

Narcissism and popularity among peers: A cross-transition longitudinal study

Astrid M. G. Poorthuis, Meike Slagt, Marcel A. G. van Aken, Jaap J. A. Denissen & Sander Thomaes

To cite this article: Astrid M. G. Poorthuis, Meike Slagt, Marcel A. G. van Aken, Jaap J. A. Denissen & Sander Thomaes (2019): Narcissism and popularity among peers: A cross-transition longitudinal study, *Self and Identity*, DOI: [10.1080/15298868.2019.1609575](https://doi.org/10.1080/15298868.2019.1609575)

To link to this article: <https://doi.org/10.1080/15298868.2019.1609575>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 12 May 2019.



[Submit your article to this journal](#)



Article views: 542



[View related articles](#)



[View Crossmark data](#)



Citing articles: 1 [View citing articles](#)

Narcissism and popularity among peers: A cross-transition longitudinal study

Astrid M. G. Poorthuis^a, Meike Slagt^b, Marcel A. G. van Aken^a, Jaap J. A. Denissen^c and Sander Thomaes^a

^aDepartment of Psychology, Utrecht University, Utrecht, The Netherlands; ^bLugano, Switzerland;

^cDepartment of Psychology, Tilburg University, Tilburg, The Netherlands

ABSTRACT

The dual-pathway model posits that narcissism can both benefit and compromise popularity, depending upon whether narcissists' assertive or adversarial interpersonal tendencies surface in social interaction. A 5-wave longitudinal study followed Dutch adolescents ($N = 322$, 53% female, $M_{age} = 12.2$) who transitioned from primary into secondary school and examined how narcissism, along with self-esteem (measured at the end of primary school), contributes to cross-transition change in peer-rated popularity. Narcissism predicted rank-order increases in popularity among children with modest self-esteem but decreases in popularity among children with high self-esteem. These effects emerged shortly after the transition and were maintained throughout the school year. The results illustrate how self-esteem can act as a marker for the different faces of youth narcissism.

ARTICLE HISTORY

Received 28 September 2018

Accepted 12 April 2019

KEYWORDS

Narcissism; self-esteem; popularity; status; dual-pathway model

Where children interact, popularity hierarchies emerge. Throughout the school years, many children strive to obtain popularity. The pursuit of popularity may be especially pronounced, however, during the transition from primary into secondary school – a naturally occurring rupture in children's social lives, which marks the start of a period when new social relationships and popularity hierarchies are formed (Adler & Adler, 1998; Brown, 2011; Eccles et al., 1993). The present cross-transition longitudinal research tests how narcissism – a personality trait marked by a drive for admiration and status (Thomaes & Brummelman, 2016) – contributes to how children attain and maintain popularity among peers in the first year of secondary school.

Popularity across the secondary school transition

Popularity (or “perceived popularity”) can be defined as children's favorable status among peers, rooted in the ability to exert power and influence over others (Mayeux, Houser, & Dyches, 2011). Popularity is different from the overlapping construct of likeability, which is another facet of peer status, but rooted in the ability to gain affiliation and acceptance from others (Cillessen & Rose, 2005). After the transition into secondary

CONTACT Astrid M. G. Poorthuis  a.poorthuis@uu.nl  Department of Psychology, Utrecht University, P.O. Box 80.140, 3508 TC Utrecht, The Netherlands

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

school, many children seek to attain status in their new peer group (Adler & Adler, 1998; Brown, 2011; LaFontana & Cillessen, 2010). As a one-two punch, the secondary school transition is timed in early adolescence, a developmental period during which children become increasingly concerned about the impressions they make on their peers (Eccles et al., 1993; Harter, 2012; LaFontana & Cillessen, 2010).

The formation of popularity hierarchies is an ongoing process, but can be broken down into the stages of “popularity attainment” (becoming popular in a new peer group) and “popularity maintenance” (staying popular; Cillessen, 2011). Popularity attainment requires children’s motivation and ability to be socially visible (i.e., to grab and hold the attention of peers) and to have an impact on others. Popularity maintenance, in turn, additionally requires children to be able to anticipate how their actions influence their popularity, and to flexibly adjust to changes in peer group norms (Rubin, Bukowski, & Parker, 2006).

Narcissism and the “dual-pathway model” of popularity

We focus on narcissism as a trait on which youth and adults in the general population vary (Barry, Wallace, & Guelker, 2011; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Thomaes & Brummelman, 2016) – a trait characterized by grandiosity, entitlement, and exploitative interpersonal attitudes (Thomaes, Stegge, Bushman, Olthof, & Denissen, 2008). We call an individual with high values on this trait a “narcissist” in the present paper. Much like their adult counterparts (Morf & Rhodewalt, 2001), narcissistic youth have a strong need to get attention and be admired by others, and they often use their social relationships as a platform to garner approval or status (Barry et al., 2011; Thomaes, Brummelman, & Sedikides, 2018). For example, research has shown that narcissistic youth are prone to present themselves to others as attractive, fashionable, or ‘cool’ (Ong et al., 2011; for similar evidence in college students, see Back, Schmukle, & Egloff, 2010), they are socially facile and easily disclose personal information to others (Hawk, van den Eijnden, van Lissa, & ter Bogt, 2019; Liu, Ang, & Lwin, 2016), and they seek approval and admiration (more than closeness) in their relationships (Ojanen, Findley, & Fuller, 2012; Thomaes, Stegge, et al., 2008). It seems plausible that these self-promotional, agentic tendencies will typically help narcissists to gain popularity among peers. Indeed, if attaining popularity requires a drive and ability to be visible and have an impact, then narcissists have what it takes. However, research has also shown that narcissistic youth can behave in ways that potentially compromise popularity. In particular, narcissistic youth – or at least subsets of them – can behave abusively and aggressively (Golmaryami & Barry, 2010; Reijntjes et al., 2016; Thomaes, Bushman, Stegge, & Olthof, 2008), and are often perceived by peers as competitive and hostile (Grafeman, Barry, Marcus, & Leachman, 2015).

