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Maternal narcissism during childhood and adolescent narcissism: The moderating influences of child sex and self-esteem

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ABSTRACT

Extant studies of parent-youth narcissism resemblance yield associations of varying strength. Youth characteristics may account for variable patterns of intergenerational narcissism resemblance by influencing whether and how children internalize a parent's narcissistic traits and behaviors. This study examined pathways linking childhood maternal narcissism (age 10) to adolescent narcissism (age 17), as shaped by children's assigned sex at birth and self-esteem (age 10). Participants were 197 youth (50.8% assigned female; 46.7% Latine) and their biological mothers (55.3% Latina) who completed laboratory assessments at ages 10 and 17. A significant two-way interaction indicated that child self-esteem moderated the impact of maternal narcissism on adolescent narcissism, with significant resemblance only among children who reported lower self-esteem. Further, a significant three-way interaction by assigned sex revealed that the two-way interaction between maternal narcissism and child self-esteem was significant for daughters, but not for sons. These findings suggest that efforts to promote a stable and internally grounded sense of self during childhood may protect children from internalizing their mother's narcissistic traits and negative parenting practices in ways that curtail the development of narcissism later in adolescence, particularly for daughters of narcissistic mothers.

1. Introduction

Parental narcissism (e.g., need for admiration, superiority, and entitlement; hypersensitivity; Krizan & Herlache, 2018) has been linked to a range of youth adjustment difficulties, including externalizing behaviors (e.g., aggression, defiance; Rawn et al., 2025; Estlein et al., 2024), internalizing problems (e.g., anxiety, depression; Hewitt et al., 2024; Vignando & Bizumic, 2023), and socioemotional maladjustment (e.g., dependence; Estlein et al., 2024). However, less is known about whether and for whom parental narcissism may contribute to narcissism in the next generation. Consistent with constructivist (Piaget & Cook, 1952) and transactional (Sameroff, 2009) developmental perspectives, youth are active participants in development with reciprocal parent-child exchanges shaping adaptive pathways over time. Research on child-based effects shows that youth characteristics influence parenting dynamics and their consequences (Ganiban et al., 2011; Sanson et al., 2018), with emerging evidence for reciprocal, bidirectional processes linking parenting and adolescent adjustment (Cheng et al., 2025; Tang et al., 2024). Accordingly, modest and variable levels of parent-youth narcissism resemblance in extant studies (Coppola et al., 2020; Li et al., 2022) may reflect the influence of child characteristics that

moderate how parental narcissism is expressed and internalized.

This study drew on a large and sociodemographically diverse sample of biological mother-youth dyads to evaluate two individual and potentially interactive moderators of mother-youth narcissism resemblance across the transition to adolescence. First, we examined whether child assigned sex moderates mother-youth narcissism resemblance, particularly during the transition to adolescence when same-sex parental identifications take on heightened salience (Langenhof et al., 2016). Second, we investigated if and how child self-esteem may shape the internalization of feedback from (m)others and, by extension, intergenerational patterns of narcissism resemblance (Brummelman et al., 2015). Finally, we explored a three-way interaction among maternal narcissism, child assigned sex, and self-esteem to clarify when and for whom maternal narcissism exposure during childhood predicts youth narcissism during adolescence.

1.1. Intergenerational narcissism resemblance

Intergenerational resemblance reflects biological, relational, and contextual processes through which traits and behaviors are passed from one generation to the next (van IJzendoorn, 1992). These processes

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produce observable parent-youth resemblance across multiple domains, such as facial features (Kaminski et al., 2009), intelligence (Plomin & Deary, 2015), and behavior (Gidziela et al., 2023). However, parent-youth personality resemblance remains comparatively understudied (Plomin et al., 2016). To date, empirical works suggest that parent-youth personality resemblance tends to be trait-dependent (Sutin & Terracciano, 2017) and fluctuates across development (Schofield et al., 2012), with some evidence suggesting that same-sex dyads exhibit stronger similarity than cross-sex dyads (Langenhof et al., 2016).

Within the broader literature on intergenerational personality transmission, research on narcissism has favored behavioral genetic twin designs conducted within a single generation (e.g., Vernon et al., 2008) or at one point in time (e.g., Horton et al., 2006). These studies suggest that narcissism is moderately heritable, with genetic factors accounting for 23% to 59% of the variance in narcissism (Livesley et al., 1993; Luo et al., 2014; Vernon et al., 2008). However, additional factors (e.g., nonshared environmental experiences) may shape intergenerational patterns of narcissism by influencing the degree to which genetic predispositions are expressed (Gidziela et al., 2023).

