of Study 6 was to examine two core elements of narcissists' adversarial interpersonal orientation: (a) lack of empathic concern for others and (b) the propensity to respond to ego threat by aggressing against others. Narcissists' lack of empathy is particularly evident in that their preoccupation with self-promotion often comes at the expense of others. For example, narcissists tend to downgrade others to place themselves in a more favorable light and are instrumentally exploitative in social relationships (e.g., Morf & Rhodewalt, 2001). In adults, several studies have shown that narcissism is negatively linked with empathy (e.g., Bushman, Bonacci, Van Dijk, & Baumeister, 2003; Watson et al., 1984). In addition, there is converging evidence that narcissists are prone to engage in violent and aggressive behavior when their egos are threatened (e.g., Bushman & Baumeister, 1998; Twenge & Campbell, 2003). Aggression is thought to enable narcissists to uphold their inflated public image and to protect their fragile self-esteem. We therefore predicted that childhood narcissism would be negatively related to self-reported and peer-reported empathy and positively related to self-reported and peer-reported aggression.

Method

Participants. Participants were 280 children (55% boys) 9 to 14 years old ($M = 11.7$, $SD = 1.0$). We recruited them from

six randomly selected public schools throughout The Netherlands (parental consent rate = 84%). Most children were White (76%); 23% had other (e.g., Turkish, Surinam) or mixed ethnical/cultural origins.

Procedure. Children completed the CNS and self-report and peer-report measures of empathy and aggression in their classrooms. The self-report measure of empathy was the well-established 22-item Index of Empathy for Children and Adolescents (Bryant, 1982; Cronbach's $\alpha = .72$; sample item: "It makes me sad to see a girl who can't find anyone to play with"). We adapted our peer-nomination measure of empathy from the 6-item, best-friend-rated, empathy procedure (Strayer & Roberts, 2004; Cronbach's $\alpha = .93$; sample item: "These kids feel bad if they see another kid without a friend to play with"). Children nominated up to four classmates who best fit each item. We summed the number of nominations children received and standardized them separately for each classroom to correct for differences in classroom size.

To measure the specific type of aggression that narcissists typically engage in (i.e., aggression in response to ego threat), we developed an 8-item self-report aggression measure (Cronbach's $\alpha = .71$; sample item: "Some kids take revenge when they are ridiculed by others. How much are you like these kids?") and a peer-nomination aggression measure consisting of the same items (Cronbach's $\alpha = .96$; sample item: "These kids take revenge when they are ridiculed by others").

Results and Discussion

The mean CNS score was 0.78 ($SD = 0.53$). Cronbach's alpha was .84. As predicted, small but significant negative associations were found between narcissism and empathic concern for others [self-report $r(278) = -.15$, $p < .02$; peer-report $r(278) = -.23$, $p < .001$]. In contrast, narcissism was positively correlated with aggression against others in ego-threatening situations [self-report $r(278) = .26$, $p < .001$; peer-report $r(278) = .21$, $p < .001$]. Importantly, the association between narcissism and self-reported and peer-reported aggression remained significant after controlling for empathy [self-report semipartial $r(278) = .22$, $p < .001$; peer-report semipartial $r(278) = .13$, $p < .03$].

In summary, in this study, we provided initial evidence that narcissistic children tend to have an adversarial interpersonal orientation. They show reduced empathic concern for others and tend to behave aggressively against others in response to ego-threatening situations. Furthermore, the results suggest that narcissists' aggressive tendencies are not fully explained by their lack of empathy, leaving room for the notion that narcissistic aggression is at least partly motivated by self-protective concerns.

GENERAL DISCUSSION

The purpose of this article was to develop and provide validity data on a short and comprehensive self-report measure of childhood narcissism, the CNS. In a series of six studies, the CNS was shown to have good reliability and validity. We hope that the CNS provides researchers a tool for measuring narcissism in children and young adolescents. By jointly considering the operation of narcissism and self-esteem, psychologists are likely to gain a more comprehensive picture of children's self-views and their impact on well-being and adaptation.