How successful, then, are narcissists at gaining popularity? The “dual-pathway model” (Küfner, Nestler, & Back, 2013; Leckelt, Küfner, Nestler, & Back, 2015) explains how narcissism may influence popularity in the early stages of relationship formation. This model posits that narcissism can influence the degree to which individuals become popular or unpopular, depending on whether their interpersonal style predominantly manifests in narcissistic assertive behaviors (e.g., dominance, agentic tendencies) or narcissistic adversarial behaviors (e.g., self-centeredness, lack of genuine concern for others, competitiveness, envy). Küfner et al. (2013) illustrated the model in research

involving college students. In the context of a brief (<15 min) group discussion with unacquainted peers, narcissism was positively related to peer judgments of both “assertiveness” and “aggressiveness.” These judgments, in turn, had opposing effects on the impressions that peers formed: Assertiveness was positively related to popularity, whereas aggression was negatively related to popularity. Leckelt et al. (2015) found support for the model by systematically varying social context. In the context of self-presentation, narcissists’ assertiveness surfaced in social interactions, which predicted increased popularity with peers. In the context of task-oriented interaction with peers, narcissists’ adversarial tendencies surfaced, which predicted decreased popularity. Recently, the contextual evidence for the dual pathway model has been complemented with an individual difference approach. Research showed how narcissism has differential effects on popularity across subsets of narcissists who differ in their tendencies to behave assertively versus aggressively (e.g., Back, Küfner, & Leckelt, 2018; Leckelt et al., 2015).

Narcissists’ level of self-esteem and popularity across the secondary school transition

Some initial attempts have been made to distinguish between different “faces” (or facets) of youth narcissism. For example, some scholars have tried to measure vulnerable manifestations of narcissism in addition to grandiose manifestations (Derry, Bayliss, & Ohan, 2018). Others have distinguished between the facets of narcissistic superiority and exploitativeness (Ang & Raine, 2009). Still, others distinguished between maladaptive and adaptive facets of narcissism, based on a factor analysis of the Narcissistic Personality Inventory for Children (Barry, Frick, Adler, & Grafeman, 2007). Despite the informativeness of these approaches, broad consensus on whether youth narcissism actually is a multifaceted trait (and if so, what youth narcissistic facets can be distinguished) is still lacking (Thomaes & Brummelman, 2016)

There is, however, a consensus that narcissistic youth differ in their level of self-esteem and concomitant social behavior (Barry, Grafeman, Adler, & Pickard, 2007; Pauletti, Menon, Menon, Tobin, & Perry, 2012; Thomaes et al., 2018). Indeed, narcissism and self-esteem are relatively independent psychological traits, especially so in youth (Barry & Ansel, 2011; Brummelman, Thomaes, & Sedikides, 2016). The self-absorption and feelings of entitlement that characterize narcissism may co-occur with either self-assurance and hubris (in narcissistic youth with high self-esteem), or more measured feelings of worth and occasional self-doubt (in narcissistic youth with modest self-esteem; Pauletti et al., 2012; Thomaes et al., 2018).

Importantly, narcissistic youth with high self-esteem differ from narcissistic youth with more modest self-esteem when it comes to their interpersonal style. Compared to narcissistic youth with modest self-esteem, those with high self-esteem are more likely to be hostile, abusive, and aggressive. For example, in one experimental study in which young adolescent participants played a competitive computer game against a peer and lost, narcissists with high (but not modest) self-esteem were prone to aggress against their opponent when they experienced ego-threat (Thomaes et al., 2008). Similar evidence has been obtained using self-report and peer nomination aggression data (e.g., Golmaryami & Barry, 2010; Lau, Marsee, Kunimatsu, & Fassnacht, 2011; but see Pauletti et al., 2012). A recent study among adults also provided evidence that narcissists with high

self-esteem are more aggressive than those with modest self-esteem. Using cluster analyses, this study identified two groups of individuals high on entitlement (a key feature of narcissism): Both groups had equally high levels of extraversion – a trait characterized by assertive behavior. One group was characterized by high levels of both self-esteem and antisocial behavior (including aggression), whereas the other group was characterized by low levels of self-esteem and low levels of antisocial behavior (Crowe, LoPilato, Campbell, & Miller, 2016).

How will these differences in interpersonal style play out in terms of how successful narcissists are at attaining popularity in a new peer group? Although narcissistic youth (regardless of their level of self-esteem) are socially facile and skilled at obtaining attention – traits that may benefit their popularity (Liu et al., 2016; Ojanen et al., 2012; Ong et al., 2011) – the competitive, hostile, and aggressive behaviors that narcissistic youth with high self-esteem tend to engage in are likely to backfire and compromise popularity. Accordingly, we propose that narcissism will foster popularity among adolescents with modest levels of self-esteem, but not among those with high self-esteem.

That said, different dynamics might apply for the short-term attainment and longer-term maintenance of popularity. For example, research involving college students has shown that the popularity benefits associated with narcissistic assertiveness decrease over time, while other facets of narcissism (e.g., exploitativeness, entitlement) become increasingly influential and decrease narcissists' popularity (Carlson & Lawless DesJardins, 2015; Leckelt et al., 2015). Thus, even if narcissists with modest self-esteem may readily attain popularity in the short term because they come across as assertive rather than aggressive, in the longer term their self-centeredness and entitlement may be picked up by peers the more they interact with them, and turn them off (Carlson & Lawless DesJardins, 2015; Paulhus, 1998). If so, then narcissists with modest self-esteem may eventually lose at least some of their initial status among peers and gradually decrease in popularity.

Overview

The present longitudinal study examines how narcissism, along with self-esteem, predicts children's popularity attainment and subsequent maintenance. It does so right at a time when children enter a new peer-group, with the transition into secondary school. Five waves of data collection were timed from the end of primary school (T1 = spring at primary school) continuing throughout the first year of secondary school (T5 = spring at secondary school).