Notwithstanding the unique value of genetically informative designs for disentangling genetic and environmental influences, several studies have relied on longitudinal, correlational approaches to characterize intergenerational narcissism resemblance. Recent empirical work reveals modest parent-youth narcissism resemblance with stronger concordance for same-sex dyads as compared to cross-sex dyads and for mother-child as compared to father-child dyads. For example, in a study of same-sex personality resemblance among 486 college students (ages 17 to 22) and their parents, Li and colleagues (2022) found correlations of 0.30 for mother-daughter and 0.20 for father-son narcissism resemblance. Likewise, among 519 families with a school-aged child (i.e., ages 9–11), Coppola and colleagues (2020) found correlations of 0.20 for mother-child and 0.16 for father-child narcissism resemblance. Building on modest rates of mother-child narcissism resemblance in prior studies within childhood (Coppola et al., 2020) and late adolescence (Li et al., 2022), the current study evaluated the intergenerational resemblance of maternal narcissism across the transition to adolescence while examining child assigned sex and child self-esteem as putative moderating influences on patterns of resemblance between maternal narcissism in childhood and adolescent narcissism.

1.1.1. Moderation by child assigned sex

Meta-analytic results from over 350 studies of narcissism reveal a small effect of assigned sex at birth such that males endorse higher levels of narcissism than females (Grijalva et al., 2015). However, assigned sex may also qualify patterns of intergenerational narcissism resemblance. Theoretical frameworks focused on social learning (Bandura, 1977) and gender intensification (Hill & Lynch, 1983) suggest that youth internalize parental characteristics through sex-specific socialization pathways, particularly during adolescence when gender roles, secondary sex characteristics, and same-sex parental identification processes take on increased salience (Galambos et al., 2009; Leaper & Farkas, 2015). Moreover, daughters may be particularly attuned to parental feedback and family relational dynamics during the transition to adolescence (Endendijk et al., 2018), as compared to sons who increasingly seek validation from peers and extrafamilial experiences during this period of development (Reijntjes et al., 2016). Consistent with these assertions, Langenhof and colleagues (2016) found higher rates of personality resemblance in same-sex versus cross-sex parent-youth dyads, and studies generally find greater same-sex parent-youth narcissism resemblance for daughters than for sons (Coppola et al., 2020; Li et al., 2022). Thus, prior theory and research suggest that, whereas boys may endorse higher rates of narcissism in adolescence, parental narcissism, particularly maternal narcissism which is the focus of this study, may be more strongly related to the development of narcissism for daughters as compared to sons.

1.1.2. Moderation by child self-esteem

Developmental models suggest that parental narcissism may contribute to narcissism in the next generation through parenting practices featuring conditional approval (Horton et al., 2006), overvaluation (Brummelman et al., 2015), or emotional coldness (Huxley & Bizumic, 2017), which heighten children's dependence on external validation to affirm their self-worth (Brummelman & Sedikides, 2020; Kohut, 1971/1977). However, self-esteem may affect how children interpret and internalize parental behaviors in ways that influence the intergenerational resemblance of narcissism. For example, in a study of 357 children (ages 8 to 12), Brummelman and colleagues (2014) found that children with lower self-esteem perceived inflated parental praise (i.e., overvaluation) as pressuring and demotivating, while those with higher self-esteem interpreted similar feedback as supportive.

Although self-esteem and narcissism both involve positive self-evaluations (Hyatt et al., 2018), they reflect distinct psychological processes. Self-esteem reflects relatively stable and internally grounded feelings of self-worth (Harter, 2012), whereas narcissism is characterized by positive self-evaluations as well as interpersonal entitlement and excessive reliance on admiration and validation from others (Krizan & Herlache, 2018; Morf & Rhodewalt, 2001). From this perspective, children with relatively well-developed self-esteem may be less dependent on external validation and therefore less likely to internalize narcissistic parental dynamics. In contrast, for children with less well-developed or fragile self-esteem, parental narcissism may heighten sensitivity to criticism and conditional regard, increasing the child's reliance on others' approval and reinforcing narcissistic patterns of self-evaluation over time (Brummelman & Sedikides, 2020; Kohut, 1971/1977).

1.2. Study overview

This longitudinal investigation examined intergenerational pathways from childhood exposure to maternal narcissism at age 10 to adolescents' own narcissism at age 17 as moderated by child assigned sex and self-esteem assessed at age 10. We hypothesized that examiner ratings of maternal narcissism, male assigned sex, and child-reports of self-esteem at age 10 would be positively related to self-reported narcissism at age 17. However, beyond these main effects, we predicted pathways from maternal narcissism to adolescent narcissism would be significantly stronger for daughters as compared to sons, and for children with relatively low self-esteem as compared to those with relatively high self-esteem. Finally, an exploratory three-way moderation analysis considered the individual and interactive effects of maternal narcissism, child assigned sex, and child self-esteem at age 10 on adolescents' narcissism at age 17.

