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### Are Parenting Practices Associated with the Development of Narcissism? Findings from a Longitudinal Study of Mexicanorigin Youth

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#### Abstract

Narcissism is an important and consequential aspect of personality, yet we know little about its developmental origins. Using data from a longitudinal study of 674 Mexican-origin families, we examined cross-lagged relations between parenting behaviors (warmth, hostility, monitoring) and narcissism (superiority, exploitativeness). Parental hostility at age 12 was associated with higher levels of exploitativeness at age 14, whereas parental monitoring at age 12 was associated with lower levels of exploitativeness at age 14. These effects replicated across three different parenting measures: child reports, spouse reports, and behavioral coding of parent-child interactions. None of the parenting dimensions was related to superiority, suggesting that parenting practices are more strongly related to the maladaptive than the adaptive component of narcissism.

#### Keywords

narcissism; exploitativeness; superiority; parental warmth; parental hostility; parental monitoring

Narcissism encompasses a wide range of characteristics, including feelings of superiority, a sense of grandiosity, exhibitionism, exploitative behaviors in the interpersonal domain, feelings of entitlement, fantasies of unlimited power, success, or beauty, and a lack of empathy. Despite the abiding, and even growing, interest in narcissism, we know little about its developmental origins and childhood correlates. Given the link between narcissism and adjustment problems during childhood and adolescence (Barry, Frick, Adler, & Grafeman, 2007; Barry, Frick, & Killian, 2003; Washburn, McMahon, King, Reinecke, & Silver, 2004), it is important to understand the socialization processes that contribute to the development of narcissism. A large body of theoretical and empirical work suggests that parent socialization practices play a central role in shaping children's developmental trajectories (Bornstein, 2006; Parke & Buriel, 2006).

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The present study uses longitudinal data from 674 Mexican-origin families to examine prospective effects of parenting on the development of narcissism. There are strong theoretical reasons to expect that parenting practices play an important role in shaping narcissistic tendencies. The first influential theory linking parenting to narcissism is based on psychodynamic theory and was articulated by Kohut (1971, 1977) and Kernberg (1975), although it can be traced back to Freud (1914). According to Kohut and Kernberg, parental hostility and excessive criticism, along with a lack of warmth and responsiveness, lead to feelings of inadequacy in children and impede the development of positive self-regard. Children try to compensate for these feelings of inadequacy by inflating their self-worth and constantly seeking approval and admiration from others. Narcissism can thus be seen as a defensive reaction to parenting behaviors that convey disapproval and lack of acceptance and support. The second influential theory, social learning theory, also posits that parenting practices shape the development of child narcissism. In contrast to psychodynamic theory, this perspective based on work by Millon (1969, 1981) posits that extremely permissive parenting behavior, and in particular excessive parental indulgence and approval, are responsible for the development of narcissistic tendencies. According to social learning theory, children directly learn the behavior modeled by their parents and internalize their parents' beliefs that they are superior to others and entitled to special treatment and therefore develop increased narcissism.

Despite the rich theoretical literature on parenting and narcissism, we know of only two longitudinal studies on the topic. Cramer (2011) showed that children raised by *authoritative* and *permissive* parents (high responsiveness) exhibited more adaptive narcissistic tendencies, such as superiority and grandiosity, whereas children raised by *authoritarian* parents (low responsiveness) were less likely to exhibit such traits. In contrast, Cramer did not find any main effects of parenting on the more maladaptive components of narcissism, such as exploitativeness and entitlement. However, this study relied on self-reports of parenting and involved a very small sample (e.g., 89 mothers reported on their parenting).

In a more recent longitudinal study, Brummelman et al. (2015) examined the influence of parental indulgence (termed "parental overvaluation" in their study) and parental warmth on the development of narcissism in late childhood. Parental indulgence (assessed via parent self-report) predicted increases in narcissism from age 10 to 12, whereas parental warmth (assessed via child-report and parent self-report) was not related to narcissism. No reciprocal effects of child narcissism on parenting were found, suggesting the association is unidirectional, going from parenting to narcissism rather than vice versa. Note, however, that Brummelman et al. examined overall narcissism levels and did not differentiate between facets of narcissism. An emerging body of research suggests that different facets of narcissism have highly divergent antecedents and consequences. Facets encompassing feelings of superiority and having a grandiose self-concept appear to be at least partially adaptive since they have been linked to positive outcomes such as high self-esteem and emotional stability and low loneliness and depression (Rhodewalt & Morf, 1995; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Trzesniewski, Donnellan, & Robins, 2008). In contrast, facets encompassing a sense of entitlement and exploitativeness appear to be maladaptive since they have been linked to negative outcomes such as trait anger, aggression, counterproductive work behaviors, and dysfunctional interpersonal relationships

(Bushman & Baumeister, 1998; Campbell & Campbell, 2009; Campbell, Foster, & Finkel, 2002; Miller et al., 2009). These findings highlight the need to distinguish the facets of narcissism.

In addition to examining facets of narcissism, it is also important to consider self-esteem when studying narcissism. Narcissism and self-esteem are conceptually related but distinct traits. Although both entail a positive evaluation of the self, individuals with high selfesteem are assumed to generally like and accept themselves, whereas narcissists are assumed to have inflated views of their worth, and a compulsive need to be better than others, presumably as a defense against underlying feelings of inadequacy. Consequently, whereas high self-esteem involves seeing oneself as "a person of worth, at least on an equal basis with others" (sample item from the Rosenberg Self-esteem Scale; Rosenberg, 1979), narcissism involves feeling superior to others, and carries with it a pattern of interpersonally toxic tendencies such as exploitativeness and contempt toward others. Not surprisingly, although measures of the two constructs tend to be moderately correlated (e.g., Brown & Zeigler-Hill, 2004; Paulhus, Robins, Trzesniewski, & Tracy, 2004), they have quite different relations with other constructs; for example, antisocial behavior, aggression, and hostility are positively related to narcissism, but negatively related to self-esteem (Tracy, Cheng, Robins, & Trzesniewski, 2009). The conceptual and empirical overlap between narcissism and selfesteem raises the possibility that prior findings concerning the association between parenting and narcissism may have been confounded by self-esteem. Neither Cramer (2011) nor Brummelman et al. (2015) controlled for self-esteem when they examined associations between parenting and narcissism, raising the possibility that their findings were driven by the variance in narcissism that reflects genuine self-esteem rather than narcissistic tendencies<sup>1</sup>. Narcissism with self-esteem partialed out can be conceptualized as a more pure measure of narcissistic tendencies, with any aspects of genuine self-esteem removed. Thus, in our models investigating parenting practices and narcissism, we will include self-esteem as a control variable. By doing so, we will ensure that any observed associations with narcissism are due to narcissism itself, and not its overlap with self-esteem.