We hypothesized that narcissism would interact with self-esteem in predicting both popularity attainment (i.e., rank-order change in popularity from T1 to T2; 2 to 3 weeks after the transition) and popularity maintenance (i.e., rank-order change in popularity throughout the first school year; from T2 to T5), but in different ways. For children with lower self-esteem, we expect narcissism to predict initial increases in status (i.e., in the popularity attainment stage) but subsequent decreases in status (i.e., in the popularity maintenance phase). For children with high self-esteem, we expect narcissism to predict no increases in status (i.e., neither in the status attainment nor in the status maintenance stages).

Method

Participants

Participants were 322 students (53% girls) from schools in a medium-sized town (35,000 inhabitants) in the Netherlands. All participants transitioned from primary to secondary school. At the study start, students were on average 12.2 years old ($SD = 0.45$). Most students (77%) were of ethnic Dutch origin; others were mainly of mixed cultural or ethnical origin. As is common in the Dutch secondary school system, students transitioned into tracks ranging from pre-vocational to pre-university training.

Schools were selected following a two-step procedure. First, all secondary schools in town were asked to take part in the study; four (out of six) schools agreed. Second, all primary schools feeding at least five students into these secondary schools were asked to take part; 22 (out of 29) schools agreed. Next, parental consent letters were sent home from primary schools, were signed, and returned (consent rate = 75%). This procedure resulted in an initial Grade 6 sample of 485 participants. Of them, a proportion of 66% transitioned into the secondary schools that took part in our study (i.e., the 322 participants in the transition sample). Participants in the transition sample did not differ from students who only participated in Grade 6 in terms of self-esteem, age, gender, and cultural or ethnical diversity ($ps > .56$). Participants in the transition sample were higher in narcissism and popularity ($ps < .02$), but effect sizes were small ($ds < .29$). Students in all academic tracks were represented in the transition sample. Attrition was 5% at T3, 3% at T4, and 3% at T5. Missing values were estimated using Full Information Maximum Likelihood (FIML) in Mplus 6.0 (Enders & Bandalos, 2001).

Procedure

In the Netherlands, children transition into secondary school at Grade 7. The five waves of data collection were timed from the end of primary school (T1 = spring prior to the transition) continuing throughout the first year of secondary school (T2 = September, 2 to 3 weeks after the transition; T3 = December; T4 = March; T5 = June). Questionnaires and peer rating procedures were administered in students' classes.

Measures

Narcissism

Narcissism was measured at T1 using the 10-item *Childhood Narcissism Scale* (Thomaes et al., 2008). This scale measures narcissism as a unidimensional construct, tapping children's grandiose, inflated self-views, feelings of entitlement, and exploitative interpersonal attitudes. Sample items include: "I think it is important to stand out" and "I love showing all the things I can do." Items were rated along a 4-point scale (1 = *not at all true*, 4 = *completely true*). Higher scores indicate higher levels of narcissism (Cronbach $\alpha = .79$).

Self-esteem

Self-esteem was measured at T1 using the 5-item *Global Self-Worth* scale of the *Self-Perception Profile for Adolescents* (Harter, 1988). This scale measures how satisfied

children are with themselves. A sample item includes: “Some kids are happy with themselves”. As in the previous research (Brendgen, Vitaro, Turgeon, Poulin, & Wanner, 2004; Thomaes et al., 2008), items were rated along a 4-point scale (1 = *I am not like these kids at all*, 4 = *I am exactly like these kids*). Negative items were recoded, with higher scores indicating higher levels of self-esteem (Cronbach $\alpha = .75$).

Popularity

Popularity was measured at each time point using standard peer rating procedures (Schwartz, Gorman, Nakamoto, & McKay, 2006; Singleton & Asher, 1977). Participants rated for each of their classmates how “popular” they thought these classmates were. Ratings were provided on a 5-point scale (1 = *not at all*, 5 = *very much*). Because of the school transition (between T1 and T2), T1 involved a different set of raters for each child than T2 to T5. Received ratings (M received ratings in primary school = 17, $SD = 4.9$; M received ratings in secondary school = 21, $SD = 4.6$) were averaged, with higher scores indicating higher levels of popularity.

Results

Preliminary analyses

Descriptive statistics and correlations for the main study variables are presented in Table 1. Mean levels of popularity decreased across the transition (i.e., from T1 to T2), $t(322) = -4.48$, $p < .001$, $d = -0.21$, then slightly increased (i.e., from T2 to T3), $t(323) = 2.54$, $p = .01$, $d = 0.07$, and stabilized (i.e., from T3 to T4 and from T4 to T5), $t(315) = -0.14$, $p = .89$, $d = 0.00$, and $t(307) = -1.22$, $p = .22$, $d = -0.02$, respectively.

As in the previous research involving youth (Barry & Ansel, 2011; Thomaes & Brummelman, 2016), and consistent with their conceptualization as separable dimensions of the self (Brummelman et al., 2016), narcissism and self-esteem were unrelated. Boys were more narcissistic than girls ($p < .001$, $d = 0.43$); no sex differences were found for self-esteem or popularity ($ps > .13$).

Primary analyses

We used structural equation modeling and the Latent Moderated Structural equation technique (LMS; Klein & Moosbrugger, 2000) to test our hypotheses in Mplus 7.2

Table 1. Means, standard deviations, and correlations for measures of popularity, narcissism, and self-esteem.

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-----------|--------|--------|--------|--------|--------|-----|
| 1. Popularity T1 | 3.25 | 0.77 | – | | | | | |
| 2. Popularity T2 | 3.10 | 0.61 | .65*** | – | | | | |
| 3. Popularity T3 | 3.15 | 0.66 | .66*** | .88*** | – | | | |
| 4. Popularity T4 | 3.15 | 0.67 | .66*** | .83*** | .94*** | – | | |
| 5. Popularity T5 | 3.13 | 0.69 | .67*** | .82*** | .92*** | .96*** | – | |
| 6. Narcissism T1 | 2.07 | 0.46 | .30*** | .20*** | .23*** | .20*** | .22*** | – |
| 7. Self-esteem T1 | 3.24 | 0.52 | .20*** | .10 | .06 | .08 | .08 | .06 |

$N = 322$; T1 = Time 1, T2 = Time 2, T3 = Time 3, T4 = Time 4, T5 = Time 5. The possible range of scores for popularity was 1–5; for narcissism and self-esteem, it was 1–4.