All models controlled for maternal ethnicity and race, maternal psychopathology, family income-to-poverty ratio, and examiner ratings of child narcissism at age 10. Maternal ethnicity and race were covaried because prior research points to ethnic and racial group differences in both self-esteem (Bachman et al., 2011) and narcissism (Zeigler-Hill & Wallace, 2011). Controlling for maternal psychopathology ensured that observed associations were not driven by broader maternal symptomatology (Berg-Nielsen & Wichström, 2012). Income-to-poverty ratio was held constant to account for positive associations with both self-esteem (Twenge & Campbell, 2002) and narcissism (Côté et al., 2021). Finally, holding child narcissism at age 10 constant accounted for trait stability (Orth et al., 2024) and supported directional inferences.

2. Method

2.1. Participants

Participants were drawn from a broader longitudinal study of development among 250 caregiver-youth dyads. Dyads were excluded from these analyses if the participating caregiver was not the biological

mother ($n = 19$) or dyads did not complete assessments at ages 10 or 17 ($n = 36$). Of the remaining 197 mother-youth dyads in these analyses, 187 (94.9%) completed the age 10 assessment ($M_{\text{age}} = 9.61$, $SD = 0.27$), 184 (93.4%) completed the age 17 assessment ($M_{\text{age}} = 17.31$, $SD = 0.49$), and 174 (88.3%) completed both assessments. Youth (50.8% assigned female at birth) were diverse with respect to ethnicity and race (46.7% Latine, 24.4% multiracial, 16.8% Black, 11.7% white). Mothers were similarly diverse with respect to ethnicity and race (55.3% Latina, 20.3% white, 18.3% Black, 6.1% multiracial). Maternal education levels varied from high school dropout (11.5%), to diploma or GED (19.3%), to some college or technical training (52.6%), to a bachelor's degree or higher (16.2%). At age 10, just over half the mothers were employed (59.9%) and most were married (62.4%) or in a committed relationship (21.1%). At age 10, about one third of the sample (37.4%) resided in or near-poverty (i.e., <130% of the poverty line) and qualified for federal subsidies, such as food stamps and low-income housing. The socio-demographic features of the current sample reflected the southern California community from which families were recruited (U.S. Census Bureau, 2007).

2.2. Procedures

Families were initially invited to participate in a longitudinal study of children's early learning and development via flyers placed in community-based childcare centers. Exclusionary criteria included children with diagnosed developmental disabilities or delays ($n = 3$), children who were unable to understand English ($n = 4$), and children outside the wave 1 recruitment age of 45–54 months (not tracked). Dyads in the current sub-study completed comprehensive laboratory assessments at ages 10 and/or 17, including questionnaires and observational measures assessing a broad range of developmental processes with the adolescent, the mother, and the dyad. The current study drew on a subset of these measures. Mothers were compensated at a rate of \$25–50 per assessment hour, while youth received a small gift at age 10 and \$40 per assessment hour at age 17. Informed consent and assent were obtained from the mother and youth, respectively. All procedures were approved by the human research review board of the participating university.

2.3. Measures

2.3.1. Maternal narcissism

At age 10, adult examiners completed the California Adult Q-Sort (CAQ; Block, 1978) to evaluate the personality of the participating mother based on observations across a range of structured and semi-structured tasks designed to elicit a wide range of interpersonal and behavioral expressions. Following this extensive period of observation, trained examiners rated each mother's personality across 100 descriptors (e.g., "Shows condescending behavior in relations with others," "Is thin-skinned; sensitive to anything that can be construed as criticism or an interpersonal slight") using a 9-point scale ranging from 1 (*highly uncharacteristic*) to 9 (*highly characteristic*), distributed in a forced normal distribution using the computerized Riverside Accuracy Project (2010). The resultant CAQ profile of scores across the 100 items for each participant was then correlated with a series of expert-generated personality prototypes (e.g., ego control, ego-resilience; Block & Block, 1980). For this study, each mother's personality profile was correlated with Wink's (1991) narcissism prototype, which reflects the average of scores assigned by nine expert raters who were asked to create a Q-sort for a narcissistic individual. High scoring items captured willfulness (e.g., assertive, forceful, or controlling interpersonal behavior), hypersensitivity (e.g., excessive reactions to criticism or disapproval), and autonomy (e.g., self-directed, independent, or resistant to external influence). Higher prototype correlations denoted greater similarity to the narcissism prototype and lower correlations reflected a non-narcissistic personality profile. Prior research has demonstrated the

reliability and validity of CAQ profiles for evaluating personality structure (see Block, 2008, for review).

2.3.2. Child self-esteem

At age 10, children completed the Self-Perception Profile for Children-Revised (SPPC-R; Harter, 2012) to assess global self-esteem using six items presented as two contrasting statements (e.g., "Some kids like the kind of person they are BUT other kids don't really like the kind of person they are"). Children first indicated which type of child was most like them and then specified whether the statement they chose was "really true" or "sort of true" for them yielding a 4-point response scale from 1 (*least favorable*) to 4 (*most favorable*). Scores were averaged across items to form a composite index of global self-esteem, with higher scores reflecting greater overall self-esteem. The SPPC-R demonstrated acceptable reliability ($\alpha = 0.712$), which is comparable to prior studies with ethnically and racially diverse youth (e.g., $\alpha = 0.67$, Mirza et al., 2011; $\alpha = 0.69$, Dinh et al., 2002).

