

# Origins of narcissism in children

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**Narcissism levels have been increasing among Western youth, and contribute to societal problems such as aggression and violence. The origins of narcissism, however, are not well understood. Here, we report, to our knowledge, the first prospective longitudinal evidence on the origins of narcissism in children. We compared two perspectives: social learning theory (positing that narcissism is cultivated by parental overvaluation) and psychoanalytic theory (positing that narcissism is cultivated by lack of parental warmth). We timed the study in late childhood (ages 7–12), when individual differences in narcissism first emerge. In four 6-mo waves, 565 children and their parents reported child narcissism, child self-esteem, parental overvaluation, and parental warmth. Four-wave cross-lagged panel models were conducted. Results support social learning theory and contradict psychoanalytic theory: Narcissism was predicted by parental overvaluation, not by lack of parental warmth. Thus, children seem to acquire narcissism, in part, by internalizing parents' inflated views of them (e.g., "I am superior to others" and "I am entitled to privileges"). Attesting to the specificity of this finding, self-esteem was predicted by parental warmth, not by parental overvaluation. These findings uncover early socialization experiences that cultivate narcissism, and may inform interventions to curtail narcissistic development at an early age.**

childhood narcissism | childhood self-esteem | parental overvaluation | parental warmth | socialization

The mythological figure Narcissus was a handsome, self-absorbed, and vain young man who passionately fell in love with his own reflection in the water. "I burn with love for—me!" Narcissus cried, "the spark I kindle is the torch I carry." Narcissus was unable to stop looking at his own reflection, and he ultimately pined away by the waterside. Psychologists have come to know Narcissus' personality as narcissism. Although well known in its extreme form as Narcissistic Personality Disorder, narcissism is a personality trait in which people in the general population differ from one another. Narcissists feel superior to others, fantasize about personal successes, and believe they deserve special treatment (1). When narcissists feel humiliated, they are prone to lash out aggressively (2, 3) or even violently (4). Narcissists are also at increased risk for mental health problems, including drug addiction, depression, and anxiety (5). Research shows that narcissism is higher in Western than non-Western countries (6), and suggests that narcissism levels have been steadily increasing among Western youth over the past few decades (7; see ref. 8 for an alternative view).

The origins of narcissism, however, are not well understood. Here, we report, to our knowledge, the first prospective longitudinal evidence on the origins of narcissism in children. We pitted two major theories against each other: social learning theory and psychoanalytic theory. Social learning theory holds that children are likely to grow up to be narcissistic when their parents overvalue them: when their parents see them as more special and more entitled than other children (9). When parents overvalue their child, they see their child as "God's gift to man"

(9) and "are under a compulsion to ascribe every perfection to the child—which sober observation would find no occasion to do" (10). Consequently, children might internalize the belief that they are special individuals who are entitled to privileges. In contrast, psychoanalytic theory holds that children are likely to grow up to be narcissistic when their parents lack warmth toward them (11, 12). When parents lack warmth, they express little affection, appreciation, and positive affect toward their child, and they show little enjoyment of their child (13). In such an upbringing, children might place themselves on a pedestal to try to obtain from others the approval they did not receive from their parents.

Both theories have received preliminary support. Cross-sectional research finds that adult narcissists are more likely than nonnarcissists to remember their parents as overvaluing and lacking warmth in childhood (14; for overviews, see refs. 15 and 16). These findings are inconclusive, however. First, the studies were cross-sectional, and were therefore unable to investigate direction of effects. Second, the studies were often limited to samples of college students or adults, whereas the origins of narcissism lie in childhood (17, 18). Third, the studies often relied on adults' retrospective reports of early socialization experiences. It is no surprise that adult narcissists remember their parents overvaluing them: narcissists typically feel admired by many others, even in the face of disconfirming evidence (19).