In Studies 1 through 4, we provided information regarding the psychometric properties of the CNS. The CNS appeared to be a one-dimensional measure of stable individual differences in childhood narcissism with good internal consistency. In Studies 5 and 6, we revealed some of the psychological and interpersonal correlates of childhood narcissism. In these studies, we provided initial evidence that childhood narcissism fits in the same nomological network as adult narcissism. Specifically, in Study 5, we focused on the distinctions between childhood narcissism and normal, healthy self-esteem. As predicted, childhood narcissism was positively associated with self-appraised superiority but largely independent of self-esteem. The self-views of children high in narcissism tended to be vulnerable, and contingent on external appraisals, whereas the self-views of children high in self-esteem tended to be relatively impervious to external appraisals. Narcissistic children appeared to have agentic social goals, whereas children with high self-esteem appeared to have communal social goals. Also, childhood narcissism was associated with emotional extremity, whereas self-esteem was associated with emotional well-being. In addition to these findings, in Study 6, we provided initial evidence for the notion that narcissistic children tend to have an adversarial interpersonal orientation. Childhood narcissism was negatively related to empathic concern and positively related to aggression following ego threat.

Obviously, much more research is needed before we are able to draw a full picture of children holding narcissistic traits. The studies reported here suggest a picture of children who are not necessarily satisfied with who they are but do believe they are better than others. Narcissistic children seek to dominate social interactions, to impress others, and to gain admiration, whereas they seem to care less about establishing genuine friendships or close relationships. They tend to have deficiencies in sharing emotions and placing the self in the position of others. Finally, narcissistic children seem ego involved and emotionally invested in interpersonal and evaluative situations. When they receive criticism, or when they are ridiculed or rejected by their peers, they tend to lash out aggressively in retaliation.

A remaining issue concerns the gender differences associated with the CNS. Because gender differences were not a central issue of our research, we did not report them for the independent studies. We conducted a meta-analysis on the seven independent studies ($N = 2,389$ children) reported in this article. Boys tended to be somewhat more narcissistic than girls. The average standardized mean difference was $d_+ = 0.24$, with a 95% confidence interval ranging from 0.16 to 0.32. This effect is similar in magnitude to J. Cohen's (1988) conventional value for a small effect (i.e., $d = 0.20$). This small gender difference is consistent with findings from adult studies (Foster et al., 2003). Also, it is consistent with past research that has shown that boys tend to view themselves more favorably (e.g., Harter, 2006), are more socially dominant (e.g., Maccoby, 1990), and are less empathic (e.g., Eisenberg, Fabes, & Spinrad, 2006) than girls.

Limitations and Future Research

We hope that the availability of the CNS will stimulate more researchers to study childhood narcissism. One limitation of this study is that we focused rather narrowly on how the key

manifestations of childhood narcissism can be distinguished from children's level of self-esteem. Future research is needed to show how childhood narcissism can be distinguished from other dimensions of children's self-views (e.g., stability of self-esteem), from other personality dimensions (e.g., childhood psychopathy), and from overlapping child characteristics that reflect normative development (e.g., normative self-overestimation in young children; David & Kistner, 2000; Harter, 2006).

A second limitation is that we did not establish the age when narcissism can be meaningfully assessed in children. The samples we used in this research included Dutch children 8 to 14 years old and American children 10 to 14 years old. The CNS may well be administered in children older than 14. A more complicated issue is whether the CNS may be administered in children younger than 8. Until middle childhood, children typically have unrealistically positive self-views and lack the capacity to base their self-views on social comparisons (Harter, 2006; Marsh et al., 1998). Research is needed to establish to what extent these features of normative self-development limit the meaningful assessment of individual differences in narcissism among young children.

