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Recollections of Parenting Styles in The Development of Narcissism: The Role of Gender

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Abstract

Narcissism in females is under-theorised in the literature due to a predominant focus on grandiose features indicative of the male gender. This study aimed to investigate recalled parenting styles in the development of grandiose and vulnerable narcissism to enhance theoretical knowledge regarding gender differences in the personality construct. Based on previous research, it was hypothesized that strict parenting by the father would predict grandiose narcissism in males, and cold parenting by the mother would predict vulnerable narcissism in females. Participants ($N= 328$; 176 females) recruited from the normal population completed scales for grandiose and vulnerable narcissism, and perceived parenting styles. Results showed that females scored significantly higher on vulnerable narcissism than males, but no gender differences were found for grandiose narcissism. Findings linked retrospective reports of paternal overprotectiveness as a significant positive predictor of both grandiose and vulnerable narcissism in males; for females, recollections of maternal warmth significantly negatively predicted unique variance in vulnerable narcissism. Findings suggest that the interplay between parental styles and parent gender may be associated with different manifestations of narcissism in males and females. The theoretical implications of these findings are discussed and suggestions for future research made.

Key words: Grandiose narcissism, vulnerable narcissism, gender, parenting styles, etiology

1. Introduction

Widespread conceptualisations of narcissism – as a personality disorder in the DSM-5 psychiatric nomenclature and a normative personality trait in empirical literature – capture traits including overt grandiosity, lack of empathy, entitlement, and inflated self-esteem (American Psychiatric Association, 2013). Research identifies two subtypes of narcissism: grandiose narcissism, captured by the DSM-5 and the most widely used measurement of trait narcissism (Narcissistic Personality Inventory; NPI; Raskin & Terry, 1988), and vulnerable narcissism, marked by overt shyness, hypersensitivity, shame and low self-esteem (Cain, Pincus, & Ansell, 2008). Current popular inventories of trait narcissism tend to emphasise either grandiose features (e.g., the NPI; Raskin & Terry, 1988, the Narcissistic Admiration and Rivalry Questionnaire; NARQ, Back et al., 2013) or vulnerable features (the Hypersensitive Narcissism Scale; HSNS, Hendin & Cheek, 1997), or both (the Pathological Narcissism Inventory; PNI, Pincus et al., 2009). Despite this, vulnerable narcissism is the lesser-studied form, as evidenced by research demonstrating that over 75% of the empirical literature relies on the NPI as the main assessment indicator of trait narcissism (Cain et al., 2008). Although this review is now 11 years old, more recent reviews support the dominant assessment of the NPI in the field (Yakeley, 2018), thereby emphasising the grandiose nature of narcissism.

More importantly, mainstream depictions of narcissism (DSM/NPI) resembles commonly masculine features, including physical expressions of aggression, an excessive need for power, and an authoritarian character (Corry et al., 2008). This is further reflected in meta-analytic reviews demonstrating that, compared to females, males report significantly higher scores on the NPI and are up to 75% more likely to be diagnosed with narcissistic personality disorder (NPD; Grijalva et al., 2014). However, with females being less likely to

endorse overt narcissistic characteristics, gender differences may instead divide along the lines of grandiose and vulnerable narcissism. The literature has consistently found the vulnerable type of narcissism to be either gender neutral (Besser & Priel, 2009; Miller et al., 2010), or with females scoring significantly higher than males (Huxley & Bizumic, 2017; Pincus et al., 2009; Wright et al., 2010). It has been conjectured that the observed gender differences in grandiose and vulnerable narcissism may be attributed to gender-related norms associated with masculinity and femininity, respectively (see Grijalva et al., 2014, for an overview).