2.3.3. Adolescent narcissism

At age 17, adolescents completed the narcissism subscale of the Short Dark Triad (SD3; Jones & Paulhus, 2014), which consists of 9 items capturing grandiose self-views, entitlement, and the need for admiration (e.g., "I insist on getting the respect I deserve"). Each item was rated on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*), with three items reverse-scored (e.g., "I hate being the center of attention"), and then averaged such that higher scores indicated higher narcissism. The SD3 demonstrated acceptable internal consistency ($\alpha = 0.694$) at age 17, which is consistent with prior studies (e.g., $\alpha = 0.60$, De Clercq et al., 2017; $\alpha = 0.69$, Egorova & Adamovich, 2019). Despite modest reliability in this and prior studies, the SD3 narcissism scale exhibits strong convergent validity with established measures of narcissism (e.g., Narcissistic Personality Inventory; Raskin & Terry, 1988) in both adolescent (Klimczak & Turska, 2020) and non-Western samples (Siddiqi et al., 2020).

2.4. Covariates

2.4.1. Maternal psychopathology

At age 10, mothers completed the Brief Symptom Inventory (Derogatis, 1993), which includes 53 items assessing a range of symptoms (e.g., depression, anxiety, hostility, paranoid ideation). Mothers indicated the degree to which they were distressed by each symptom during the past week (e.g., "How much were you distressed by nervousness or shakiness inside?") using a 5-point Likert scale from 0 (*not at all*) to 4 (*extremely*). The Global Symptom Severity score used in these analyses ($\alpha = 0.961$) demonstrates strong reliability and validity in ethnically and racially diverse community samples (Hoe & Brekke, 2009; Prelow et al., 2005).

2.4.2. Family income-to-poverty ratio

At age 10, mothers reported the household's total annual income across all sources of financial support (e.g., wages, child support, public assistance). Family income was divided by the federal poverty threshold corresponding to the household size and number of children under 18 (U.S. Census Bureau, 2014) with values below 1 denoting poverty status.

2.4.3. Child narcissism

At age 10, child examiners completed the California Child Q-Set (CCQ; Block & Block, 1980) using common-language adjustments provided by Caspi and colleagues (1992) to evaluate the personality of the participating child. Children participated in the same 3-h laboratory visit described earlier, which allowed examiners to observe their behavior across multiple tasks and interaction contexts before completing the CCQ ratings. Following the 3-h laboratory observation, examiners rated each child on 100 personality descriptors using a 9-point scale ranging from 1 (*highly uncharacteristic*) to 9 (*highly*

characteristic), distributed in a forced normal distribution using the computerized [Riverside Accuracy Project \(2010\)](#). As with the CAQ, these ratings capture broad personality characteristics, from which specific constructs can be derived. Following [Carlson and Gjerde \(2009\)](#), 22 item ratings were composited to capture early narcissistic expressions, including Center of Attention (e.g., “tries to be the center of attention”), Activity (e.g., “is vital, energetic, and lively”), Histrionic Tendencies (e.g., “tends to exaggerate mishaps”), Interpersonal Antagonism (e.g., “is aggressive physically or verbally”), and Undercontrol of Impulse (e.g., “characteristically pushes and tries to stretch limits”). The internal consistency of the CCQ narcissism scale was acceptable ($\alpha = 0.700$), and prior work supports positive predictive associations with adolescent and adult narcissism ([Carlson & Gjerde, 2009](#)).

2.5. Data analytic plan

Descriptive and bivariate analyses were conducted in SPSS Version 30, and moderation analyses were conducted using the *lavaan* package in RStudio ([Rosseel, 2012](#)). All study variables satisfied assumptions of normality for parametric testing ([Afifi et al., 2007](#)). Data were missing for family income ($n = 2$), maternal narcissism ($n = 27$), maternal psychopathology ($n = 2$), child self-esteem ($n = 13$), child narcissism ($n = 10$), and adolescent narcissism ($n = 13$) due to missed or partial assessments. Missingness was handled using full-information maximum likelihood (FIML) estimation in *lavaan* as supported by [Little's \(1988\)](#) MCAR test, $\chi^2(31) = 39.02, p = .15$. A sensitivity analysis evaluated the proposed model using the 154 participants with complete data at all waves.