A third limitation is that inevitably, the CNS was not grounded in a thorough knowledge base of the development of narcissism. We do not know, for example, to what extent childhood narcissism is stable over longer periods of time. The availability of the CNS allows researchers to start studying how narcissistic traits develop from their early origins into adulthood. Theory (Kernberg, 1975; Kohut, 1971; Millon, 1981) and some empirical research (Otway & Vignoles, 2006) has suggested that narcissistic individuals have developed a strong need to get attention and admiration due to disturbed attachment relationships in early life. Further empirical research should identify the constellation of factors that promote and protect against the development of narcissism.

We have examined how childhood narcissism relates to some important psychological and interpersonal indexes such as children's emotional well-being, social goals, and aggressive behavior. Other promising areas to explore in relation to narcissism include children's prosocial behavior (e.g., helping others, empathy- and sympathy-related responding), emotional development (e.g., emotion regulation, emotion understanding, emotion expression), peer relations (e.g., sociometric status, friendship formation and maintenance, the impact of peer rejection), and risk status for psychopathology (to what extent does narcissism promote—or protect against—the development of psychological symptoms). Further, normative data for different populations will be necessary for the CNS transition from a research tool to an instrument with clinical applicability.

CONCLUSION

From the 1980s, the notion that we should teach children to feel good about themselves has deeply entrenched Western conceptions of childrearing and education. However, numerous researchers and theorists have come to question the value of bolstering self-views as a primary goal for raising and educating children (e.g., Damon, 1995; DuBois & Tevendale, 1999; Seligman, 1998; Stout, 2001). A major concern is that childrearing and educational practices aimed at bolstering children's self-views may actually cultivate an excessive focus on the self and an inflated sense of entitlement and of being special,

self-characteristics that are strongly associated with narcissism. In support of that notion, research on generational differences shows that narcissism is much more common among children in today's young generations than in previous ones (Twenge, 2006; Twenge, Konrath, Foster, Campbell, & Bushman, in press). Research on cultural differences and socialization practices predicts that childhood narcissism levels will remain high as long as socialization practices emphasize individualism, independence, and the primary importance of the self (Foster et al., 2003; Otway & Vignoles, 2006). The CNS provides researchers a tool to assess narcissistic self-views in children, which have become more prevalent in modern Western society.