The present study extends previous research on the development of narcissism by investigating longitudinal relations between parenting practices and narcissism, using data from a sample of 674 Mexican-origin youth followed from age 12 to 16. We extend previous research in several important ways. First, we examined a more comprehensive set of parenting dimensions, including the three most commonly studied components of parenting (hostility, warmth, monitoring). Second, we assessed parenting using three different methods: child report, spouse report, and behavioral coding of parent-child interactions. Third, we examined effects separately for two important components of narcissism, exploitativeness and superiority, as well as for overall narcissism levels. Fourth, we analyzed data collected in a cohort-sequential longitudinal design with three waves of data spanning five years. Fifth, we applied latent variable modeling techniques to investigate reciprocal relations between parenting practices and narcissism, thereby controlling for measurement

<sup>&</sup>lt;sup>1</sup>Although Brummelman et al. (2015) did not control for self-esteem when they examined the association between parenting and narcissism, they did examine relations between parenting and self-esteem, and found that child-reported (but not parent-reported) parental warmth was reciprocally related to self-esteem.

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error. Sixth, we examined the effects of narcissism while controlling for its overlap with self-esteem. Finally, we investigated the association between parenting and narcissism in an important but understudied ethnic minority group, Mexican-origin families.

#### Hypotheses

We hypothesized that higher levels of parental hostility would be related to higher levels of narcissism in adolescents, based on psychodynamic theories about the origins of narcissism (Kernberg, 1975; Kohut, 1977). Although we know no empirical studies (longitudinal or cross-sectional) that have investigated the effects of parental hostility, a study on parental coldness, which is conceptually similar to parental hostility, found a positive association with narcissism (Otway & Vignoles, 2006). Note, however, that if parental hostility is assumed to be simply the converse of overvaluing a child, then we might expect hostility to be related to lower levels of narcissism, based on Brummelman et al.'s (2015) finding that overvaluation is related to higher narcissism. This is a situation where the social learning perspective conflicts with the psychodynamic perspective. The former assumes a relatively direct translation of feedback from one's parents ("my parents think I'm perfect therefore I think I'm perfect"; "my parents think I'm terrible therefore I think I'm terrible"), whereas the latter assumes a defensive reaction ("my parents think I'm terrible, and that makes me feel worthless so I am going to try to convince myself and others that I'm perfect"). Thus, our hypothesis of a positive relationship between parental hostility and narcissism is derived from psychodynamic perspective.

We also hypothesized that higher levels of parental monitoring would be related to lower levels of narcissism. This hypothesis is based on concurrent studies documenting this association (Barry et al., 2007; Horton, Bleau, & Drwecki, 2006; Miller & Campbell, 2008). Furthermore, a lack of monitoring can be understood as part of a permissive, indulgent parenting style (Horton, 2011). Thus, a negative relationship between parental monitoring and narcissism can also be predicted from social learning theory and Brummelman et al.'s finding that parental indulgence is positively associated with narcissism. A large body of research has demonstrated that parental monitoring decreases risk for a wide range of negative adolescent outcomes, and thus we would expect it to impede the development of narcissistic tendencies (Barber, Olsen, & Shagle, 1994; Dishion & McMahon, 1998; Pettit, Laird, Dodge, Bates, & Criss, 2001), at least the maladaptive component. Finally, we did not expect to find a relation between parental warmth and narcissism, based on Brummelman et al.

In sum, we hypothesized:

H1: Parental hostility at age 12 and 14 will be positively related to narcissism at age 14 and 16, even after controlling for prior levels of narcissism and concurrent associations with parental hostility.

H2: Parental monitoring at age 12 and 14 will be negatively related to narcissism at age 14 and 16, even after controlling for prior levels of narcissism and concurrent associations with parental monitoring.

H3: The effects specified in Hypotheses 1 and 2 will hold after controlling for self-esteem and gender.

We did not make separate predictions for the exploitativeness and superiority facets because prior research and theory concerning the effects of parenting has focused on the overall narcissistic profile. Note that these hypotheses are based on the assumption that narcissism is still undergoing development during adolescence. If narcissism emerges and stabilizes earlier than the time period examined in the present study, we would not expect any of the parenting measures to predict narcissism. However, it seems likely that the socialization processes specified by both social learning theory and psychodynamic theory continue into adolescence. For example, the socialization processes described by social learning theory imply that narcissistic tendencies are likely to continue to develop across the lifespan, and certainly within the late childhood to adolescence period covered by the present study. Although classic psychodynamic theories imply that narcissistic tendencies are likely to be particularly relevant during and following the transition into adolescence (the time period covered by the present study), when youth face considerable socioemotional difficulties that often trigger feelings of insecurity and inadequacy.

#### Method

#### Sample

Data come from the California Families Project, an ongoing longitudinal study of 674 Mexican-origin children (50% female) and their families. The children were drawn at random from student rosters provided by two school districts in metropolitan areas of Northern California. The focal child had to be in the 5<sup>th</sup> grade, of Mexican origin, and living with his or her biological mother. Of the eligible families, 73% agreed to participate. The sample has been assessed annually since 2006, when the children were 10.8 (SD = .61) years of age on average. Trained interviewers visited the participants at home. The interviews were conducted either in Spanish or in English, depending on the preference of the participant.

The present study used data collected when the children were 12, 14, and 16 years old, when most of the key measures were available. The retention rate in the age 16 assessment was 90% (relative to the original sample of 674). Attrition analyses showed that families who participated in the age 16 assessment did not differ significantly from nonparticipating families in child gender, parent education, and family income, all ps > .05, or on any of the constructs investigated in this study, namely narcissism (overall and facet-level), parental warmth, parental hostility, parental monitoring, and self-esteem (all ps > .05).

#### Measures

Descriptive statistics and alpha reliability coefficients for all measures are shown in Table 1. All measures were available at ages 12, 14, and 16, except for the narcissism scale, which was available at ages 14 and 16, and the observational assessments of parenting, which were available at age 12.

Narcissistic Personality Questionnaire for Children – Revised (NPQC-R)—The NPQC-R (Ang & Raine, 2008) is a self-report instrument designed to assess narcissism in children and adolescents. It includes two subscales, Superiority and Exploitativeness, which are assessed with six items each. Superiority captures the grandiose aspects of narcissism including feelings of superiority, vanity, and inflated self-views. A sample item on the superiority scale is "I am going to be a great person." Exploitativeness captures the interpersonally maladaptive aspects of narcissism including interpersonal exploitativeness, feelings of entitlement, and manipulativeness. A sample item on the exploitativeness scale is "I am good at getting people to do things my way." Participants responded on a five-point rating scale ranging from *not at all like me* (1) to *completely like me* (5).