A multivariate analysis of variance (MANOVA) examined the main effects of child assigned sex at birth, maternal ethnicity and race, and their interaction across key study variables. A moderation model evaluated pathways from mothers' narcissism at age 10 to adolescents' narcissism at age 17 as influenced by child assigned sex and/or self-esteem at age 10, while holding maternal ethnicity and race, maternal psychopathology, family income-to-poverty ratio, and child narcissism at age 10 constant. Maternal ethnicity and race was effect-coded for Latina, Black, and white mothers, with multiracial mothers as the reference group so that each effect reflected deviation from the grand mean. Continuous predictors were mean-centered to reduce multicollinearity and enhance interpretability of interaction effects ([Kraemer & Blasey, 2004](#)). The moderation model was evaluated using bias-corrected bootstrapped confidence intervals (CIs) based on 10,000 resamples to provide robust estimates of conditional effects. Regions of significance identified the specific values of the moderator(s) at which the association between the independent and dependent variables reached statistical significance ([Johnson & Neyman, 1936](#)). Significant interactions were probed at one standard deviation (SD) above and below the moderator means to further interpret the conditional effects.

3. Results

3.1. Descriptive and bivariate analyses

[Table 1](#) depicts descriptive statistics and bivariate relations among study variables. A MANOVA revealed a significant main effect of maternal ethnicity and race (Wilks' $\lambda = 0.703; p < .001$) for both family income-to-poverty ratio ($F[3146] = 4.005, p = .009$) and adolescent narcissism ($F[3146] = 8.488, p < .001$). Post-hoc Bonferroni-corrected comparisons indicated no significant pairwise differences in income-to-poverty ratio across ethnic and racial groups. However, adolescents of Black mothers endorsed significantly higher levels of narcissism than adolescents of white and Latina mothers, though they did not differ from adolescents of multiracial mothers. Although there was no significant main effect of child assigned sex across study variables (Wilks' $\lambda = 0.948; p = .261$), a significant interaction (Wilks' $\lambda = 0.813; p = .040$) indicated that sons of multiracial mothers and daughters of Black mothers endorsed higher self-esteem at age 10 ($F[3146] = 4.692, p = .004$). At the bivariate level, there was one significant concurrent correlation between maternal narcissism and maternal psychopathology at age 10.

3.2. Moderation analyses

[Table 2](#) depicts main and interactive predictions to adolescent narcissism at age 17 from maternal narcissism during childhood at age 10 as moderated by the child's assigned sex and self-esteem at age 10. Parameter estimates with 95% bootstrapped CIs across 10,000 resamples explained 22.8% of the variance in adolescent narcissism, representing a medium to large effect ($f^2 = 0.295$). Neither maternal narcissism at age 10, child assigned sex, nor child self-esteem at age 10 predicted significant changes in youth's narcissism from ages 10 to 17. Although the interaction between maternal narcissism and child assigned sex was not significant, there was a significant two-way interaction between maternal narcissism and child self-esteem and a significant three-way interaction with child assigned sex. Maternal narcissism was positively associated with adolescent narcissism for children with relatively low self-esteem ($B = 0.694, SE = 0.276, p = .011, 95\% CI [0.153, 1.235]$), but this relation was not significant for children with relatively high self-esteem ($B = -0.299, SE = 0.238, p = .207, 95\% CI [-0.765, 0.167]$). However, as shown in [Fig. 1](#), child assigned sex further qualified these patterns such that maternal narcissism predicted increased adolescent narcissism for daughters with relatively low self-esteem, but did not predict significant changes in narcissism for daughters with relatively high self-esteem, and these patterns were not significant for sons.

3.3. Sensitivity analysis

A sensitivity analysis using the 154 cases with complete data replicated all significant findings, including the two-way interaction between maternal narcissism and child self-esteem ($B = -1.902, SE = 0.739, 95\% CI [-3.088, -0.163], p = .010$), and the three-way interaction among maternal narcissism, child assigned sex, and child self-esteem ($B =$

Table 1
Descriptive statistics and correlations among study variables.

Study variable	1	2	3	4	5	6
1. Family income-to-poverty ratio (age 10)	–					
2. Maternal Psychopathology (age 10)	–0.124	–				
3. Child Narcissism (age 10)	–0.019	0.135	–			
4. Maternal Narcissism (age 10)	–0.086	0.358**	0.096	–		
5. Child Self-Esteem (age 10)	0.075	–0.079	–0.029	–0.003	–	
6. Adolescent Narcissism (age 17)	0.000	–0.020	0.085	0.039	0.131	–
Mean (SD)	1.85 (1.32)	0.30 (0.39)	4.26 (0.69)	–0.15(0.25)	3.54(0.46)	2.79 (0.63)
(SD)	(1.36)	(0.25)	(0.46)		(0.63)	

Note: ** $p < .01$. SD = Standard Deviation.

Table 2
Regression of adolescent narcissism (age 17) on childhood maternal narcissism (age 10) as moderated by child assigned sex and self-esteem (age 10).