Addressing these limitations, we conducted a four-wave multi-informant prospective longitudinal study on the origins of narcissism in children. We timed the study in late childhood, ages

## Significance

**Narcissistic individuals feel superior to others, fantasize about personal successes, and believe they deserve special treatment. When they feel humiliated, they often lash out aggressively or even violently. Unfortunately, little is known about the origins of narcissism. Such knowledge is important for designing interventions to curtail narcissistic development. We demonstrate that narcissism in children is cultivated by parental overvaluation: parents believing their child to be more special and more entitled than others. In contrast, high self-esteem in children is cultivated by parental warmth: parents expressing affection and appreciation toward their child. These findings show that narcissism is partly rooted in early socialization experiences, and suggest that parent-training interventions can help curtail narcissistic development and reduce its costs for society.**

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7–12, a key developmental phase during which individual differences in narcissism first emerge (17, 18). Indeed, research finds that, from this age, narcissism can be assessed validly (17, 18). Children this age are able to form the global evaluations of themselves as a person (e.g., “I am a special person”) (20) that underlie narcissism. Additionally, they have typically outgrown the unrealistically positive, inflated self-views that are normative for younger children (20), making narcissistic self-views nonnormative.

Although narcissists feel superior to others and feel entitled to privileges, they are not necessarily satisfied with themselves as a person. That is, narcissism and self-esteem capture two different dimensions of the self (21, 22). As scholars put it, “High self-esteem means thinking well of oneself, whereas narcissism involves passionately wanting to think well of oneself” (2). Additionally, high self-esteem, unlike narcissism, predicts lower levels of anxiety and depression over time (23). An important question, therefore, is whether the socialization experiences that may cultivate narcissism (e.g., parental overvaluation, lack of parental warmth) also foster high self-esteem. We therefore compared the socialization of narcissism with the socialization of self-esteem.

Participants were 565 children (ages 7–11 at wave 1) and their parents, 415 mothers and 290 fathers. The study consisted of four 6-mo waves. In each wave, children completed well-established questionnaires to assess narcissism (e.g., “kids like me deserve something extra”) (17), self-esteem (e.g., “kids like me are happy with themselves as a person”) (24), and parental warmth separately for mothers and fathers (e.g., “my father/mother lets me know he/she loves me”) (25); parents completed well-established questionnaires to assess parental overvaluation (e.g., “my child is more special than other children”) (26) and parental warmth (e.g., “I let my child know I love him/her”) (25).

## Results

We conducted cross-lagged panel models in *Mplus* v7.11 (27) to examine whether parental socialization (overvaluation, warmth) predicts subsequent changes in children’s self-views (narcissism, self-esteem), and vice versa (*Materials and Methods*).

Consistent with social learning theory, parental overvaluation predicted child narcissism over time, but not vice versa (Fig. 1). Paternal overvaluation predicted child narcissism one wave later ( $B = 0.066$ ,  $\beta = 0.067$ – $0.068$ ,  $P = 0.021$ ), but child narcissism did not predict paternal overvaluation one wave later ( $B = -0.019$ ,  $P = 0.496$ ). Similarly, maternal overvaluation predicted child narcissism one wave later ( $B = 0.068$ ,  $\beta = 0.063$ – $0.071$ ,  $P = 0.003$ ), but child narcissism did not predict maternal overvaluation one wave later ( $B = 0.026$ ,  $P = 0.166$ ).

Attesting to the specificity of these findings, parental overvaluation did not predict child self-esteem over time. Paternal overvaluation did not predict child self-esteem one wave later ( $B = -0.036$ ,  $P = 0.210$ ), nor did child self-esteem predict paternal overvaluation one wave later ( $B = -0.045$ ,  $P = 0.090$ ). Similarly, maternal overvaluation did not predict child self-esteem one wave later ( $B = 0.005$ ,  $P = 0.807$ ), nor did child self-

esteem predict maternal overvaluation one wave later ( $B = -0.006$ ,  $P = 0.758$ ). Thus, parental overvaluation did not predict children’s positive self-views in general; it predicted children’s narcissistic self-views in particular.

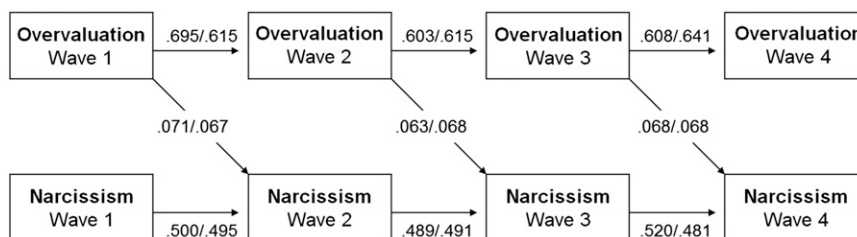
Inconsistent with psychoanalytic theory, lack of parental warmth did not predict narcissism over time. Neither child-reported nor parent-reported parental warmth predicted child narcissism one wave later ( $P$  values  $> 0.276$ ), nor did child narcissism predict child-reported or parent-reported parental warmth one wave later ( $P$  values  $> 0.157$ ).