*** $p < .001$.

(Muthén & Muthén, 1998–2012). LMS allows for testing interactions with latent variables (i.e., narcissism and self-esteem). To account for dependencies in the data (i.e., students were nested in classes), we analyzed the data using Mplus's robust maximum likelihood estimator, Type = Complex (Asparouhov, 2005). Because standard fit indices are not available for models that use latent variable interactions (due to adjustments made during estimation; Muthén & Muthén, 1998–2012), we looked at the fit for the model including main effects and compared the model with interactions with this model. We estimated a model (Figure 1) that included stability paths of popularity (from T1 to T5), main effects of narcissism and self-esteem (at T1) at each wave of popularity, and the interaction between narcissism and self-esteem (at T1) at each wave of popularity. Predictors were centered to reduce multicollinearity (Cohen, Cohen, West, & Aiken, 2003). Factor loadings can be found in the Appendix.

Prediction of popularity attainment and maintenance

The model including main effects for narcissism and self-esteem showed adequate fit, $\chi^2(160) = 330.20, p < .001, \chi^2/df = 2.06, TLI = .94, CFI = .93, RMSEA = .06$. The model including the interaction between narcissism and self-esteem demonstrated a better fit compared to the model without interactions. That is, the loglikelihood was significantly closer to zero (-5559.87 vs. $-5553.67, \chi^2(5) = 12.39, p = .03$) in the model with interactions compared to the model without interactions. As shown in Figure 1 and Table 2, popularity showed considerable rank-order stability over time. Popularity was less stable across the transition (from T1 to T2) than after the transition (from T2 to T5): Not surprisingly, children were most likely to show rank-order change in popularity across the secondary school transition, when they entered a new peer group (i.e., and they were thus evaluated by a new group of raters). Later in the school year, their popularity stabilized to a large degree.

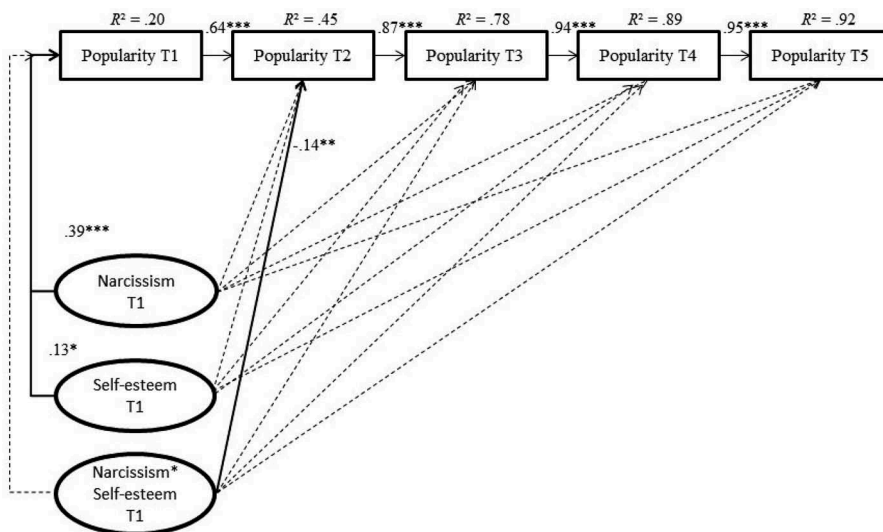


Figure 1. Standardized parameter estimates of the model predicting popularity. Factor loadings, error terms, and disturbance terms are omitted for parsimony but can be obtained from the corresponding author. Dotted paths were nonsignificant. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2. Standardized and unstandardized parameter estimates of the model predicting popularity.

| Regression path/covariance | <i>B</i> | <i>SE</i> | 95% CI | β |
|---|----------|-----------|----------------|---------|
| Popularity T1 → Popularity T2 | 0.51*** | 0.04 | [0.42, 0.59] | 0.64 |
| Popularity T2 → Popularity T3 | 0.94*** | 0.03 | [0.88, 0.99] | 0.87 |
| Popularity T3 → Popularity T4 | 0.95*** | 0.02 | [0.91, 1.00] | 0.94 |
| Popularity T4 → Popularity T5 | 0.97*** | 0.02 | [0.94, 1.01] | 0.95 |
| Narcissism T1 → Popularity T1 | 0.73*** | 0.13 | [0.48, 0.98] | 0.39 |
| Self-esteem T1 → Popularity T1 | 0.23* | 0.11 | [0.01, 0.44] | 0.13 |
| Narcissism × Self-esteem T1 → Popularity T1 | -0.50 | 0.26 | [-0.99, 0.01] | -0.12 |
| Narcissism T1 → Popularity T2 | 0.03 | 0.07 | [-0.10, 0.17] | 0.02 |
| Self-esteem T1 → Popularity T2 | -0.09 | 0.08 | [-0.25, 0.07] | -0.07 |
| Narcissism × Self-esteem T1 → Popularity T2 | -0.46** | 0.17 | [-0.79, -0.13] | -0.14 |
| Narcissism T1 → Popularity T3 | 0.11 | 0.06 | [-0.01, 0.22] | 0.07 |
| Self-esteem T1 → Popularity T3 | -0.05 | 0.05 | [-0.16, 0.05] | -0.04 |
| Narcissism × Self-esteem T1 → Popularity T3 | 0.07 | 0.12 | [-0.16, 0.30] | 0.02 |
| Narcissism T1 → Popularity T4 | 0.00 | 0.04 | [-0.09, 0.09] | 0.00 |
| Self-esteem T1 → Popularity T4 | 0.03 | 0.03 | [-0.03, 0.10] | 0.02 |
| Narcissism × Self-esteem T1 → Popularity T4 | -0.12 | 0.13 | [-0.37, 0.14] | -0.03 |
| Narcissism T1 → Popularity T5 | 0.06 | 0.03 | [-0.002, 0.12] | 0.04 |
| Self-esteem T1 → Popularity T5 | 0.04 | 0.05 | [-0.05, 0.11] | 0.02 |
| Narcissism × Self-esteem T1 → Popularity T5 | 0.04 | 0.11 | [-0.17, 0.26] | 0.01 |