Relatedly, the etiology of narcissism has commonly been linked to early dysfunctional interactions between the child and primary caregiver, with some theorists suggesting narcissism is the result of neglectful parenting (Kohut, 1977), combined with strict and harsh parenting (Kernberg, 1975), or from overly indulgent parenting (Millon, 1981; see Horton et al., 2006, for an overview). It could be argued that gender socialisation processes might align with certain parental styles that contribute somewhat to observed gender differences in narcissism. For instance, the tendency for males to display more features of grandiose narcissism may reflect differences in parental socialisation approaches to make boys more agentic (e.g., withholding affection, making boys more independent; Wood & Eagly, 2012). If this is the case, then existing gender differences would suggest parents are using parenting styles associated with grandiose narcissism more commonly with boys than with girls (Grijalva et al., 2014). Although conceivably more than one of these perspectives has merit in the aetiology of narcissism, it has been theorised that the two dimensions of narcissism may be associated with different parental aetiologies (Horton, 2011). This may partially be due to the fact that Kernberg's (1975) formulation of narcissism is centred on grandiosity and aggression, while Kohut's (1977) description of narcissism focuses on vulnerability, depression and shame.

To date, empirical support for the above theories is limited as the literature is divided regarding what style(s) of parenting are associated with the emergence of grandiose and vulnerable narcissism. For instance, retrospective reports of negative parenting (e.g., childhood abuse, emotional neglect, and high parental discipline) have been associated with vulnerable narcissism (Maxwell & Huprich, 2014; Miller et al., 2010), and grandiose narcissism (Cater, Zeigler-Hill, & Vonk, 2011; Maxwell & Huprich, 2014). However, some studies found negative parenting to be unrelated to grandiose narcissism (Miller et al., 2010; Miller & Campbell, 2008), while others demonstrate that the combination of warmth and cold parenting is associated with both narcissism subtypes (Otway & Vignoles, 2011).

The research considering gender differences in this field also provides conflicting results. For instance, Horton et al. (2006) found significant gender differences regarding associations of parenting with ‘unhealthy’ narcissism (total NPI score after variance associated with self-esteem is partialled out). As opposed to males, unhealthy narcissism in females was associated with parental warmth and psychological control. In contrast, other research found recollections of low parental care to be positively associated with unhealthy narcissism (the NPI Entitlement /Exploitativeness facet) in females (Lyons, Morgan, Thomas, & Hashmi, 2013). Using a multidimensional assessment of narcissism, Mechanic and Barry (2014) found that retrospective reports of inconsistent discipline predicted unique variance in vulnerable narcissism, with a main effect also present for gender (i.e., females scoring higher). Overall, the existing empirical discrepancies on parental styles with respect to gender differences in narcissism remains inconclusive given the utilisation of singular or multiple measurements of conceptually similar parenting constructs.

In light of previous research suggesting that the gender of the parent may influence narcissistic development in divergent ways (Cramer, 2011; Jonason, Lyons & Bethell, 2014; Trumpeter et al., 2008), exploring parenting styles by both parents may resolve previously

irreconcilable findings. A study by Cramer (2015) found that a mother's parenting style was related to vulnerable narcissism, whereas a father's parenting style was associated with the presence of grandiose narcissism. For both mothers and fathers, parenting involving permissiveness and responsiveness was negatively associated with narcissism subtypes, while authoritarian parenting was positively related to narcissism subtypes. Similarly, Huxley and Bizumiz (2017) found that recollections of maternal invalidation (coldness and rejection) positively predicted vulnerable narcissism for participants who experienced lower levels of paternal invalidation, whereas higher levels of paternal invalidation positively predicted grandiose narcissism. These findings, along with that of Cramer (2015), denote that the behaviour of both parents may influence the development of narcissism, resembling either grandiose or vulnerable expressions.