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REFERENCES

- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.). Washington, DC: Author.
- Andershed, H., Kerr, M., Stattin, H., & Levander, S. (2002). Psychopathic traits in non-referred youths: A new assessment tool. In E. Blaauw & L. Sheridan (Eds.), *Psychopaths: Current international perspectives* (pp. 131–158). The Hague, The Netherlands: Elsevier.
- Barry, C. T., Frick, P. J., & Killian, A. L. (2003). The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. *Journal of Clinical Child and Adolescent Psychology, 32*, 139–152.
- 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.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Brendgen, M., Vitaro, F., Turgeon, L., Poulin, F., & Wanner, B. (2004). Is there a dark side of positive illusions? Overestimation of social competence and subsequent adjustment in aggressive and nonaggressive children. *Journal of Abnormal Child Psychology, 32*, 305–320.
- Brown, R. P., & Zeigler-Hill, V. (2004). Narcissism and the non-equivalence of self-esteem measures: A matter of dominance? *Journal of Research in Personality, 38*, 585–592.
- Bryant, B. K. (1982). An index of empathy for children and adolescents. *Child Development, 53*, 413–425.
- 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., Bonacci, A. M., Shelton, J., Exline, J. J., & Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment, 83*, 29–45.
- Campbell, W. K., Bosson, J. K., Goheen, T. W., Lakey, C. E., & Kernis, M. H. (2007). Do narcissists dislike themselves “deep down inside”? *Psychological Science, 18*, 227–229.
- Campbell, W. K., Foster, C. A., & Finkel, E. J. (2002). Does self-love lead to love for others? A story of narcissistic game playing. *Journal of Personality and Social Psychology, 83*, 340–354.
- Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin, 28*, 358–368.
- Cohen, D., & Strayer, J. (1996). Empathy in conduct-disordered and comparison youth. *Developmental Psychology, 32*, 988–998.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New York: Academic.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*, 593–623.
- Damon, W. (1995). *Greater expectations: Overcoming the culture of indulgence in our homes and schools*. New York: Free Press.
- David, C. F., & Kistner, J. A. (2000). Do positive self-perceptions have a “dark-side”? Examination of the link between perceptual bias and aggression. *Journal of Abnormal Child Psychology, 28*, 327–337.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York: Plenum.
- DuBois, D., & Tevendale, H. (1999). Self-esteem in childhood and adolescence: Vaccine or epiphenomenon? *Applied and Preventive Psychology, 8*, 103–117.
- East, P. L., & Rook, K. S. (1992). Compensatory patterns of support among children's peer relationships: A test using school friends, nonschool friends, and siblings. *Developmental Psychology, 28*, 163–172.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In W. Damon & R. M. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 646–718). New York: Wiley.
- Foster, J. D., Campbell, W. K., & Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality, 37*, 469–486.
- Frick, P. J., Bodin, S. D., & Barry, C. T. (2000). Psychopathic traits and conduct problems in community and clinic-referred samples of children: Further development of the psychopathy screening device. *Psychological Assessment, 12*, 382–393.
- Frick, P. J., O'Brien, B. S., Wootton, J. M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology, 103*, 700–707.
- Glorfeld, L. W. (1995). An improvement on Horn's parallel analysis methodology for selecting the correct number of factors to retain. *Educational and Psychological Measurement, 55*, 377–393.
- Gurtman, M. B. (1992). Construct validity of interpersonal personality measures: The interpersonal circumplex as a nomological net. *Journal of Personality and Social Psychology, 63*, 105–118.
- Harter, S. (1985). *The self-perception profile for children: Revision of the Perceived Competence Scale for Children*. Denver, CO: University of Denver.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford.
- Harter, S. (2006). The self. In W. Damon & R. M. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 505–570). New York: Wiley.
- Hawley, P. H. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted Machiavellian. *Merrill-Palmer Quarterly, 49*, 279–309.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional versus new alternatives. *Structural Equation Modeling, 6*, 1–55.
- Hughes, J. N., Cavell, T. A., & Grossman, P. B. (1997). A positive view of self: Risk or protection for aggressive children? *Development and psychopathology, 9*, 75–94.
- Hymel, S., Rubin, K. H., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing