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

The goal of this research was to investigate how narcissism, along with self-esteem, predicts popularity attainment (i.e., popularity shortly after the school transition at T2, controlled for popularity in primary school at T1) and popularity maintenance (i.e., popularity later in the school year at T3, T4, and T5, controlled for popularity at the previous time point). Main effects of narcissism and self-esteem for popularity attainment and maintenance were nonsignificant. For popularity attainment, the Narcissism × Self-esteem interaction was significant. We conducted a region of significance analyses (Preacher, Curran, & Bauer, 2006) to test how self-esteem qualified the link between narcissism and popularity attainment. Region of significance analyses provide the range of moderator values (i.e., values of self-esteem) for which the association between the predictor (i.e., narcissism) and the outcome (i.e., popularity attainment) is significant. As predicted, the region of significance analyses showed that narcissism was significantly *positively* associated with popularity attainment among children with modest self-esteem; those whose absolute self-esteem levels ranged up to 2.9 on the 1–4 self-esteem response scale (i.e., near the neutral midpoint of the scale at which children report equal amounts of self-satisfaction and self-dissatisfaction). Narcissism was *not* associated with popularity attainment among children whose absolute self-esteem levels ranged between 2.9 and 3.7 (i.e., intermediate levels of self-esteem). Finally, narcissism was significantly *negatively* associated with popularity attainment among children with high self-esteem; those whose absolute self-esteem levels were 3.7 or higher on the 1–4 self-esteem response scale. [Figure 2](#) shows the boundaries of the region of significance, along with the simple slopes for children who score one standard deviation below the mean (self-esteem score = 2.7, $b = 0.27$, $t = 2.22$, $p = .027$, $\beta = .20$), and one standard deviation above the mean (self-esteem score = 3.8, $b = -0.21$, $t = -2.11$, $p = .035$, $\beta = -.16$) on the self-esteem scale.

Regarding popularity maintenance, the Narcissism × Self-esteem interaction did not significantly predict popularity change from T2 onwards. Thus, we found no support for the hypothesis that narcissists with modest self-esteem – who initially attained

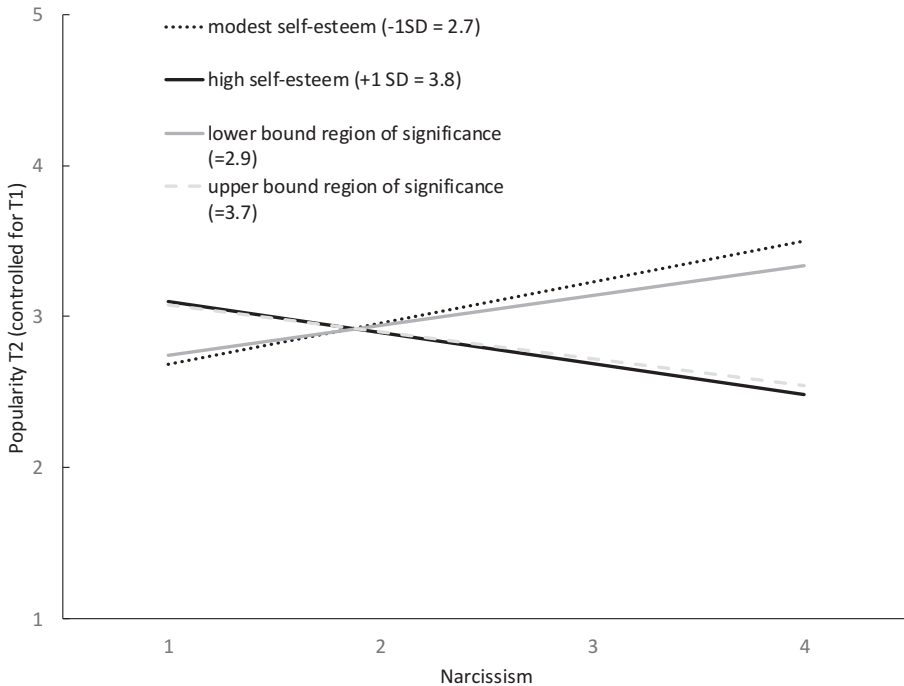


Figure 2. Narcissism predicts decreased popularity (T1-T2) for children with high self-esteem and increased popularity for children with modest self-esteem. The black solid line represents the significant simple slope of the self-esteem score one standard deviation above the mean. The black dashed lines represent the significant simple slope of the self-esteem score one standard deviation below the mean. The grey lines represent the boundaries of the region of significance. Associations between narcissism and popularity are significant at self-esteem values above the upper boundary (= 3.7) and below the lower boundary (= 2.9).

popularity – would subsequently decrease in popularity over the course of the school year. Rather, regardless of their level of self-esteem, narcissists maintained their initially attained position in the popularity hierarchy throughout the school year.

Concurrent popularity

Although our hypotheses did not concern effects for concurrent popularity (at T1), we considered them for exploratory purposes. Both narcissism and self-esteem were significantly positively associated with concurrent popularity, and the Narcissism \times Self-esteem interaction was not significant.