1.1 The present study

Theoretical understanding regarding the etiology of narcissism is currently limited due to its examination of different assessments of narcissism and parenting behaviours. The current study addresses these shortcomings by examining gender differences in grandiose and vulnerable narcissism in relation to perceived parenting styles by mothers and fathers, specifically neglectful (Kohut, 1977), strict (Kernberg, 1975), and indulgent parenting (Millon, 1981). These parental dimensions were used as it is proposed that gender differences in narcissism can be further elucidated by exploring recollections of early divergent parental styles by mothers and fathers, as these may indicate differential associations with grandiose and vulnerable narcissism. Such foci will arguably allow for a more comprehensive understanding to the etiology of narcissism in relation to parenting styles. Given that such interactive influence remains uninvestigated empirically, the association between recalled

parenting styles, gender, and narcissism were explored in the normal population via self-report instruments.

The research set out to test the following hypotheses:

1. This study hypothesized that males would obtain significantly higher scores on grandiose narcissism than females, and females would score significantly higher on vulnerable narcissism than males. This prediction is based on previous research on longstanding gender differences in narcissism (e.g., Grijalva et al., 2014).
2. This study hypothesized that strict parenting by the father would predict grandiose narcissism in males. This prediction is based on previous research (Cramer, 2015; Huxley & Bizumiz, 2017), and Kernberg's (1975) formulation of narcissism and theorized parenting style.
3. This study hypothesized that cold parenting by the mother would predict vulnerable narcissism in females. This prediction is based on previous research (Cramer, 2015; Huxley & Bizumiz, 2017), and Kohut's (1977) formulation of narcissism and theorized parenting style.

2. Method

2.1 Design

This study utilised a between-subjects, quasi-experimental design, with two independent variables: gender (males and females) and parental styles (coldness, warmth and overprotection). The dependent variables were grandiose and vulnerable narcissism.

2.2 Participants¹

Power analysis (G*Power 3.1.9.2; Faul et al., 2007) determined a minimum sample size of 146 to detect a moderate effect size ($f^2=0.15$) using multiple regression with six predictor variables ($\alpha = .05$, power = .95). The sample comprised 328 participants (176 females) aged 18-64 years ($M = 27.93$ years, $SD = 9.09$). Although the researchers were based in a UK university, the study was conducted online and therefore not restricted to a UK sample. Participants were recruited through advertisements on social media, flyers, and psychology research participation websites. The sample was predominantly Caucasian ($n = 262$), with 16 South or East Asian, 12 Hispanic or Latino, 10 African, and five Middle Eastern; the remaining 23 participants chose ‘mixed’ or ‘other’ for ethnic status.

2.3 Materials and Procedure

2.3.1 *Pathological Narcissism Inventory*

The Pathological Narcissism Inventory (PNI; Pincus et al., 2009) is a 52-item self-report measure of pathological narcissism assessing both vulnerable (34 items) and grandiose (18 items) features. Responses for the 52-items are made on a 6-point Likert scale ranging from 0 (not at all like me) to 5 (very much like me). Three sub-scales load on to the Narcissistic Grandiosity scale: Exploitativeness, Grandiose Fantasy, and Self-Sacrificing Self-Enhancement; four sub-scales load on to the Narcissistic Vulnerability scale: Contingent Self-esteem, Hiding the Self, Devaluing, and Entitlement Rage. As advised by Pincus et al. (2009) and in line with previous research (e.g., Wright et al., 2010), mean scores were computed instead of total scores due to variability in scale length. The PNI is a widely used

¹ The data presented here is from a larger study, where other measures were administered to the sample and are reported elsewhere (give citation).

measurement and manifests good internal consistency (Pincus et al., 2009). In this study, Cronbach's alpha was high (grandiose scale: $\alpha = 0.87$; vulnerable scale: $\alpha = 0.95$).

2.3.2 Psychological Control Scale

The Psychological Control Scale (PCS; Barber, 1996) is a revised 10-item subscale from the Children's Report of Parental Behaviour Inventory (CRPBI; Barber, 1996), and measures levels of psychological control asserted by one's mother and father. Some components of psychological control include love withdrawal, guilt induction, and excessive pressure to change. This questionnaire uses a 3-point Likert scale: 1 (not like her/him) to 3 (a lot like her/him). In this study, participants were asked to recall their parents' parenting styles up until the age of 16. If participants did not grow up with either parent, they were asked to refer to their primary female/male caregiver. The mean rating of each parent was calculated where ratings for both were provided; otherwise, one single rating was used. Items pertaining to maternal parenting (or mother figure) and paternal parenting (or father figure) were totalled separately to create corresponding indices. The PCS manifests good internal consistency and has been utilised in previous narcissism research (Horton et al., 2006; Miller & Campbell, 2008). Internal reliability for the PCS was $\alpha = .91$ in the current study.