**Rosenberg Self-esteem Scale (RSE)**—The RSE (Rosenberg, 1965, 1979) consists of 10 items assessing global self-esteem such as "On the whole, I am satisfied with myself". Participants rated how well the items described them on a scale ranging from *totally disagree* (1) to *totally agree* (4).

**Behavioral Affect Rating Scale (BARS)**—The BARS (Conger, 1989a) assesses parental warmth (9 items) and parental hostility (13 items). The *parental warmth* scale reflects how often the parent displayed warmth toward the child, for example by listening carefully to the child's point of view. The *parental hostility* scale reflects the frequency of hostile behavior toward the child, for example by ignoring the child when the child tries to talk to the parent. Responses to the BARS items were collected from two informants: the child and the spouse. That is, the mother's parenting behaviors were rated by the child and father whereas the father's parenting behaviors were rated by the child and mother. The ratings were made with respect to behavior displayed during the past three months on a response scale from *almost never or never* (1) to *almost always or always* (4).

**Iowa Parenting Scale (IPS)**—The IPS (Conger, 1989b) assesses parenting practices mainly with respect to discipline. *Parental warmth* (9 items) was assessed by combining items related to positive reinforcement (e.g., "When you have done something your mom likes or approves of, how often does she let you know she is pleased about it?") and inductive reasoning(e.g., "How often does your mom give you reasons for her decisions?"). The rating scale was the same as the BARS rating scale. As with the BARS, ratings by the child and the spouse were collected. For the child-report data, the correlation of IPS maternal (paternal) warmth with BARS maternal (paternal) warmth ranged from .72 to .75 (. 79 to .80) across assessments. For the parent-reports, the correlation of IPS maternal (paternal) warmth with BARS maternal (paternal) warmth ranged from .65 to .76 (.78 to .81) across assessments.

**Parental Monitoring of Child (PMC)**—The PMC (Small & Kerns, 1993) assesses the extent to which the parents are informed about how and with whom their child spends their time (e.g., "Your mom knew who your friends were.", "Your mom knew where you were and what you were doing."). For 9 out of the 14 items, a four-point rating scale ranging from *almost never or never* to *almost always or always* was used. For five items addressing the parent's monitoring of social plans such as "If you were going to get home late, you were

expected to call her", a fifth response category was introduced to reflect that the child was not allowed to show the described behavior (e.g., not allowed to stay out late). Parental monitoring was assessed with respect to the past three months via child-report, parent self-report, and spouse-report.

**Observational assessments of parenting**—During the interviewer visits, structured interaction tasks (mother-child, father-child) were videotaped in the families' homes and later rated by trained coders on a wide range of behavioral dimensions adapted from the Iowa Family Interaction Rating Scales (Melby et al., 1998). Different coders rated each parent's behavior.

To parallel the BARS, IPS, and PMC scales, we used the observational data to assess parenting behaviors related to *hostility, warmth*, and *monitoring*. Hostility reflects the degree to which the focal parent displayed hostile, angry, critical, or disapproving behavior toward the child during the interaction. Warmth reflects the degree to which the focal parent expressed liking, appreciation, praise, care, concern, or support for the child. Monitoring reflects the degree to which the parent displayed knowledge of and pursued information about the child's life and daily activities during the interaction.

All scales were rated on a nine-point scale ranging from *not at all characteristic* (1) to *mainly characteristic* (9). Most interactions were rated by a single coder. For a random selection of 25% of the interaction tasks, ratings from two coders were available in which case the averaged score across raters was analyzed. The intraclass correlation between coders was .86 (.85) for maternal (paternal) hostility, .80 (.66) for maternal (paternal) warmth, and .68 (.67) for maternal (paternal) monitoring.

#### Analyses

**Overview**—We first tested for longitudinal measurement invariance and then estimated latent cross-lagged panel models to investigate reciprocal relations between narcissism (total score, superiority, exploitativeness) and parenting practices. All analyses were conducted in Mplus (Version 7.11; Muthén & Muthén, 1998–2014) using maximum likelihood estimation robust to non-normality (denoted MLR in Mplus). To deal with missing data, we used full information maximum likelihood estimation to fit models directly to the raw data (Schafer & Graham, 2002). Model fit was evaluated by the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), and the root mean square error of approximation (RMSEA; Steiger, 1990). Good fit is indicated by values above .95 for the CFI and TLI, and values below .05 for the RMSEA (Hu & Bentler, 1999).

**Longitudinal measurement invariance**—Measurement invariance was evaluated following the procedure outlined in Meredith (1993) and Widaman and Reise (1997). That is, starting with a baseline model of configural invariance where all parameters were free to vary across waves of assessment, we first constrained the factor loadings to be equal across ages (metric invariance) and then additionally constrained the indicator intercepts to be equal across ages (scalar invariance). These nested models were tested using a  $\chi^2$  difference test based on rescaled log-likelihood values (due to the MLR estimator) and the difference in CFI between models (CFI). If the  $\chi^2$  difference test indicated that the more restrictive

model fit significantly worse than the less restrictive model at  $\alpha = .01$  and CFI was > .002 (Meade, Johnson, & Braddy, 2008), one parameter at a time was freed based on the modification indices and the  $\chi^2$  difference test and check of CFI were repeated until both criteria were fulfilled.

With respect to child-report data, full scalar invariance held for overall narcissism, superiority, exploitativeness, BARS maternal warmth, BARS maternal hostility, BARS paternal warmth, BARS paternal hostility, and maternal monitoring. Partial scalar invariance held for self-esteem, IPS maternal warmth, IPS paternal warmth, and paternal monitoring. With respect to the parent-report data, mother-report of paternal monitoring showed full scalar invariance and all other constructs (BARS, IPS, and PMC parenting scales) showed partial scalar invariance. Thus, overall, the same constructs were being measured over time, although for some constructs one or two of the indicators were not fully invariant across waves.

**Latent cross-lagged panel models (LCLP)**—Figure 1 shows the basic structure of the models to be tested. Each model includes one of the three parenting dimensions at age 12, 14, and 16 and either overall narcissism or the two narcissism facets at age 14 and 16.