Potential gender differences

Because boys were more narcissistic than girls, we explored potential gender differences in the links between narcissism, self-esteem, and popularity. The model was re-analyzed using a multigroup procedure, which compared a model in which regression parameters were constrained to be equal across gender to a model in which regression parameters were allowed to differ across gender (Kline, 1998). By default, means, intercepts, and variances were allowed to differ across gender. Models were compared using the Satorra-Bentler scaled χ^2 -difference test (Satorra & Bentler, 2001). The links between

narcissism, self-esteem, and children's popularity were similar for boys and girls. Releasing equality constraints across gender did not significantly improve model fit, $\Delta\chi^2(11) = 17.71, p = .09$.

Discussion

The present study found longitudinal support for the overall hypothesis that narcissism can both benefit and compromise peer popularity (Küfner et al., 2013; Leckelt et al., 2015). We followed children across the transition from primary into secondary school – an eventful time when new relationships and popularity hierarchies are formed. Narcissism interacted with self-esteem to predict popularity attainment (i.e., rank-order change in popularity from shortly before to shortly after the transition). Specifically, narcissism predicted increased cross-transition popularity among children with modest self-esteem, decreased cross-transition popularity among children with high self-esteem, a no change in popularity for children with intermediate self-esteem. Later in the school year, children's levels of popularity stabilized and changes in popularity were no longer predicted by the interaction of narcissism and self-esteem. We found no indications that the popularity of those narcissists whose popularity increased across the school transition waned over time when peers got to know them better.

Previous evidence that narcissists can make both positive and negative impressions on their peers was obtained in get-acquainted tasks involving college students who first introduced themselves and then engaged in group discussions (Carlson & Lawless DesJardins, 2015; Küfner et al., 2013; Leckelt et al., 2015). Our results extend this evidence in that they are based on a sample of young adolescents who were followed over an extended period of time, in a naturalistic setting, and following a major life transition.

Our results are consistent with the dual-pathway model. Narcissistic youth tend to have a drive and ability to be seen and obtain power or admiration (i.e., assertive behavior in the dual-pathway model; Liu et al., 2016; Ojanen et al., 2012; Ong et al., 2011). And yet, some narcissistic youth – those with high self-esteem – also engage in interpersonal behaviors that are likely to turn others off – they tend to be competitive, hostile, and aggressive (Golmaryami & Barry, 2010; Lau et al., 2011; Thomaes et al., 2008). It is thus not surprising that we found differences in the popularity attainment of narcissists with high versus modest self-esteem.

What does it mean for narcissistic youth to hold “modest” self-esteem? Although one might intuitively believe that all narcissists should have high self-esteem, this is not the case (Brummelman et al., 2016). Although some narcissists are self-assured, others occasionally experience feelings of imperfection and self-doubt (along with feelings of entitlement and specialness; Geukes et al., 2017; Thomaes, Stegge, Olthof, Bushman, & Nezlek, 2011; Zeigler-Hill & Besser, 2013). The present research illustrates, for the first time, that this particular constellation of narcissism and modest self-esteem may have certain interpersonal benefits, at least in terms of youth's social standing among peers. Narcissists' moderate feelings of worth may come with an interpersonal style that is perceived as less hostile and aggressive by peers (Crowe et al., 2016). Future research will need to further explore the psychological costs and benefits of this interpersonal style.

Some of our findings were unexpected. Previous research in college students has suggested that narcissists make increasingly negative impressions on their peers and

lose status over time (Carlson & Lawless DesJardins, 2015; Leckelt et al., 2015; Paulhus, 1998). Accordingly, we predicted that those narcissistic individuals who were initially successful at attaining popularity would gradually decrease in popularity over the school year. We found no evidence for such a trend – popularity hierarchies were remarkably stable after they were established at the beginning of the school year, and narcissists whose popularity increased shortly after the school transition were able to uphold their popularity throughout the school year. What accounts for this apparent discrepancy with previous research? The developmental timing of our research may provide an explanation. In early adolescence, compared to early adulthood, peers may be less skilled at recognizing the relatively concealed, subtle cues of entitlement and superiority that narcissists with modest self-esteem exhibit, and so they may be less easily turned off by them – a possibility that deserves further empirical scrutiny.

Limitations and future research

A central tenet of the dual-pathway model of narcissistic popularity is that narcissists' level of popularity depends on how assertiveness and aggression surface in social interaction. We did not measure those behaviors directly. Instead, we measured children's level of self-esteem – a marker of individual differences in narcissists' interpersonal style (e.g., Bushman et al., 2009; Crowe et al., 2016; Golmaryami & Barry, 2010; Thomaes et al., 2008). Future research may seek to identify the social behaviors that explain the heterogeneous effects of narcissism on children's popularity among peers. Intensive methods of data collection (e.g., daily diary methods, repeated observational methods; Pellegrini & Bartini, 2000; Sandstrom & Cillessen, 2003), timed during early stages of peer relationship formation, may be especially suited for such an approach.

The measure of youth narcissism that we used, the Childhood Narcissism Scale, assesses narcissism as a single-dimension construct, and was not developed to disentangle potential facets of youth narcissism. A viable direction for future work is to explore the multifaceted nature of youth narcissism and its interpersonal correlates, including popularity attainment and maintenance. For example, such research could explore whether assertive and antagonistic facets of narcissism can be distinguished in youth (Back et al., 2013) and whether these have opposing consequences for popularity (Leckelt et al., 2015), as has been found in adult populations.

Another interesting direction for future research may be to study how youth narcissism (along with self-esteem) is not just a predictor of, but indeed, a *consequence* of changes in popularity, such as they may occur across the secondary school transition. Still, little is known about whether or how narcissism may be rooted in impactful peer experiences. An ideal developmental period to explore such effects is in (early) adolescence – a time when youth care deeply about how they are viewed by peers.