Variable	B	Bootstrapped SE	p	95% CI Bias Corrected	
				LLCI	ULCI
<i>Covariates</i>					
Maternal race (Black = 1)	0.330	0.215	0.125	-0.096	0.754
Maternal ethnicity (Latina = 1)	-0.283	0.187	0.129	-0.651	0.081
Maternal race (white = 1)	-0.107	0.205	0.603	-0.504	0.300
Family income-to-poverty ratio (age 10)	-0.004	0.031	0.907	-0.064	0.058
Maternal psychopathology (age 10)	-0.096	0.144	0.504	-0.339	0.228
Child narcissism (age 10)	0.000	0.067	0.999	-0.133	0.133
<i>Predictors</i>					
Child assigned sex (Female = 1)	-0.133	0.091	0.144	-0.309	0.048
Maternal narcissism (age 10)	0.013	0.289	0.964	-0.567	0.565
Child self-esteem (age 10)	0.291	0.153	0.057	-0.003	0.607
Maternal narcissism x child assigned sex	0.098	0.434	0.820	-0.714	0.972
Child self-esteem x child assigned sex	-0.230	0.198	0.245	-0.617	0.153
Maternal narcissism x child self-esteem	-1.872	0.627	0.003	-2.882	-0.428
<i>Conditional effect on adolescent narcissism by child self-esteem</i>					
Low self-esteem (-1 SD)	0.696	0.276	0.013	0.155	1.237
High self-esteem (+1 SD)	-0.296	0.238	0.207	-0.762	0.170
Maternal narcissism x child assigned sex x child self-esteem	2.793	0.934	0.003	0.887	4.578
<i>Conditional effect on adolescent narcissism by girls' self-esteem</i>					
Low self-esteem (-1 SD)	1.180	0.440	0.010	0.318	2.042
High self-esteem (+1 SD)	-0.591	0.460	0.201	-1.493	0.311
<i>Conditional effect on adolescent narcissism by boys' self-esteem</i>					
Low self-esteem (-1 SD)	-0.310	0.520	0.550	-1.329	0.709
High self-esteem (+1 SD)	0.610	0.401	0.130	-0.176	1.396

Note: SE = Standard Error. SD = Standard Deviation. LLCI = Lower limit confidence interval. ULCI = Upper limit confidence interval. Maternal ethnicity and race coefficients reflect effect codes yielding the estimated difference between the grand mean and the group coded 1.

2.888, SE = 1.065, 95% CI [0.787,4.985], p = .007).

3.4. Post-Hoc power analysis

A post hoc power analysis was conducted to evaluate whether the present model was adequately powered to detect the observed three-way interaction effect. Using G*Power 3.1.9.6 (Faul et al., 2007), results indicated that the study had 96.3% power to detect a small-to-moderate effect size ($f^2 = 0.065$) with a sample size of 197 and an alpha level of 0.05.

4. Discussion

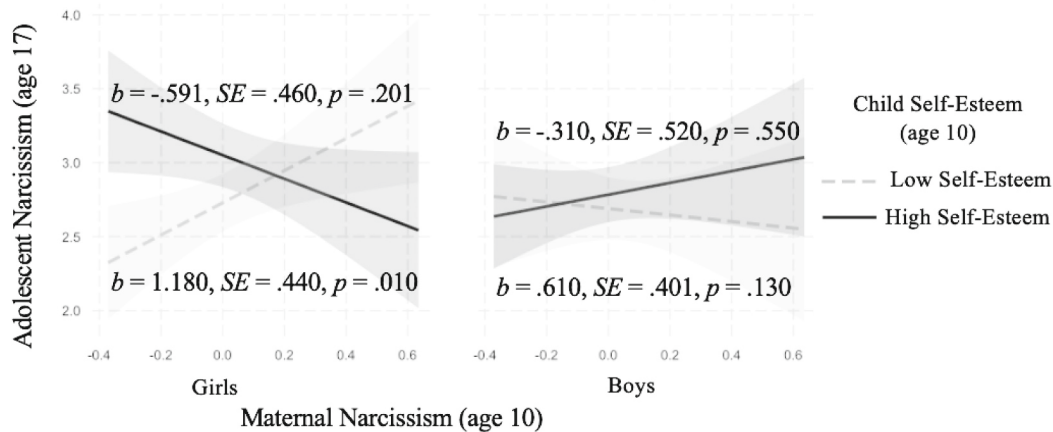
This investigation examined intergenerational relations from childhood maternal narcissism at age 10 to adolescent narcissism at age 17 as moderated by children's assigned sex and self-esteem at age 10. Results

revealed a significant three-way interaction, indicating that maternal narcissism predicted increased adolescent narcissism only among daughters with low self-esteem. Mother-youth narcissism resemblance was not significant for daughters with high self-esteem, nor for sons irrespective of their self-esteem levels. These findings suggest that child-level factors may qualify the expression and developmental impact of parental narcissism.