In contrast, parental warmth did predict child self-esteem. More specifically, child-reported parental warmth, unlike parent-reported parental warmth ( $P$  values  $> 0.129$ ), predicted child self-esteem over time, and vice versa (Fig. 2). The finding that children’s self-esteem is predicted by child-reported but not parent-reported parental warmth is consistent with sociometer theory (28), which holds that it is perceptions of social acceptance, not social acceptance itself, that shape self-esteem. Child-reported paternal warmth predicted child self-esteem one wave later ( $B = 0.108$ ,  $\beta = 0.104$ – $0.106$ ,  $P < 0.001$ ), and child self-esteem predicted child-reported paternal warmth one wave later ( $B = 0.072$ ,  $\beta = 0.078$ – $0.084$ ,  $P = 0.001$ ). Similarly, child-reported maternal warmth predicted child self-esteem one wave later ( $B = 0.064$ ,  $\beta = 0.052$ – $0.055$ ,  $P = 0.019$ ), and child self-esteem predicted child-reported maternal warmth one wave later ( $B = 0.046$ ,  $\beta = 0.060$ – $0.063$ ,  $P = 0.010$ ). Thus, overvaluation specifically predicted narcissism, not self-esteem, whereas warmth specifically predicted self-esteem, not narcissism.

## Discussion

What are the origins of narcissism? This question has a long history, both in the field of psychology and in popular culture, but conclusive evidence has been lacking. Our longitudinal findings support social learning theory and contradict psychoanalytic theory: Narcissism was predicted by parental overvaluation, not by lack of parental warmth. Attesting to the specificity of this finding, self-esteem was predicted by parental warmth, not by parental overvaluation. These findings are consistent with the view that children come to see themselves as they believe to be seen by significant others, as if they learn to see themselves through others’ eyes (29). “Each to each a looking-glass, reflects the other that doth pass,” as Charles Cooley (29) described it. When children are seen by their parents as being more special and more entitled than other children, they may internalize the view that they are superior individuals, a view that is at the core of narcissism. However, when children are treated by their parents with affection and appreciation, they may internalize the view that they are valuable individuals, a view that is at the core of self-esteem.

An alternative interpretation of our findings might be that parents who overvalue their children are likely to be narcissistic themselves: Parental overvaluation, then, might predict children’s narcissism merely because children mimic or inherit parents’ narcissism levels. Additional analyses, however, refute this



**Fig. 1.** Standardized longitudinal associations between parental overvaluation and child narcissism. Only significant cross-lagged paths and one-wave stability paths are displayed. Associations for mothers and fathers are displayed on the left and right side of the forward slash, respectively.

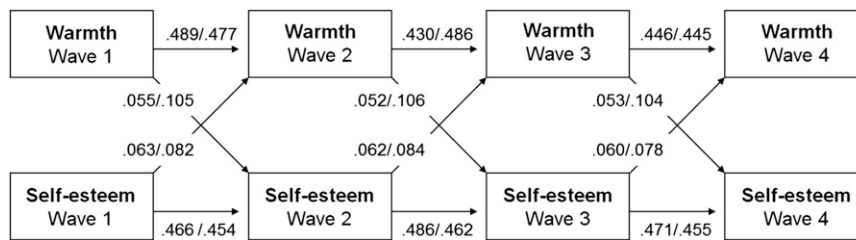


Fig. 2. Standardized longitudinal associations between parental warmth and child self-esteem. Only significant cross-lagged paths and one-wave stability paths are displayed. Associations for mothers and fathers are displayed on the left and right side of the forward slash, respectively.

interpretation (*SI Text*). Parental narcissism and overvaluation were only weakly-to-moderately correlated. Additionally, even when controlling for parental narcissism, parental overvaluation still robustly and significantly predicted increased child narcissism over time. Thus, parental overvaluation contributes to the development of narcissism in children above and beyond parents' own narcissism levels.

The findings also add to the literature showing that self-esteem is associated with perceived social acceptance (30–32). Our longitudinal findings show bidirectional associations between children's self-esteem and one key form of perceived social acceptance: how much parental warmth children experience. An interesting possibility, then, is that self-esteem represents an internal gauge (or "sociometer") of one's social acceptance, and that it is not self-esteem itself but rather the underlying perception of being accepted by others that confers benefits to children (e.g., lower levels of anxiety and depression) (28).