Conclusion

Narcissism has many faces, but in youth, these faces are only beginning to be unveiled. Our research illustrates how self-esteem is a marker of different faces of youth narcissism, one that is consequential for the popularity of narcissistic youth. Narcissism

benefits the popularity attainment of children with modest self-esteem but compromises the popularity attainment of those with high self-esteem.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Adler, P. A., & Adler, P. (1998). *Peer power: Preadolescent culture and identity*. New Brunswick: Rutgers University Press.
- Ang, R. P., & Raine, A. (2009). Reliability, validity and invariance of the Narcissistic Personality Questionnaire for Children-Revised (NPQC-R). *Journal of Psychopathology and Behavioral Assessment, 31*, 143–151.
- Asparouhov, T. (2005). Sampling weights in latent variable modeling. *Structural Equation Modeling, 12*, 411–434.
- Back, M. D., Küfner, A. C. P., & Leckelt, M. (2018). Early impressions of grandiose narcissists: A dual-pathway perspective. In A. Hermann, A. Brunell, & J. Foster (Eds.) *Handbook of trait narcissism* (pp. 309–316). Cham, Switzerland: Springer International Publishing AG. doi:10.1007/978-3-319-92171-6
- Back, M. D., Küfner, A. C., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality and Social Psychology, 105*, 1013–1037.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? decoding the narcissism–popularity link at zero acquaintance. *Journal of Personality and Social Psychology, 98*, 132–145. doi: 10.1037/a0016338
- Barry, C. T., & Ansel, L. L. (2011). Assessment of youth narcissism. In W. K. Campbell & J. D. Miller (Eds.), *The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatments* (pp. 153–163). Hoboken, NJ: Wiley.
- Barry, C. T., Wallace, M. T., & Guelker, M. D. (2011). Developmental and theoretical influences on the conceptualization and assessment of youth narcissism. In C. T. Barry, P. K. Kerig, K. Stellwagen, & T. D. Barry (Eds.), *Narcissism and machiavellianism in youth: Implications for the development of adaptive and maladaptive behavior* (pp. 71–88). Washington, DC: American Psychological Association. doi:10.1037/12352-004
- Barry, C. T., Frick, P. J., Adler, K. A., & Grafeman, S. J. (2007). The predictive utility of narcissism among children and adolescents: Evidence for a distinction between adaptive and maladaptive narcissism. *Journal of Child and Family Studies, 16*, 508–521.
- Barry, C. T., Grafeman, S. J., Adler, K. K., & Pickard, J. D. (2007). The relations among narcissism, self-esteem, and delinquency in a sample of at-risk adolescence. *Journal of Adolescence, 30*, 933–942.
- 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, B. B. (2011). Popularity in peer group perspective: The role of status in adolescent peer systems. In A. H. N. Cillessen, D. Schwartz, & L. Mayeux (Eds.), *Popularity in the peer system* (pp. 165–192). New York, NY: Guilford.
- Brummelman, E., Thomaes, S., & Sedikides, C. (2016). Separating narcissism from self-esteem. *Current Directions in Psychological Science, 25*, 8–13.
- Bushman, B. J., Baumeister, R. F., Thomaes, S., Ryu, E., Begeer, S., & West, S. G. (2009). Looking again, and harder, for a link between low self-esteem and aggression. *Journal of Personality, 77*, 427–446.

- Carlson, E. N., & Lawless DesJardins, N. M. (2015). Do mean guys always finish first or just say that they do? Narcissists' awareness of their social status and popularity over time. *Personality and Social Psychology Bulletin*, *41*, 901–917.
- Cillessen, A. H. N. (2011). Toward a theory of popularity. In A. H. N. Cillessen, D. Schwartz, & L. Mayeux (Eds.), *Popularity in the peer system* (pp. 273–299). New York, NY: Guilford.
- Cillessen, A. H. N., & Rose, A. J. (2005). Understanding popularity in the peer system. *Current Directions in Psychological Science*, *14*, 102–105.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Crowe, M. L., LoPilato, A. C., Campbell, W. K., & Miller, J. D. (2016). Identifying two groups of entitled individuals: Cluster analysis reveals emotional stability and self-esteem distinction. *Journal of Personality Disorders*, *30*, 762–775.
- Derry, K. L., Bayliss, D. M., & Ohan, J. L. (2018). Measuring grandiose and vulnerable narcissism in children and adolescents: The narcissism scale for children. *Assessment*. doi:10.1177/1073191118773872
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, *48*, 90–101.
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling*, *8*, 430–457.
- Geukes, K., Nestler, S., Hutteman, R., Dufner, M., Kүfner, A. C., Egloff, B., ... Back, M. D. (2017). Puffed-up but shaky selves: State self-esteem level and variability in narcissists. *Journal of Personality and Social Psychology*, *112*(5), 769–786.
- Golmaryami, F. N., & Barry, C. T. (2010). The associations of self-reported and peer-reported relational aggression with narcissism and self-esteem among adolescents in a residential setting. *Journal of Clinical Child and Adolescent Psychology*, *39*, 128–133.
- Grafeman, S. J., Barry, C. T., Marcus, D. K., & Leachman, L. L. (2015). Interpersonal perceptions of narcissism in an at-risk adolescent sample: A social relations analysis. *Journal of Research on Adolescence*, *25*, 92–100.
- Harter, S. (1988). *Manual for the self-perception profile for adolescents*. Denver: University of Denver.
- Harter, S. (2012). *Construction of the self: Developmental and sociocultural foundations*. New York, NY: Guilford.
- Hawk, S. T., van Den Eijnden, R. J., van Lissa, C. J., & Ter Bogt, T. F. (2019). Narcissistic adolescents' attention-seeking following social rejection: Links with social media disclosure, problematic social media use, and smartphone stress. *Computers in Human Behavior*, *92*, 65–75.
- Kernberg, P. F., Weiner, A. S., & Bardenstein, K. K. (2000). *Personality disorders in children and adolescents*. New York: Basic Books.
- Klein, A., & Moosbrugger, H. (2000). Maximum likelihood estimation of latent interaction effects with the LMS method. *Psychometrika*, *65*, 457–474.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York, NY: Guilford.
- Kүfner, A., Nestler, S., & Back, M. D. (2013). The two pathways to being an (un-)popular narcissist. *Journal of Personality*, *81*, 184–195.
- LaFontana, K. M., & Cillessen, A. H. N. (2010). Developmental changes in the priority of perceived status in childhood and adolescence. *Social Development*, *19*, 130–147.
- Lau, K. S. L., Marsee, M. A., Kunitatsu, M. M., & Fassnacht, G. M. (2011). Examining associations between narcissism, behavior problems, and anxiety in non-referred adolescents. *Child & Youth Care Forum*, *40*, 163–176.
- Leckelt, M., Kүfner, A. C. P., Nestler, S., & Back, M. D. (2015). Behavioral processes underlying the decline of narcissists' popularity over time. *Journal of Personality and Social Psychology*, *109*, 856–871.
- Liu, C., Ang, R. P., & Lwin, M. O. (2016). Influences of narcissism and parental mediation on adolescents' textual and visual personal information disclosure in Facebook. *Computers in Human Behavior*, *58*, 82–88.