- problems from middle to late childhood. *Child Development*, 61, 2004–2021.
- 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. (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.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford.
- Kohut, H. (1971). *The analysis of the self*. New York: International Universities Press.
- LaGreca, A. M., & Stone, W. L. (1993). Social Anxiety Scale for Children—Revised: Factor structure and concurrent validity. *Journal of Clinical Child Psychology*, 22, 17–27.
- Laurent, J., Catanzaro, S. J., Joiner, T. E., Jr., Rudolph, K. D., Potter, K. I., Lambert, S., et al. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment*, 11, 326–338.
- Locke, K. D. (2000). Circumplex Scales of Interpersonal Values: Reliability, validity, and applicability to interpersonal problems and personality disorders. *Journal of Personality Assessment*, 75, 249–267.
- Maccoby, E. E. (1990). Gender and relationship: A developmental account. *American Psychologist*, 45, 513–520.
- Marsh, H., Craven, R. G., & Debus, R. L. (1998). Structure, stability, and development of young children's self-concepts: A multicohort-multioccasion study. *Child Development*, 69, 1030–1053.
- Millon, T. (1981). *Disorders of personality: DSM-III: Axis II*. New York: Wiley.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Muthén, L. K., & Muthén, B. O. (1998–2004). *M-Plus. Statistical analyses with latent variables. User's guide* (3.0 ed.). Los Angeles: Author.
- Ojanen, T., Gronroos, M., & Salmivalli, C. (2005). An interpersonal circumplex model of children's social goals: Links with peer-reported behavior and sociometric status. *Developmental Psychology*, 41, 699–710.
- Otway, L. J., & Vignoles, V. L. (2006). Narcissism and childhood recollections: A quantitative test of psychoanalytic predictions. *Personality and Social Psychology Bulletin*, 32, 104–116.
- Paulhus, D. L. (2001). Normal narcissism: Two minimalist views. *Psychological Inquiry*, 12, 228–230.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validation. *Journal of Personality and Social Psychology*, 54, 890–902.
- Reynolds, C. R., & Richmond, B. O. (1978). What I think and feel: A revised measure of children's manifest anxiety. *Journal of Abnormal Child Psychology*, 6, 271–280.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rudolph, K. D., Caldwell, M. S., & Conley, C. S. (2005). Need for approval and children's well-being. *Child Development*, 76, 309–323.
- Salekin, R. T., & Frick, P. J. (2005). Psychopathy in children and adolescents: The need for a developmental perspective. *Journal of Abnormal Child Psychology*, 33, 403–409.
- Salmivalli, C., Ojanen, T., Haanpää, J., & Peets, K. (2005). "I'm O.K. but you're not" and other peer-relational schemas: Explaining individual differences in children's social goals. *Developmental Psychology*, 41, 363–375.
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbuldt, C. (2004). Are normal narcissists psychologically healthy? Self-esteem matters. *Journal of Personality and Social Psychology*, 87, 400–416.
- Seligman, M. E. P. (1998). The American way of blame. *Monitor on Psychology*, 29, 4.
- Stout, M. (2001). *The feel-good curriculum: The dumbing down of America's kids in the name of self-esteem*. Cambridge, MA: Perseus Publishing.
- Strayer, J., & Roberts, W. (2004). Empathy and observed anger and aggression in five-year olds. *Social Development*, 13, 1–13.
- Twenge, J. M. (2006). *Generation me: Why today's young Americans are more confident, assertive, entitled—And more miserable than ever before*. New York: Free Press.
- 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.
- Twenge, J. M., Konrath, S., Foster, J. D., Campbell, W. K., & Bushman, B. J. (in press). Egos inflating over time: A test of two generational theories of narcissism. *Journal of Personality*.
- Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with perceived opportunity for glory. *Journal of Personality and Social Psychology*, 82, 819–834.
- Washburn, J. J., McMahon, S. D., King, C. A., Reinecke, M. A., & Silver, C. (2004). Narcissistic features in young adolescents: Relations to aggression and internalizing symptoms. *Journal of Youth and Adolescence*, 33, 247–260.
- Watson, P. J., Grisham, S. O., Trotter, M. V., & Biderman, M. D. (1984). Narcissism and empathy: Validity evidence for the narcissistic personality inventory. *Journal of Personality Assessment*, 48, 301–305.
- Woodall, K. L., & Matthews, K. A. (1993). Changes and stability of hostile characteristics. Results from a 4-year longitudinal study of children. *Journal of Personality and Social Psychology*, 64, 491–499.
- Zakriski, A. L., & Coie, J. D. (1996). A comparison of aggressive-rejected and nonaggressive-rejected children's interpretations of self-directed and other-directed rejection. *Child Development*, 67, 1048–1070.
- Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, 99, 432–442.

APPENDIX

The Childhood Narcissism Scale

Please circle the answer that fits your opinion best.

1. I think it's important to stand out.
2. Kids like me deserve something extra.
3. Without me, our class would be much less fun.
4. It often happens that other kids get the compliments that I actually deserve.
5. I love showing all the things I can do.
6. I am very good at making other people believe what I want them to believe.
7. I am a very special person.
8. I am a great example for other kids to follow.
9. I often succeed in getting admiration.
10. I like to think about how incredibly nice I am.

Note: Responses are scored using a 4-point scale ranging from 0 (*not at all true*) to 3 (*completely true*). Responses are summed, with higher scores indicating higher levels of narcissism. The Dutch version of the Childhood Narcissism Scale can be obtained from S. Thomaes.