Three parcels consisting of two to five items (depending on the length of the scale) were used as indicators for each latent variable. The items were randomly assigned to parcels. Indicators based on the same items were correlated across waves (e.g., indicator 1 for exploitativeness at age 14 was correlated with indicator 1 for exploitativeness at age 16). First-order and second-order stability paths were included (e.g., maternal warmth at age 12 predicted maternal warmth at age 14 and maternal warmth at age 16). First-order cross-lagged regression paths were modeled between constructs, for example narcissism at age 16 was regressed on narcissism at age 14. Different constructs within a wave were correlated (e.g., narcissism at age 14 with maternal warmth at age 14). The regression paths were allowed to vary over time because model comparisons showed that the constraint of time-invariant paths deteriorated model fit.

The analyses were conducted separately for child-report and parent-report of BARS, IPS, and PMC scales as well as for observational assessments of parental warmth, parental hostility, and parental monitoring. Gender and self-esteem were included as covariates in all models. Latent variables for self-esteem at age 12, age 14, and age 16 were included in the latent cross-lagged panel models. Thus, self-esteem is a time varying covariate.

#### Results

#### Gender Differences and Stability over Time

Narcissism did not show any gender differences, either at the overall or facet level. At all ages, girls reported higher paternal warmth than boys on the BARS (but not IPS) scale and higher maternal warmth on the IPS (but not BARS) scale; however, neither gender difference held for parent reported warmth. Girls reported higher maternal monitoring than boys at all ages and higher paternal monitoring at ages 14 and 16. For the mothers' self-report of their

r for girls at ago 14 and 16.

monitoring of the child, monitoring scores were also higher for girls at age 14 and 16. No significant gender differences were found for mothers reporting on paternal monitoring or fathers reporting on their own monitoring and maternal monitoring. Boys reported higher self-esteem than girls at age 14 (t = -2.87, p = .004), but not at age 12 or at age 16.

Overall narcissism and the superiority facet were moderately stable from age 14 to 16, with average stability coefficients of .58 (range .57 - .59) for the total scale and .61 (range .61 - .62) for the superiority facet. In contrast, the exploitativeness facet was less stable with an average stability coefficient of .46 (range .46 - .47). The first-order (age 12 to 14 and 14 to 16) stability coefficients for the parenting dimensions ranged (across waves and child- and parent-reports) from .44 to .75 for paternal hostility, .31 to .63 for maternal hostility, .45 to . 75 for paternal warmth, .42 to .53 for maternal warmth, .46 to .72 for paternal monitoring, and .41 to .63 for maternal monitoring. The second-order stability coefficients, spanning age 12 to 16, were, as expected given that they control for the 1<sup>st</sup> order stabilities, much lower, with an average of .20 for parental hostility, .24 for parental warmth, and .19 for parental monitoring.

#### **Reciprocal Relations between Parenting and Narcissism**

As shown in Table 2, the overall fit of all models tested was good (CFI .96, TLI .95, RMSEA .04). Standardized regression coefficients for cross-lagged effects from all models are depicted in Tables 3–5. Below we organize the results by parenting dimension; within each section, we describe the results separately for the narcissism total score, exploitativeness, and superiority.

**Parental hostility**—Parental hostility at age 12 predicted narcissism at age 14 for both mothers and fathers. Importantly, this effect was consistent across child- and parent-report as well as observational data, although in the observational data the effect was only significant for maternal hostility. Thus, higher parental hostility at age 12 was associated with children reporting higher narcissism at age 14. Thus, H1 was partly confirmed since this relationship held for age 12 to age 14, but not age 14 to age 16. Furthermore, H3 was confirmed since this effect was significant with both gender and self-esteem entered as control variables. Facet-level analyses revealed that this effect was mainly attributable to the exploitativeness facet of narcissism: Consistently a cross-lagged effect between parental hostility at age 12 and exploitativeness at age 14 appeared in models differentiating the two narcissism facets (see Table 3). Thus, for both mothers and fathers, a higher degree of hostility towards their child at age 12 was related to their child reporting being more exploitative at age 14. As for overall narcissism, this finding held not only across maternal and paternal hostility, but also across different informants on the BARS (child and spouse) as well as for the observational data, though the effect was only marginally significant for observational data on paternal hostility ( $\beta = .10, p = .12$ ). For example, for maternal hostility, the child-report BARS yielded a beta of .29, the parent-report BARS yielded a beta of .18 and the observational rating yielded a beta of .17. Parental hostility at age 14 did not significantly predict exploitativeness or overall narcissism at age 16. Furthermore, the cross-lagged regressions between parental hostility and superiority were non-significant in all cases. There were no notable differences, in either effect sizes or significance levels, between the models

including self-esteem as a control variable and the models not including self-esteem as a control variable.

**Parental warmth**—Parental warmth was not related to overall narcissism, as expected. At the facet-level, there were also no consistent cross-lagged effects on either exploitativeness or superiority. One effect that replicated across the BARS and IPS scales was a negative relationship between paternal warmth at age 12 and exploitativeness at age 14 ( $\beta = -.12$ , p = .015 for BARS and  $\beta = -.11$ , p = .036 for IPS). However, this effect was only significant for the spouse-report of paternal warmth and not for the child-report and it was also not found in the observational data. Parental warmth at age 12 predicted superiority at age 14 for IPS maternal warmth ( $\beta = .14$ , p = .035), for IPS paternal warmth ( $\beta = .19$ , p = .001), and for BARS paternal warmth ( $\beta = .12$ , p = .031). However, in this case, the effect was only present for child-report data and not for parent-report data and it was also not present in the observational ratings of parental warmth (see Table 4). In some (but not all) of the models without self-esteem as a control variable, parental warmth at age 12 positively predicted superiority at age 14 (e.g.,  $\beta = .15$ , p = .019 for BARS maternal warmth in the spouse-report data).

Parental monitoring—Our prediction (H2) that parental monitoring would be associated with overall narcissism levels was not confirmed. However, when narcissism was differentiated into the two facets exploitativeness and superiority, we found that both maternal and paternal monitoring at age 12 were negatively related to exploitativeness at age 14. For example, the standardized regression coefficient for the child-report of parental monitoring was -.16 for paternal monitoring and -.14 for maternal monitoring. In the models without self-esteem as a control variable, the effect was slightly smaller for maternal monitoring ( $\beta = -.10$ ) and did not reach significance (p = .072). This result also held for parent-report data (e.g.,  $\beta = -.10$ , p = .049 for mother-report of paternal monitoring), although not all effects were large enough to reach significance (e.g.,  $\beta = -.07$ , p = .28 for father-report of maternal monitoring). For the data from observational assessments this effect was confirmed for paternal monitoring, but not maternal monitoring (see Table 5). The superiority facet was not related to parental monitoring in models including self-esteem. In models without self-esteem, a positive association between superiority and parental monitoring was found when monitoring was assessed via parent and child reports (e.g.,  $\beta = .$ 15, p = .006 for mother-report of paternal monitoring), but not using the observational data. Thus, it appears that adolescents who were monitored less closely at age 12 tended to have higher exploitativeness levels over time compared to adolescents who were monitored more closely at age 12.