Child female sex and low self-esteem emerged as key conditions shaping intergenerational pathways from maternal narcissism to adolescent narcissism. Psychoanalytic theories of self posit that caregiving disturbances associated with parental narcissism (e.g., conditional approval, overevaluation, emotional coldness) may increase the degree to which children rely on parental feedback to interpret and organize their self-experience leading to excessive reliance on external validation to sustain self-worth (Kohut, 1971/1977). Children with low self-esteem may be especially sensitive to parental input (Brummelman et al., 2014) further compounding risk for narcissistic trait development following exposure to parental narcissism. As compared to adolescent boys who tend to derive their sense of self from peer hierarchies (Reijntjes et al., 2016), these dynamics may be especially salient for girls because they tend to be more relationally attuned to parental evaluation (Endendijk et al., 2018) and are particularly sensitive to maternal influences during adolescence when same-sex parent-youth resemblance is most pronounced (Langenhof et al., 2016). As such, daughters with low self-esteem may be especially likely to internalize mothers' narcissistic characteristics and a conditional sense of self-worth that renders them vulnerable to later narcissism in adolescence, whereas higher self-esteem may buffer against these processes.

Notwithstanding our moderating hypotheses, the absence of significant relations between maternal narcissism and youth narcissism, both within and across time, was surprising. Prior works support modest heritability estimates (Livesley et al., 1993; Luo et al., 2014; Vernon et al., 2008) and at least weak parent-youth narcissism resemblance (Brummelman et al., 2015). However, these associations may vary across contexts. For example, relatively high levels of economic and experiential adversity in the current sample may have attenuated parent-youth resemblance, which is consistent with reduced heritability estimates in high-risk contexts (Sellers et al., 2022). Measurement differences across time and between maternal and youth narcissism assessments may have further reduced patterns of intergenerational resemblance. For example, examiner ratings of maternal narcissism on the CAQ assessed both grandiose and vulnerable narcissism using an expert profile correlation, whereas examiner ratings of child narcissism on the CCQ composited items across multiple dimensions (i.e., center of attention, activity, histrionic tendencies), and the adolescent SD3 measure assessed only self-reported grandiose narcissism. Thus, the absence of significant associations between maternal and youth narcissism within and across time may reflect shifts in both measurement methods and foci.

In contrast to prior research showing positive relations between narcissism and both male assigned sex (Grijalva et al., 2015) and self-esteem (Hyatt et al., 2018), neither significantly predicted adolescent narcissism in this study. As noted earlier, the SD3 focuses on narcissistic grandiosity (e.g., confidence, admiration-seeking) rather than on narcissistic antagonism and entitlement (e.g., shows condescending behavior in relations with others, expresses hostile feelings directly) which show more robust gender differences (Jones & Paulhus, 2014; Weidmann et al., 2023). Regarding self-esteem, the absence of a significant main effect on adolescent narcissism may reflect known changes in self-esteem across the transition to adolescence (Trzesniewski et al., 2003). Together, the current findings suggest that child sex and self-esteem may not independently predict adolescent narcissism, but rather shape when and for whom narcissistic traits emerge in the context of maternal narcissism and associated parenting practices.



Note: SE = Standard Error. SD = Standard Deviation.

Fig. 1. Johnson-Neyman plot showing the slope of adolescent narcissism (age 17) on childhood maternal narcissism (age 10) by child assigned sex depending on childhood self-esteem (age 10).

Note: SE = Standard Error. SD = Standard Deviation.

4.1. Limitations & future directions

This study suggests that child assigned sex and self-esteem influence the intergenerational resemblance of maternal-youth narcissism from childhood to adolescence. Moderation analyses drew on longitudinal, multi-informant data from a large and sociodemographically diverse community sample of biological mother-youth dyads while accounting for key covariates, including mothers' ethnicity and race, maternal

psychopathology, family income-to-poverty ratio, and prior child narcissism. However, several limitations both constrain the interpretation of these findings and illuminate promising avenues for future research.

First, similar to noted differences in our assessments of maternal and youth narcissism, the absence of stability from examiner ratings of childhood narcissism to self-reports of adolescent narcissism may have reflected measurement change rather than developmental discontinuity. Based on an extensive period of observation across multiple structured tasks designed to capture broad patterns of personality expression, observer CCQ ratings offered a rich, contextually grounded evaluation of children's personality (Block & Block, 1980). However, observer ratings may be less well-suited to capture private thoughts, motivations, and internal vulnerabilities (Olin & Klein, 2015). In contrast, adolescent narcissism was assessed via self-report, which captures internal self-evaluations but may be limited by youth's insight, developmental changes in self-understanding, and social desirability (Maples-Keller & Miller, 2018; Barry et al., 2017). Unfortunately, the broader longitudinal study from which these data were drawn was not designed to assess narcissism consistently across development, yielding measurement variation that may have contributed to observed patterns of (in) stability in ways that could not be evaluated here. Future studies using consistent, developmentally appropriate assessments across time are needed to evaluate the stability of narcissism across development.