2.3.3 Parenting Bonding Instrument

The Parenting Bonding Instrument (PBI; Parker et al., 1979) measures recollections of parental care and overprotectiveness. Items on parental care include 'He/She was affectionate to me' and 'he/she tended to baby me'. Items on parental overprotectiveness includes 'He/she invaded my privacy' and 'he/she tried to control everything I did'. Twelve items are reserved for the mother (or female caregiver) and 12 for the father (or male caregiver). Participants were asked to recall their experienced parenting styles during their

first 16 years of life on a 4-point Likert scale: 1 (very like her/him) to 4 (very unlike her/him). As with the PCS, the mean ratings for each parent were computed where ratings were provided for both; otherwise, one single rating was used. Also, as with the PCS, the 12 items for maternal parenting and 12 items for paternal parenting were totalled to create corresponding indexes. The PBI manifests good internal consistency and has been used in previous narcissism research (Jonason et al., 2014; Maxwell & Huprich, 2014). In the present study, internal reliability for the total PBI score was $\alpha = .80$.

2.3.4 Procedure

Participants were presented with demographic questions and then continued to complete the PNI, PCS and PBI questionnaires, which were presented in that order for each participant. Finally, participants had the option to enter a prize draw for a £50 Amazon voucher. Ethical approval was granted by the relevant Ethics Committees.

2.3.5 Data Analyses

Data were analysed using SPSS software version 23. Preliminary analyses were conducted to ensure all variables under investigation met the assumptions of parametric tests. Grandiose and vulnerable narcissism variables were normally distributed, as determined through measuring skewness and kurtosis (scores were within the acceptable range of -1 to +1). In males, the overprotection component by the father and care component (PBI) by the mother, and psychological control (PCS) by the mother exceeded the acceptable range of kurtosis and skewness, and therefore were not normally distributed. In females, non-parametric variables pertained to the care component by the father and mother, and psychological control by the father and mother. Although the data set contained both parametric and non-parametric variables, assumptions of normality were assumed given the

sample size of the current study. This was based on the grounds that values of kurtosis and skewness should have no upper criterion applied in sample sizes >200 (Field, 2009).

As for the regression models, preliminary analyses showed no evidence of multicollinearity as assessed by the variance inflation factor (VIF), ensuring scores were <10 and tolerance scores were >0.2. Durbin-Watson statistics showed that values for each model were close to 2, indicating independence of residuals. There was linearity as assessed through plotting standardised residuals against the predicted values, and there was evidence of homoscedasticity through visual inspection using P-P plots (Field, 2009). All assumptions of regression were therefore met.

3. Results

3.1 Gender differences in Narcissism

To test for gender differences in grandiose and vulnerable narcissism, a 2 x 2 mixed design ANOVA with narcissism type as within-subjects factor and gender as between-subjects factor was conducted. There was a significant main effect of narcissism type, $F(1, 326) = 92.687, p < .001, \eta^2 = .221$, such that overall participants scored higher on grandiose narcissism ($M = 2.7, SD = .83$) than vulnerable narcissism ($M = 2.3, SD = 1.0$). There was also a significant main effect of gender, $F(1, 326) = 14.939, p < .001, \eta^2 = .044$, such that females ($M = 2.7, SD = 1.9$) scored significantly higher on overall narcissism score compared to males ($M = 2.4, SD = 1.6$). A significant interaction was found between gender and narcissism type, $F(1, 326) = 120.904, p < .001, \eta^2 = .271$.