#### Supplemental Analyses

In supplemental analyses, we examined reciprocal cross-lagged relations between the narcissism facets and self-esteem. Higher self-esteem at age 12 was related to higher superiority at age 14 ( $\beta$  = .43, *p* < .001), whereas superiority at age 12 was not related to self-esteem at age 14. Exploitativeness and self-esteem were not related. These effects consistently held when each of the parenting dimensions was added to the model. We also tested whether the parenting dimensions had interactive effects on narcissism. We found that

the association between paternal hostility and exploitativeness was stronger for higher levels of monitoring (interaction effect b = .17, p < .001) and for higher levels of warmth (interaction effect b = .14, p < .001). In addition, we found that the association between paternal hostility and superiority was stronger for higher levels of monitoring, (interaction effect, b = .10, p = .041). Thus, it appears that monitoring tends to magnify the effects of parenting on narcissism, at least for fathers.

Lastly, we tested whether nativity (born in Mexico vs. the U.S.) moderated the relations between parenting and narcissism. We found two significant effects: nativity moderated the association between observed maternal hostility and superiority and between observed maternal warmth and exploitativeness. However, we do not believe these interaction effects merit interpretation because: (a) we conducted a total of 72 interactions tests and two significant effects is less than would be expected by chance; (b) the interaction effects held only for observational assessments of parenting and did not replicate for either child or parent reports, and (c) the effects did not replicate for any measure of paternal hostility and warmth. Overall, then, the results suggest that our basic findings hold for youth who were born in Mexico as well as those born in the United States. Moreover, all of the significant findings remained significant after controlling for nativity; that is, after nativity was entered as a covariate in the models.

#### Discussion

The present study investigated the association between parenting practices and the development of narcissism using data from a large longitudinal study of Mexican-origin children and their parents. The two most robust predictors were parental hostility and parental monitoring, with hostility associated with higher exploitativeness from age 12 to 14 and parental monitoring associated with lower exploitativeness from age 12 to 14. These effects replicated across three different parenting measures (child reports, spouse reports, and behavioral coding of parent-child interactions), and held for youth born in Mexico and the United States. Surprisingly, none of the parenting dimensions was related to superiority, suggesting that parenting practices are more strongly related to the maladaptive than the adaptive component of narcissism. Below we discuss the implications of the findings for theory, research, and practice.

The tendency for youth raised by hostile parents to develop higher levels of exploitativeness is consistent with psychodynamic theory. Specifically, psychodynamic theory posits that children exposed to hostile and overly critical parents will develop feelings of inadequacy that they will try to compensate for by exploiting and seeking admiration from others (Kernberg, 1975; Kohut, 1977). However, psychodynamic theory also posits that a lack of parental warmth plays an important role in the development of narcissism. This prediction was not confirmed in our study since we found no relationship between parental warmth and narcissism, neither at the level of overall narcissism nor at the level of the exploitativeness and superiority facets. Interestingly, when we explored interactions among the parenting dimensions, we found that the effect of paternal hostility on exploitativeness was stronger for higher levels of warmth, as well as for higher levels of monitoring. Especially the interaction between parental hostility and parental warmth is consistent with the idea

grounded in psychodynamic theory that parental behavior characterized by first elevating children with love and support and then tearing them down with excessive criticism fosters the development of narcissism. Although these results should be interpreted with caution, since neither effect replicated for parent-report or observational assessments of parenting, they do suggest that the association between parenting practices and narcissism is likely to be more complex than what can be captured by unidimensional measures of parenting. Finally, it is important to note that most theories of the origins of narcissism do not specify distinct developmental pathways to the specific facets of narcissism. The moderate stability coefficients at the level of overall narcissism and at the facet level indicate that narcissism and in particular the exploitativeness facet have not fully stabilized by adolescence. It is mainly the maladaptive components of narcissism such as exploitativeness that are related to a number of adjustment problems in adolescence (e.g., Washburn et al., 2004). Thus, more conceptual work is needed to extend current theories to the development of the maladaptive and adaptive components of narcissism, taking into account different developmental periods from childhood to adolescence.

Most of our findings are consistent with prior research. For example, our finding that overall narcissism was not related to parental warmth is consistent with Brummelman et al. (2015). In some of our models without self-esteem as a control variable, parental warmth was related to the adaptive superiority facet. This is in line with Cramer (2011) who found that parenting styles characterized by high responsiveness (an aspect of warmth) were related to higher levels of adaptive narcissistic traits, although we did not find this relationship when we controlled for self-esteem. We found that high parental monitoring was related to lower levels of exploitativeness, but not to higher levels of superiority. This is consistent with cross-sectional research showing a negative relationship between parental monitoring and overall narcissism (Barry et al., 2007; Horton et al., 2006; Miller & Campbell, 2008). The convergence of our results with previous research suggests that the relationship between parenting behaviors and narcissism is similar across different cultural contexts, such as Mexican-origin and European background youth living in the United States and Dutch youth. This is substantiated by our finding that nativity did not influence the relations between parenting and narcissism. Nevertheless, the degree to which the cultural context plays a role in the developmental processes involved in narcissism is an empirical question that merits further research.

Controlling for self-esteem was an important extension of the analyses conducted in previous studies. Superiority and self-esteem were positively related, with self-esteem at age 12 predicting superiority at age 14. This overlap between superiority and self-esteem produced differences between the effects found in models that controlled vs. did not control for self-esteem. For example, in models investigating the narcissism facets and parental monitoring without controlling for self-esteem, parental monitoring at age 12 predicted superiority at age 14. When self-esteem was added to the model, this relationship was diminished greatly and no longer statistically significant, illustrating that the initial effect was only due to the confounding of superiority and self-esteem. The same pattern occurred in some models examining the association between parental warmth and superiority. Thus, relationships between positive parenting dimensions and superiority appear to be attributable to the shared variance between superiority and self-esteem; when the variance associated

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with self-esteem is statistically removed, the resulting more pure measure of narcissistic self-aggrandizement is not related to the positive parenting dimensions of warmth and monitoring. This finding highlights the importance of controlling for self-esteem when examining the effects of narcissism, and vice versa. Note that as exploitativeness was not correlated with self-esteem, all observed associations between parenting and exploitativeness were robust across models that included or did not include self-esteem as a control.