Second, and perhaps related to the aforementioned narcissism instability, a host of unmeasured developmental experiences (e.g., peer relationships, life events) may have shaped youth's personality development in ways that were not captured across the seven-year interval between data waves in this study. Thus, rather than reflecting uniform developmental change, it is possible that unmeasured life experiences contributed to variability in both youth narcissism across time and in patterns of resemblance between maternal narcissism during childhood and youth's narcissism in both childhood and adolescence. These intervening experiences may have contributed differences in the strength or consistency of parent-youth associations instead of, or in

addition to, the aforementioned measurement differences. Future research with more frequent assessments across adolescence would be better positioned to identify additional factors that may account for patterns of mother-youth narcissism resemblance.

Third, both the examiner-rated Q-sort and self-report surveys of narcissism in this study centered on Western personality prototypes that may not capture culturally specific expressions of narcissism fully, particularly in this ethnically and racially diverse sample. Narcissistic traits carry different meanings across sociocultural contexts that differentially value humility, interdependence, or collective achievement (Jauk et al., 2021). As such, group differences in adolescent narcissism observed here (e.g., adolescents of Black mothers reported higher narcissism than those of white or Latina mothers) may reflect culturally-shaped models of self-expression and social desirability rather than true elevations in pathological self-focus (Zeigler-Hill & Wallace, 2011). Future research will benefit from samples with greater subgroup representation to allow for more nuanced comparisons across ethnic and racial groups. Likewise, the inclusion of culturally informative measures, such as ethnic and racial socialization practices (Zeigler-Hill, 2007) or experiences of discrimination (Twenge & Crocker, 2002), would offer further insight as broad ethnic and racial categories offer coarse indicators of sociocultural processes that may influence personality expression and resemblance (Pickard et al., 2013).

Fourth, the absence of fathers in the current study limits our ability to fully interpret observed sex differences. Indeed, given our exclusive focus on mothers, it is possible that daughters' apparent sensitivity reflected same-sex similarity effects, rather than effects of child assigned sex per se. Prior studies suggest that fathers exert distinct influences on youth narcissism, particularly for sons (Coppola et al., 2020). Thus, including fathers in future research would allow researchers to determine whether the obtained self-esteem moderation effect is specific to daughters, to same-sex parent-youth dyads, or some combination of the two.

Finally, in the absence of a genetically informative design, the present study could not disentangle genetic and environmental contributions to mother-youth narcissism (Horwitz & Neiderhiser, 2011). Accordingly, the observed associations should be interpreted as intergenerational narcissism resemblance rather than as evidence of causal environmental transmission. Relatedly, consistent with transactional models of development (Sameroff, 2009) and documented reciprocal youth effects on parenting (Ganiban et al., 2011; Sanson et al., 2018), it may be that youth's narcissistic traits influenced parental behaviors or perceptions in ways that highlight the correlative rather than causal

inferences supported by the current research design. Future studies using multiple assessments of both parent and youth characteristics in the context of a genetically informative longitudinal research design will be important for elucidating likely bidirectional processes underlying parent-youth resemblance in narcissism and evaluating their genetic and environmental origins.

4.2. Implications

The current findings illuminate the significant role of child self-esteem, particularly for girls, in moderating the intergenerational patterns of resemblance between maternal narcissism during childhood and youth narcissism in adolescence. To date, empirical efforts to intervene directly on narcissistic processes have been limited (e.g., Thomaes et al., 2009). However, these findings suggest that interventions aimed at strengthening children's self-esteem offer a promising avenue for reducing vulnerability to narcissistic developmental pathways. Specifically, efforts to promote youth's multidimensional self-concept, such as by encouraging them to draw on multiple domains of self-esteem (e.g., social, academic, physical) and relationships as sources of self-worth (Pazzaglia et al., 2020), may reduce their reliance on a single source of validation, such as parental approval. Relatedly, interventions that reduce contingent self-worth and promote stable, internally grounded self-evaluations, such as through self-affirmation approaches that encourage youth to repeat or write statements reinforcing their personal values and competencies (Hoffman & Schacter, 2024; Marauleng, 2025), may decrease youth's dependence on external parental validation processes. In addition to supporting positive self-esteem, cultivating self-compassion may promote youth's tolerance for self-doubt and acceptance of critical self-evaluations as common and shared experiences (Marshall et al., 2015), thereby reducing their vulnerability to internalizing evaluative feedback from a narcissistic parent. In the context of maternal narcissism, efforts to promote multi-faceted and stable self-evaluations and broader self-compassion may be especially important for girls, given their heightened attunement to parental feedback and same-sex parental identification processes, particularly across the transition to adolescence.

CRedit authorship contribution statement

Amanda Sadri: Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Conceptualization. **Tuppett M. Yates:** Writing – review & editing, Supervision, Software, Resources, Project administration, Funding acquisition, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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