The findings may also inform intervention efforts. As of yet, proof-effective interventions to prevent or reduce narcissism in youth are lacking. A critical step toward such interventions is knowledge about the processes that lead up to narcissism (16). Given that narcissism is cultivated by parental overvaluation, parent-training interventions might be one effective means to curtail narcissistic development. Such interventions can help parents convey affection and appreciation to children without conveying to children that they are superior to others.

Of course, parental overvaluation is not the sole origin of narcissism. The prospective association between parental overvaluation and narcissism was modest in size. Like other personality traits, narcissism is moderately heritable and partly rooted in early emerging temperamental traits (33). Some children, because of their temperamental traits, might be more likely than others to become narcissistic when exposed to parental overvaluation (16, 21). An important task for future work is to identify these person-by-environment interactions.

Narcissism is a growing problem in Western society. Since the 1980s, Western society has become increasingly concerned with raising children's self-esteem (34), and proof-effective self-esteem interventions have been developed (35). However, in their attempts to raise self-esteem, parents often intuitively rely on lavishing children with praise, telling them that they are special and unique, and giving them exceptional treatment (26, 36). Our results show that, rather than raising self-esteem, such "overvaluing" practices might inadvertently raise narcissism in children. Collective efforts to reduce parental overvaluation, therefore, hold promise in curbing the societal rise in narcissism.

## Materials and Methods

**Participants.** Participants were 565 children (7–11 y old at wave 1; mean = 9.56 y, SD = 0.93; 54% girls; 89% of Dutch origin) and their parents: 290 fathers (mean = 44.67 y, SD = 4.60; 94% of Dutch origin) and 415 mothers (mean = 42.24 y, SD = 3.97; 92% of Dutch origin). Participants were recruited from 17 elementary schools in the Netherlands serving lower-to-upper middle class neighborhoods. The school boards supported all procedures. Of all children who were approached, 75% received active parental consent

and participated in the study. All children gave their assent. The study consisted of four 6-mo waves (T1–T4). The study was conducted under a protocol approved by the research ethics committee of Social and Behavioral Sciences of Utrecht University. Children completed questionnaires in their classes under the supervision of trained research assistants; parents completed questionnaires at home. Attrition entailed an average of 4% of children, 18% of fathers, and 16% of mothers per wave. Little's Missing Completely at Random test produced a normed  $\chi^2$  ( $\chi^2/df$ ) of 1.03, [ $\chi^2(2,847) = 2939.004, P = 0.112$ ], suggesting that attrition was random (37). Missing data were handled in *Mplus* using the Full Information Maximum-Likelihood procedure (27).

**Measures.** Each construct was assessed each wave using well-established questionnaires. For each construct, responses were averaged across items. Table S1 displays descriptive statistics.

Child narcissism was measured via child-report using the ten-item Childhood Narcissism Scale (e.g., "I like to think about how incredibly nice I am" and "kids like me deserve something extra"; 0 = not at all true, 3 = completely true) (17).

Child self-esteem was measured via child-report using the six-item Global Self-Worth subscale of the Self-Perception Profile for Children (e.g., "some kids are happy with themselves as a person" and "some kids like the kind of person they are"; 0 = I am not like these kids at all, 3 = I am exactly like these kids) (24).

Parental overvaluation was measured via parent-report using the seven-item Parental Overvaluation Scale (e.g., "my child is more special than other children" and "my child deserves special treatment"; 0 = not at all true, 3 = completely true) (26).

Parental warmth was measured via both parent-report and child-report using the eight-item Warmth Subscale of the Short Form of the Parental Acceptance-Rejection Questionnaire (e.g., parent report: "I let my child know I love him/her" and "I treat my child gently and with kindness"; child report: "my father/mother lets me know he/she loves me" and "my father/mother treats me gently and with kindness"; 0 = not at all true, 3 = completely true) (25). Children reported about their father and mother separately. Responses were averaged across items. Consistent with previous research (38), agreement between parent-reported and child-reported warmth was small to moderate ( $0.04 < R$  values  $< 0.27$ ).