The present study also extended previous research by investigating the codevelopment of the two facets of narcissism. With regard to general patterns of change, both facets showed virtually no mean-level change from age 14 to 16 and moderately high rank-order stability, with superiority showing somewhat higher stability than exploitativeness. Interestingly, when we examined prospective cross-lagged associations between the two facets, we found that superiority at age 14 predicted exploitativeness at age 16, but exploitativeness at age 14 did not predict superiority at age 16. It is possible that a certain degree of superiority is needed in order to exhibit exploitative behaviors; that is, a sense of superiority can engender feelings of entitlement and help rationalize exploiting others. Thus, superiority may be a developmental precursor of exploitativeness, with both facets merging into a coherent narcissistic style later in development. In line with this possibility, the concurrent correlation between the two facets of narcissism was significantly higher at age 16 (latent r = .55) compared to age 14 (latent r = .38), implying that superiority and exploitativeness levels were more aligned at age 16 than at age 14. In general, the divergent pattern of findings for superiority and exploitativeness, and the fact that superiority is prospectively associated with exploitativeness, illustrate the importance of investigating narcissism at the facet level.

The present findings have important practical implications. In particular, they highlight two promising targets of intervention: parental hostility and monitoring. Specifically, parenting interventions that reduce hostility and improve monitoring could potentially disrupt the developmental pathways that lead to exploitativeness, a maladaptive component of narcissism that has been linked to adjustment and behavioral problems in childhood and adolescence (Barry et al., 2007; Barry et al., 2003; Washburn et al., 2004).

#### Limitations of the Study

Several limitations merit attention. First, narcissism was assessed on two occasions during adolescence. Both narcissism facets showed moderate rank-order stability during this time period, raising the possibility that some of the processes that contribute to the development of narcissism have already unfolded by adolescence. Stronger links to parenting practices could be expected earlier in development when narcissism levels are presumably undergoing greater change. Nevertheless, our results indicate that the socialization processes involved in the development of narcissism continue into adolescence. That is, an adolescent experiencing hostile feedback from his/her parents is likely to exhibit the same feelings of inadequacy, and compensate for these feelings by inflating his/her self-worth, in the same way as a child receiving such feedback, and consequently the socialization processes through which hostile parenting influences narcissism are likely to persist across adolescence. Similarly, from a social learning perspective, it seems likely that the relatively straightforward process of learning about oneself via feedback from parents is likely to

persist across adolescence. It would be important to investigate the effects of parenting on narcissism in a longitudinal study where both constructs are assessed at younger ages, preferably using informant assessments of narcissism given the problems with self-reports by young children. Even if parent socialization processes persist into adolescence, as we believe they do, they may be more consequential earlier in development; that is, there may be a sensitive period in the development of narcissism.

Second, the study design does not allow for strong conclusions regarding the causal effect of parenting on narcissism. As in all passive observational designs, effects between factors may be caused by third variables that were not assessed (Finkel, 1995). Nevertheless, longitudinal analyses are useful because they can indicate whether the data are consistent with a causal model of the relation between the variables.

Third, the results do not allow for firm conclusions with regard to the clinical category of narcissistic personality disorder (NPD). The narcissism measure used in the present research was designed to assess individual differences in the normal range of narcissistic tendencies, but conclusions about the antecedents of NPD should be based on diagnoses from clinical interviews. Moreover, our analyses are based on a nonclinical sample, which do not allow for valid conclusions about narcissistic tendencies in clinical populations.

#### Conclusion

Considering the detrimental effects of narcissism in the interpersonal domain, investigating the development of narcissism is an important endeavor. Our study showed that parental hostility and parental monitoring were related to adolescents' exploitativeness two years later, indicating that parenting practices play a central role in the development of narcissism during adolescence. Nevertheless, there are many open questions, including identifying the developmental precursors of the superiority facet of narcissism and understanding how parenting practices shape the development of narcissism in younger children.

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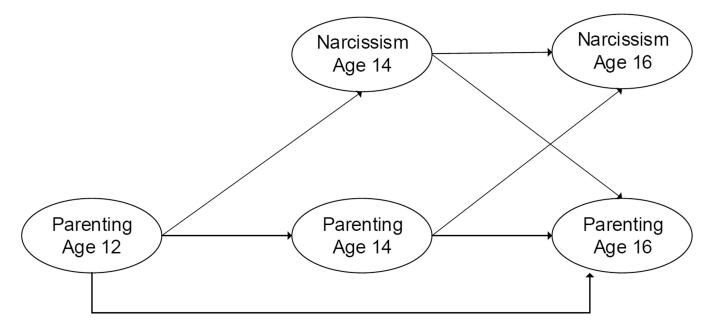
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#### Highlights

- We investigated the longitudinal relations between parenting and narcissism.
- Data from a sample of Mexican-origin youth spanning ages 12 to 16 were analyzed.
- Parental hostility was associated with higher levels of exploitativeness at age 14.
- Parental monitoring was associated with lower levels of exploitativeness at age 14.
- None of the parenting dimensions was related to superiority.
- Findings replicated across child-report, spouse-report, and behavioral codings



#### Figure 1.

Latent cross-lagged panel model with narcissism and a parenting scale (parental hostility, parental warmth, or parental monitoring). In the facet-level analyses, the overall narcissism construct was replaced by exploitativeness and superiority.

Table 1

Descriptive Statistics for all Study Variables

		Age 12		Age 14		Age 16	•
Construct	Report	M(SD)	G	M(SD)	6	M(SD)	G
Narcissism							
Total	Child	ı		2.88 (.57)	.78	2.87 (.62)	.83
Exploitativeness	Child	ı		2.42 (.72)	.74	2.42 (.76)	.78
Superiority	Child			3.36 (.71)	LL.	3.33 (.71)	.80
Hostility							
<b>BARS</b> maternal	Child	1.41 (.31)	LL.	1.51 (.41)	.86	1.53 (.39)	.86
<b>BARS</b> maternal	Parent	1.54 (.31)	.75	1.54 (.29)	.73	1.55 (.29)	.71
Maternal	Observational	2.18 (1.47)					
<b>BARS</b> paternal	Child	1.35 (.32)	.81	1.53 (.35)	.80	1.56 (.39)	.83
<b>BARS</b> paternal	Parent	1.53 (.33)	LL.	1.64 (.32)	.81	1.59 (.30)	.80
Paternal	Observational	1.75 (1.21)					
Warmth							
<b>BARS</b> maternal	Child	3.12 (.59)	.88	3.02 (.65)	.91	2.89 (.66)	.91
<b>BARS</b> maternal	Parent	3.36 (.48)	.85	3.27 (.50)	.86	3.17 (.55)	.87
IPS maternal	Child	2.70 (.63)	.87	2.56 (.62)	.86	2.48 (.62)	.88
IPS maternal	Parent	3.03 (.51)	.80	3.00 (.54)	.84	2.90 (.57)	.85
Observational maternal	observational	3.58 (1.45)					
<b>BARS</b> paternal	child	3.01 (.72)	.92	2.77 (.74)	.91	2.61 (.75)	.92
<b>BARS</b> paternal	parent	3.10 (.66)	.91	2.97 (.68)	.90	2.88 (.68)	.91
IPS paternal	child	2.60 (.68)	80.	2.39 (.66)	.88	2.26 (.66)	.89
IPS paternal	parent	2.71 (.66)	.88	2.65 (.68)	.88	2.60 (.66)	.88
Observational paternal	observational	3.25 (1.27)					
Monitoring							
PMC maternal	child	3.32 (.57)	.91	3.22 (.60)	.92	3.11 (.62)	.92
PMC maternal	father	3.68 (.43)	.87	3.52 (.50)	80.	3.38 (.60)	.92
PMC maternal	mother	3.70 (.43)	.85	3.68 (.46)	.87	3.58 (.53)	.91
Observational maternal	ohservational	5.20 (1.14)					