- Mayeux, L., Houser, J. J., & Dyches, K. D. (2011). Social acceptance and popularity: Two distinct forms of peer status. In A. H. N. Cillessen, D. Schwartz, & L. Mayeux (Eds.), *Popularity in the peer system* (pp. 79–102). New York: Guilford.
- 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. (1998–2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Authors.
- Ojanen, T., Findley, D., & Fuller, S. (2012). Physical and relational aggression in early adolescence: Associations with narcissism, temperament, and social goals. *Aggressive Behavior, 38*, 99–107.
- Ong, E. Y. L., Ang, R. P., Ho, J. C. M., Lim, J. C. Y., Goh, D. H., Lee, C. S., & Chua, A. Y. K. (2011). Narcissism, extraversion and adolescents' self-presentation on Facebook. *Personality and Individual Differences, 50*, 180–185.
- Pauletti, R. E., Menon, M., Menon, M., Tobin, D. D., & Perry, D. G. (2012). Narcissism and adjustment in preadolescence. *Child Development, 83*, 831–837.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology, 74*, 1197–1208.
- Pellegrini, A. D., & Bartini, M. (2000). A longitudinal study of bullying, victimization, and peer affiliation during the transition from primary school to middle school. *American Educational Research Journal, 37*, 699–725.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437–448.
- Reijntjes, A. H. A., Vermande, M., Thomaes, S., Olthof, T., Goossens, F., Aleva, L., & Vermeulen, M. (2016). Narcissism, bullying, and social dominance in youth: A longitudinal analysis. *Journal of Abnormal Child Psychology, 44*, 63–74.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In W. Damon, R. M. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development*. (pp. 571–645). New York, NY: Wiley.
- Sandstrom, M. J., & Cillessen, A. H. N. (2003). Sociometric status and children's peer experiences: Use of the daily diary method. *Merrill-Palmer Quarterly, 49*, 427–452.
- Satorra, A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika, 66*, 507–514.
- Schwartz, D., Gorman, A. H., Nakamoto, J., & McKay, T. (2006). Popularity, social acceptance, and aggression in adolescent peer groups: Links with academic performance and school attendance. *Developmental Psychology, 42*, 1116–1127.
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy? Self-esteem matters. *Journal of Personality and Social Psychology, 87*, 400–416.
- Singleton, L. C., & Asher, S. R. (1977). Peer preferences and social interaction among third-grade children in an integrated school district. *Journal of Educational Psychology, 69*, 330–336.
- Thomaes, S., & Brummelman, E. (2016). Narcissism. In D. Cicchetti (Ed.), *Developmental Psychopathology* (Vol. 4, 3rd ed., pp. 679–725). Hoboken, NJ: Wiley.
- Thomaes, S., Brummelman, E., & Sedikides, C. (2018). Narcissism: A social-developmental perspective. In V. Zeigler-Hill & T. Shackelford (Eds.), *The Sage handbook of personality and individual differences* (pp. 377–396). New York, NY: Sage.
- Thomaes, S., Bushman, B. J., Stegge, H., & Olthof, T. (2008). Trumping shame by blasts of noise: Narcissism, self-esteem, shame, and aggression in young adolescents. *Child Development, 79*, 1792–1801.
- Thomaes, S., Stegge, H., Bushman, B. J., Olthof, T., & Denissen, J. (2008). Development and validation of the childhood narcissism scale. *Journal of Personality Assessment, 90*, 382–391.
- Thomaes, S., Stegge, H., Olthof, T., Bushman, B. J., & Nezelek, J. B. (2011). Turning shame inside-out: "Humiliated fury" in young adolescents. *Emotion, 11*, 786–793.
- Zeigler-Hill, V., & Besser, A. (2013). A glimpse behind the mask: Facets of narcissism and feelings of self-worth. *Journal of Personality Assessment, 95*(3), 249–260.

Appendix

Factor Loadings for the Items of the Childhood Narcissism Scale and the Global Self-Worth Scale

| Factor and items | Unstandardized factor loadings | SE | Standardized factor loadings |
|--------------------|--------------------------------|------|------------------------------|
| Narcissism | | | |
| Item 1 | – | – | .55 |
| Item 2 | 0.61 | 0.13 | .40 |
| Item 3 | 1.16 | 0.19 | .63 |
| Item 4 | 0.59 | 0.19 | .32 |
| Item 5 | 1.10 | 0.15 | .53 |
| Item 6 | 1.19 | 0.17 | .61 |
| Item 7 | 1.11 | 0.22 | .51 |
| Item 8 | 1.07 | 0.20 | .62 |
| Item 9 | 1.31 | 0.16 | .67 |
| Item 10 | 0.68 | 0.13 | .38 |
| Self-esteem | | | |
| Item 1 | – | – | .52 |
| Item 2 | 0.87 | 0.10 | .60 |
| Item 3 | 1.04 | 0.16 | .71 |
| Item 4 | 0.99 | 0.12 | .52 |
| Item 5 | 1.18 | 0.18 | .75 |

All loadings and correlations were significant at $p < .001$, except item 4 for narcissism, at $p = .002$. Dashes indicate that loadings were not estimated but fixed at 1.