**Descriptive Data Analysis.** Table S2 presents the zero-order correlations between study variables at the first wave. Demonstrating the independence of child narcissism and child self-esteem, within-wave correlations between these constructs were weak, ranging from 0.06 to 0.15. Demonstrating the independence of parental overvaluation and parental warmth, within wave correlations between these constructs were weak, both for fathers and for mothers, both for child-report and for parent-report, ranging from -0.11 to 0.08.

At each wave, self-esteem and narcissism were higher in boys than in girls, overvaluation was higher in fathers than in mothers, and warmth was higher in mothers than in fathers. However, controlling for children's sex did not affect the study findings, and separate analyses were conducted for fathers and mothers.

All constructs were relatively stable over time: Correlations between successive waves ranged from 0.61 to 0.77 for paternal overvaluation, from 0.72 to 0.78 for maternal overvaluation, from 0.59 to 0.61 for parent-reported paternal warmth, from 0.68 to 0.70 for parent-reported maternal warmth, from 0.53 to 0.58 for child-reported paternal warmth, from 0.52 to 0.57 for child-reported maternal warmth, from 0.54 to 0.67 for child narcissism, and from 0.47 to 0.61 for child self-esteem.

**Longitudinal Data Analysis.** We conducted four-wave cross-lagged panel models in *Mplus* v7.11 (27) using maximum-likelihood estimation with SEs



and  $\chi^2$  robust to nonnormality (MLR estimator). We conducted separate analyses for fathers and mothers, for parental overvaluation and parental warmth, and for child narcissism and child self-esteem. We ran all analyses with and without children's sex and age as covariates (i.e., as predictors of all variables across all waves) and with and without family as a clustering variable (i.e., removing variance because of some children being from the same family using the TYPE = COMPLEX command) (27). Because neither the covariates nor family clustering affected any of the cross-lagged paths, we reported the most parsimonious models (i.e., those without covariates and family clustering).

Cross-lagged panel models were examined in two steps. First, we examined whether the fully constrained baseline model demonstrated an adequate fit to the data. This model included all one-wave stability paths, all two-wave stability paths (i.e., from T1 to T3, and from T2 to T4), all within-wave correlations, and all one-wave cross-lagged paths. To create a parsimonious model, we constrained all longitudinal parameters to be time invariant (i.e., equal over time) (39). Second, for each model, we examined whether freeing all parameters of interest (i.e., the cross-lagged paths) improved model fit. Because it did not improve model fit for any model [ $\Delta\chi^2_{SB}(4) < 6.79$ ,  $P$  values  $> 0.148$ ], the longitudinal cross-lagged paths parameters were set to be time invariant (39).

Model fit was assessed with the comparative fit index (CFI), the root mean squared error of approximation (RMSEA) and 90% confidence interval (CI), and the standardized root mean square residual (SRMR). CFI values  $\geq 0.90$ , RMSEA values  $\leq 0.08$ , and SRMR values  $< 0.10$  indicate acceptable model fit, whereas CFI values  $\geq 0.95$ , RMSEA values  $\leq 0.05$ , and SRMR values  $< 0.08$  indicate good model fit (39–41). The comparative fit between nested models was tested with the Satorra–Bentler (SB) scaled  $\chi^2$  difference test (42). All statistical tests were two-sided at the  $\alpha = 0.05$  significance level.

**Parental overvaluation and child narcissism.** The fully constrained baseline model for parental overvaluation and child narcissism demonstrated good fit to the data for both fathers [ $\chi^2_{SB}(20) = 27.275$ , CFI = 0.991, RMSEA (90% CI) = 0.033

(0.000, 0.061), SRMR = 0.046] and mothers [ $\chi^2_{SB}(20) = 27.942$ , CFI = 0.994, RMSEA (90% CI) = 0.029 (0.000, 0.052), SRMR = 0.035].

**Parental warmth and child narcissism.** The fully constrained baseline model for parental warmth and child narcissism demonstrated good fit to the data for child-reported paternal warmth [ $\chi^2_{SB}(20) = 38.943$ , CFI = 0.981, RMSEA (90% CI) = 0.041 (0.021, 0.060), SRMR = 0.044], for child-reported maternal warmth [ $\chi^2_{SB}(20) = 34.163$ , CFI = 0.986, RMSEA (90% CI) = 0.035 (0.013, 0.055), SRMR = 0.037], and for parent-reported paternal warmth [ $\chi^2_{SB}(20) = 33.903$ , CFI = 0.976, RMSEA (90% CI) = 0.046 (0.016, 0.071), SRMR = 0.080], and acceptable fit to the data for parent-reported maternal warmth [ $\chi^2_{SB}(20) = 65.133$ , CFI = 0.956, RMSEA (90% CI) = 0.069 (0.051, 0.088), SRMR = 0.112].