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		Age 12		Age 14	<b>+</b>	Age 16	<u>`</u>
Construct	Report	(QS) W	a	a. $M(SD)$ a. $M(SD)$	B	(QS) W	9
PMC paternal	child	3.09 (.75)	.94	.09 (.75) .94 2.85 (.78) .95 2.73 (.81) .95	.95	2.73 (.81)	.95
PMC paternal	father	3.51 (.49)	.85	.85 3.46 (.54) .90	.90	3.35 (.57)	.91
PMC paternal	mother	3.34 (.74)	.92	3.23 (.81) .94	.94	3.17 (.78)	.94
Observational paternal	observational	4.77 (1.10)					
Self-esteem	child	3.19 (.42)	.78	.78 3.13 (.42) .85 3.11 (.43) .85	.85	3.11 (.43)	.85

Note: BARS = Behavioral Affect Rating Scale, IPS = Iowa Parenting Scale, PMC = Parental Monitoring of Child.

Fit Indices for Latent Cross-lagged Panel Models

					Fit indices	ices	
Model	Re- port	χ <sup>2</sup>	Df	CFI	TLI	RMSEA	90% CI
Overallnarcissism							
Hostility							
Maternal	child	335.36	246	0.99	0.98	.02	[.02, .03]
Maternal	parent	322.24	244	0.99	0.98	.02	[.02, .03]
Maternal	obs	176.89	104	0.98	0.98	.03	[.03, .04]
Paternal	child	295.78	246	0.99	0.99	.02	[.01, .03]
Paternal	parent	347.66	245	0.98	0.98	.03	[.02, .03]
Paternal	obs	168.52	104	0.98	0.98	.03	[.02, .04]
Warmth							
<b>BARS</b> maternal	child	375.19	246	0.98	0.98	.03	[.02, .03]
<b>BARS</b> maternal	parent	332.63	245	0.99	0.98	.02	[.02, .03]
IPS maternal	child	326.44	245	0.99	0.99	.02	[.02, .03]
IPS maternal	parent	305.75	245	0.99	0.99	.02	[.01, .03]
maternal	obs	168.65	104	0.98	0.98	.03	[.02, .04]
<b>BARS</b> paternal	child	339.13	246	0.99	0.99	.02	[.02, .03]
<b>BARS</b> paternal	parent	306.29	245	0.99	0.99	.02	[.01, .03]
IPS paternal	child	314.71	244	0.99	0.99	.02	[.01, .03]
IPS patemal	parent	348.10	245	0.99	0.98	.03	[.02, .03]
paternal	obs	162.57	104	0.99	0.98	.03	[.02, .04]
Monitoring							
Maternal	child	374.28	246	0.98	0.98	0.03	[.02, .03]
Maternal	mother	339.81	244	0.99	0.98	0.03	[.02, .03]
Maternal	father	321.51	246	0.99	0.99	0.02	[.02, .03]
Maternal	obs	166.33	104	0.98	0.98	0.03	[.02, .04]
Paternal	child	360.52	244	0.99	0.98	0.03	[.02, .03]
Paternal	moth	345.46	246	0.99	0.99	0.03	[.02, .03]

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					Fit indices	ices	
Model	Re- port	$\chi^2$	Df	CFI	TLI	RMSEA	90% CI
Paternal	father	329.51	245	0.99	0.98	0.02	[.02, .03]
Paternal	obs	176.30	104	0.98	0.98	0.03	[.02, .04]
Facets							
Hostility							
Maternal	child	620.52	390	0.97	0.97	.03	[.03, .04]
Maternal	parent	617.56	388	0.97	0.96	.03	[.03, .04]
Maternal	obs	409.84	204	0.96	0.95	.04	[.03, .05]
Paternal	child	598.75	390	0.97	0.97	.03	[.02, .03]
Paternal	parent	626.09	389	0.97	0.96	.03	[.03, .04]
Paternal	obs	401.76	204	0.96	0.95	.04	[.03, .05]
Warmth							
<b>BARS</b> maternal	child	660.50	390	0.97	0.97	.03	[.03, .04]
<b>BARS</b> maternal	parent	604.96	389	0.97	0.96	.03	[.03, .03]
IPS maternal	child	611.22	389	0.97	0.97	.03	[.03, .03]
<b>IPS</b> maternal	parent	584.96	389	0.97	0.97	.03	[.02, .03]
Maternal	obs	399.92	204	0.96	0.95	.04	[.03, .04]
<b>BARS</b> paternal	child	624.78	390	0.98	0.97	.03	[.03, .04]
<b>BARS</b> paternal	parent	590.63	389	0.98	0.97	.03	[.02, .03]
IPS paternal	child	608.68	388	0.98	0.97	.03	[.03, .03]
IPS paternal	parent	643.11	389	0.97	0.97	.03	[.03, .04]
Paternal	obs	398.17	204	0.96	0.95	.04	[.03, .04]
Monitoring							
Maternal	child	650.38	390	0.97	0.97	0.03	[.03, .04]
Maternal	mother	641.22	388	0.97	0.97	0.03	[.03, .04]
Maternal	father	609.93	390	0.97	0.97	0.03	[.03, .03]
Maternal	obs	400.90	204	0.96	0.95	0.04	[.03, .05]
Paternal	child	624.79	388	0.98	0.97	0.03	[.03, .04]
Paternal	mother	614.67	390	0.98	0.97	0.03	[.03, .04]
Paternal	father	613.88	389	0.97	0.97	0.03	[.03, .04]

approximation. Differing numbers of degrees of freedom for models with same data structure are due to parameters freed to account for partial scalar invariance in some constructs. Models in the upper half of the table contain overall narcissism, self-esteem and one parenting scale. Models in the lower half of the table contain exploitativeness, superiority, self-esteem, and one parenting scale. Note: BARS = Behavioral Affect Rating Scale, IPS = Iowa Parenting Scale, obs = observerational, CFI = comparative fit index, TLI = Tucker-Lewis index, RMSEA = root mean square error of