**Parental overvaluation and child self-esteem.** The fully constrained baseline model for parental overvaluation and child self-esteem demonstrated good fit to the data for both fathers [ $\chi^2_{SB}(20) = 26.019$ , CFI = 0.992, RMSEA (90% CI) = 0.030 (0.000, 0.059), SRMR = 0.043], and mothers [ $\chi^2_{SB}(20) = 35.519$ , CFI = 0.987, RMSEA (90% CI) = 0.040 (0.017, 0.062), SRMR = 0.043].

**Parental warmth and child self-esteem.** The fully constrained baseline model for parental warmth and child self-esteem demonstrated good fit to the data for child-reported paternal warmth [ $\chi^2_{SB}(20) = 42.038$ , CFI = 0.975, RMSEA (90% CI) = 0.044 (0.025, 0.063), SRMR = 0.048], and for child-reported maternal warmth [ $\chi^2_{SB}(20) = 32.465$ , CFI = 0.986, RMSEA (90% CI) = 0.033 (0.008, 0.053), SRMR = 0.036], and acceptable fit to the data for parent-reported paternal warmth [ $\chi^2_{SB}(20) = 42.310$ , CFI = 0.959, RMSEA (90% CI) = 0.058 (0.033, 0.082), SRMR = 0.084], and for parent-reported maternal warmth [ $\chi^2_{SB}(20) = 66.858$ , CFI = 0.954, RMSEA (90% CI) = 0.070 (0.052, 0.089), SRMR = 0.113].