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# Table 3

Parameter Estimates for Latent Cross-lagged Panel Models Involving Parental Hostility

Model	Report		Stan	Standardized regression coefficients	ession coeffic	ients	
Overall narcissism		$\begin{array}{c} \text{Host12} \rightarrow \\ \text{Narc14} \end{array}$	$\begin{array}{c} \text{Host14} \rightarrow \\ \text{Narc16} \end{array}$	$\begin{array}{l} Narc14 \rightarrow \\ Host16 \end{array}$			
Maternal hostility	child	.24	.02	.01			
Maternal hostility	parent	.13	.02	.08			
Maternal hostility	obs	.12	,	ı			
<b>Paternal hostility</b>	child	.14	02	02			
Paternal hostility	parent	.14	06	.04			
Paternal hostility	obs	.07	ı	ı			
Narcissism facets		Host12 → Exp14	Host14 → Exp16	$\begin{array}{c} Exp14 \rightarrow \\ Host16 \end{array}$	$\begin{array}{c} Host12 \rightarrow \\ Sup14 \end{array}$	$\begin{array}{c} Host14 \rightarrow \\ Sup16 \end{array}$	$Sup14 \rightarrow Host16$
Maternal hostility	child	.29	.02	.04	80.	.05	03
Maternal hostility	parent	.18	.03	.01	.04	.02	.11
Maternal hostility	obs	.17			.03		
Paternal hostility	child	.21	.01	.04	.02	01	08
Paternal hostility	parent	61.	07	60.	.04	01	06
<b>Paternal hostility</b>	obs	.10			.02		·

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Note. Host = hostility, narc = narcissism, exp = exploitativeness, obs = observational, sup = superiority. Only standardized regression coefficients from cross-lagged paths are depicted. For stability estimates see text. Beta coefficients significant at  $\alpha = .05$  are depicted in bold and italics. All models include self-esteem and gender as covariates.

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## Table 4

Parameter Estimates for Latent Cross-lagged Panel Models Involving Parental Warmth

Model	Report		Star	dardized reg	Standardized regression coefficients	ients	
Overall narcissism		$\begin{array}{c} Warm 12 \rightarrow \\ Narc 14 \end{array}$	$\begin{array}{c} Warm 14 \rightarrow \\ Narc 16 \end{array}$	$\begin{array}{l} Narcl4 \rightarrow \\ Warm16 \end{array}$			
BARS maternal warmth	child	.03	.01	.02			
<b>BARS</b> maternal warmth	parent	.08	.03	.05			
IPS maternal warmth	child	90.	.07	.02			
IPS maternal warmth	parent	.06	.03	60.			
Maternal warmth	obs	.01					
<b>BARS</b> paternal warmth	child	.02	.01	90.			
<b>BARS</b> paternal warmth	parent	04	.03	07			
IPS paternal warmth	child	60.	.05	.05			
IPS paternal warmth	parent	06	.04	07			
Paternal warmth	obs	00	·	·			
Narcissism facets		$\substack{\text{Warm}12 \to \\ \text{Exp}14}$	Warm14 → Exp16	$\underset{Warm16}{Exp14} \rightarrow$	Warm12 $\rightarrow$ Sup14	Warm14 $\rightarrow$ Sup16	$\begin{array}{c} Sup14 \rightarrow \\ Warm16 \end{array}$
<b>BARS</b> maternal warmth	child	05	04	04	60.	.01	80.
<b>BARS</b> maternal warmth	parent	.03	.07	06	.08	01	.16
IPS maternal warmth	child	05	.03	02	.14	.07	.04
IPS maternal warmth	parent	.03	.04	04	.07	00	71.
Maternal warmth	obs	.01			.02		·
<b>BARS</b> paternal warmth	child	08	04	05	.12	00	.14
<b>BARS</b> paternal warmth	parent	12	.02	09	.06	01	.01
IPS paternal warmth	child	04	01	04	61.	.06	.12
IPS paternal warmth	parent	-11	.02	12	.01	.03	.06
Paternal warmth	obs	02	·		.01	ı	

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estimates see text. Beta coefficients significant at  $\alpha = .05$  are depicted in bold and italics. All models include self-esteem and gender as covariates.

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# Table 5

Parameter Estimates for Latent Cross-lagged Panel Models Involving Parental Monitoring

Model	Report		Stanc	Standardized regression coefficients	ession coeffici	ients	
Overall narcissism		$\begin{array}{c} Mon12 \rightarrow \\ Narc14 \end{array}$	$\begin{array}{c} Mon14 \rightarrow \\ Narc16 \end{array}$	$\begin{array}{c} \text{Narcl4} \rightarrow \\ \text{Mon16} \end{array}$			
Maternal monitoring	child	03	00.	03			
Maternal monitoring	moth	00.	.05	01			
Maternal monitoring	father	02	.02	00			
Maternal monitoring	obs	01	,				
Paternal monitoring	child	04	.02	.04			
Paternal monitoring	moth	02	.03	09			
Paternal monitoring	father	01	.04	.03			
Paternal monitoring	obs	03					
Narcissism facets		Mon12 → Exp14	Mon14 → Exp16	$Exp14 \rightarrow Mon16$	Mon12 → Sup14	Mon14 → Sup16	Sup14 → Mon16
Maternal monitoring	child	14	08	05	80.	.02	.02
Maternal monitoring	moth	04	.03	10	.04	.04	.12
Maternal monitoring	father	07	00	08	.04	.02	60.
Maternal monitoring	obs	.02	,		03		·
Paternal monitoring	child	16	04	06	60.	.05	.13
Paternal monitoring	moth	-10	.03	09	.07	00.	00
Paternal monitoring	father	06	.05	10	.06	00.	.16
Paternal monitoring	obs	08		·	.03	,	·

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Note. Mon = monitoring, narc = narcissism, exp = exploitativeness, obs = observational, sup = superiority, moth = mother. Only standardized regression coefficients from cross-lagged paths are depicted. For stability estimates see text. Beta coefficients significant at  $\alpha = .05$  are depicted in bold and italics. All models include self-esteem and gender as covariates.