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- Morf CC, Rhodewalt F (2001) Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychol Inq* 12(4):177–196.
- Bushman BJ, Baumeister RF (1998) Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *J Pers Soc Psychol* 75(1):219–229.
- Thomaes S, Bushman BJ, Stegge H, Olthof T (2008) Trumping shame by blasts of noise: Narcissism, self-esteem, shame, and aggression in young adolescents. *Child Dev* 79(6):1792–1801.
- Verlinden S, Hersen M, Thomas J (2000) Risk factors in school shootings. *Clin Psychol Rev* 20(1):3–56.
- Stinson FS, et al. (2008) Prevalence, correlates, disability, and comorbidity of DSM-IV narcissistic personality disorder: results from the wave 2 national epidemiologic survey on alcohol and related conditions. *J Clin Psychiatry* 69(7):1033–1045.
- Foster JD, Campbell WK, Twenge JM (2003) Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *J Res Pers* 37(6):469–486.
- Twenge JM, Konrath S, Foster JD, Campbell WK, Bushman BJ (2008) Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic Personality Inventory. *J Pers* 76(4):875–902, discussion 903–928.
- Trzesniewski KH, Donnellan MB, Robins RW (2008) Is “Generation Me” really more narcissistic than previous generations? *J Pers* 76(4):903–918.
- Millon T (1969) *Modern Psychopathology: A Biosocial Approach to Maladaptive Learning and Functioning* (Saunders, Philadelphia).
- Freud S (1957) On narcissism: An introduction. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, ed Strachey J (Hogarth, London), Vol 14, pp 73–102.
- Kernberg OF (1975) *Borderline Conditions and Pathological Narcissism* (Jason Aronson, New York).
- Kohut H (1971) *The Analysis of the Self: A Systematic Approach to the Psychoanalytic Treatment of Narcissistic Personality Disorders* (Univ of Chicago Press, Chicago).
- Davidov M, Grusec JE (2006) Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child Dev* 77(1):44–58.
- Otway LJ, Vignoles VL (2006) Narcissism and childhood recollections: A quantitative test of psychoanalytic predictions. *Pers Soc Psychol Bull* 32(1):104–116.
- Horton RS (2011) Parenting as a Cause of Narcissism. *The Handbook of Narcissism and Narcissistic Personality Disorder: Theoretical Approaches, Empirical Findings, and Treatments*, eds Campbell WK, Miller JD (Wiley, Hoboken, NJ), pp 181–190.
- Thomaes S, Brummelman E (2015) Narcissism. *Developmental Psychopathology*, ed Cicchetti D (Wiley, Hoboken, NJ), 3rd Ed, Vol 4.
- Thomaes S, Stegge H, Bushman BJ, Olthof T, Denissen J (2008) Development and validation of the childhood narcissism scale. *J Pers Assess* 90(4):382–391.
- Barry CT, Frick PJ, Killian AL (2003) The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. *J Clin Child Adolesc Psychol* 32(1):139–152.
- Rhodewalt F, Eddings SK (2002) Narcissus reflects: Memory distortion in response to ego-relevant feedback among high- and low-narcissistic men. *J Res Pers* 36(2):97–116.
- Harter S (2012) *Construction of the Self: Developmental and Sociocultural Foundations* (Guilford, New York).
- Thomaes S, Brummelman E, Reijntjes A, Bushman BJ (2013) When Narcissus was a boy: Origins, nature, and consequences of childhood narcissism. *Child Dev Perspect* 7(1):22–26.
- Trzesniewski KH, Donnellan MB, Robins RW (2013) Development of self-esteem. *Current Issues in Social Psychology: Self-Esteem*, eds Bos AER, Zeigler-Hill V (Psychology Press, New York), pp 60–79.
- Sowislo JF, Orth U (2013) Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychol Bull* 139(1):213–240.
- Harter S (1985) *Manual for the Self-Perception Profile for Children: Revision of the Perceived Competence Scale for Children* (Univ of Denver, Denver).
- Rohner RP (2005) Parental Acceptance-Rejection Questionnaire (PARQ): Test manual. *Handbook for the Study of Parental Acceptance and Rejection*, eds Rohner RP, Khaleque A (Rohner Research, Storrs, CT), 4th Ed, pp 43–106.
- Brummelman E, Thomaes S, Nelemans SA, Orobio de Castro B, Bushman BJ (2014) My child is God's gift to humanity: Development and validation of the Parental Overvaluation Scale (POS). *J Pers Soc Psychol*, 10.1037/pspp0000012.
- Muthén LK, Muthén BO (2012) *Mplus User's Guide* (Univ of California, Los Angeles), 7th Ed.
- Leary MR, Baumeister RF (2000) The nature and function of self-esteem: Sociometer theory. *Adv Exp Soc Psychol* 32:1–62.
- Cooley CH (1902) *Human Nature and the Social Order* (Scribner, New York).
- Leary MR, Tambor ES, Terdal SK, Downs DL (1995) Self-esteem as an interpersonal monitor: The sociometer hypothesis. *J Pers Soc Psychol* 68(3):518–530.
- Denissen JJA, Penke L, Schmitt DP, van Aken MAG (2008) Self-esteem reactions to social interactions: Evidence for sociometer mechanisms across days, people, and nations. *J Pers Soc Psychol* 95(1):181–196.
- Srivastava S, Beer JS (2005) How self-evaluations relate to being liked by others: Integrating sociometer and attachment perspectives. *J Pers Soc Psychol* 89(6):966–977.
- Vernon PA, Villani VC, Vickers LC, Harris JA (2008) A behavioral genetic investigation of the Dark Triad and the Big 5. *J Pers Soc Psychol* 44(2):445–452.
- Baumeister RF, Campbell JD, Krueger JI, Vohs KD (2003) Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychol Sci Public Interest* 4(1):1–44.
- O'Mara AJ, Marsh HW, Craven RG, Debus RL (2006) Do self-concept interventions make a difference? A synergistic blend of construct validation and meta-analysis. *Educ Psychol* 41(3):181–206.
- Twenge JM (2006) *Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled—And More Miserable Than Ever Before* (Free Press, New York).
- Bollen K (1989) *Structural Equations With Latent Variables* (Wiley, New York).
- Tein JY, Roosa MW, Michaels M (1994) Agreement between parent and child reports on parental behaviors. *J Marriage Fam* 56(2):341–355.
- Kline RB (2005) *Principles and Practice of Structural Equation Modeling* (Guilford, New York), 2nd Ed.
- Hu L-T, Bentler PM (1999) Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Modeling* 6(1):1–55.
- Muthén BO (2004) *Mplus Technical Appendices* (Muthén & Muthén, Los Angeles).
- Satorra A, Bentler PM (2001) A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika* 66(4):507–514.