Post-hoc t-tests were conducted in order to explore this interaction (see Table 1). Independent samples *t*-tests revealed gender differences in vulnerable narcissism (females higher than males), but not in grandiose narcissism. Paired samples *t*-tests showed higher

grandiose narcissism scores than vulnerable narcissism for males, $t(151) = 13.5, p < .001, d = 1.09$; but no difference for females, $t(175) = -1.0, p = .298, d = -0.07$.

INSERT TABLE 1 HERE

3.2 Relationships between parenting styles and narcissism

Table 2 presents the correlation between measures of grandiose and vulnerable narcissism and parental styles. In both males and females, grandiose narcissism showed a positive significant relationship with psychological control and overprotection by both parents, and a negative significant relationship with warmth by both parents. Similarly, vulnerable narcissism was negatively significantly correlated with warmth by both parents in males and females, and positively correlated with psychological control and overprotection by both parents in females but only by the father in males.

INSERT TABLE 2 HERE

3.3 Parental styles in predicting narcissism

Several simultaneous multiple regression analyses were performed with all six predictor variables (parental warmth, overprotectiveness and psychological control, each for both mother and father) entered into the equation in one step, as this technique allows for the unique variance explained by each predictor. These regression models were ran separately for each outcome variable (grandiose narcissism and vulnerable narcissism) and gender (males and females), as shown in Tables 3 and 4.

Table 3 summarises the multiple regression for predicting grandiose narcissism. In males, this regression model was statistically significant ($F(6,137) = 4.670, p < .001, \text{adj. } R^2 = .170$), with a significant positive predictor being overprotection by the father. In females, the

regression test was statistically significant ($F(6,159) = 4.597, p < .001, \text{adj. } R^2 = .148$), with no significant predictors emerging in the model.

INSERT TABLE 3 HERE

Table 4 summarises the multiple regression for predicting vulnerable narcissism. In males, this regression model was statistically significant ($F(6,137) = 4.400, p < .001, \text{adj. } R^2 = .162$), with the same pattern emerging: overprotection by the father was a significant positive predictor. In females, the regression test was statistically significant ($F(6,159) = 7.099, p < .001, \text{adj. } R^2 = .211$), with warmth by the mother being the only significant negative predictor.

INSERT TABLE 4 HERE

4. Discussion

This study aimed to explore the influence of parenting styles in the development of narcissism to enhance theoretical knowledge regarding gender differences in the personality construct. The hypothesis that there would be gender differences in grandiose and vulnerable narcissism was partly supported. Replicating those studies which found gender differences on vulnerable narcissism (Huxley & Bizumic, 2017; Pincus et al., 2009; Wright et al., 2010), current results show that females exhibited significantly higher scores on vulnerable narcissism than males. The observed gender difference may reflect theorisations regarding the adherence to gender-role expectations associated with femininity and masculinity (Grijalva et al., 2014). Although males scored significantly higher on grandiose narcissism than vulnerable narcissism, this study did not find gender differences on the PNI grandiosity component. However, these findings need to be interpreted with caution as the PNI grandiosity scale does not contain NPI traits such as entitlement, leadership, authority and exhibitionism: traits that have been found to consistently resemble male gender qualities

(Grijalva et al., 2014). This invites the contention that the PNI grandiosity scale may not adequately capture narcissistic grandiosity as effectively as other measures (Miller et al., 2016). Although this limitation has been rebutted by other research arguing that the PNI grandiosity does include the central elements of grandiose narcissism (Edershire, Simms & Wright, 2018), it is argued here that more research is needed to replicate the current findings.

The relationship between narcissism and recalled parental styles also showed similar results across gender. In both males and females, recollections of cold and overprotective parents in childhood were associated with exhibiting higher levels of grandiose and vulnerable narcissism in adulthood. Males and females who recalled warm and nurturing parents were less likely to exhibit grandiose and vulnerable features in adulthood. In light of this evidence, both forms of narcissism appear to share similar origins in childhood, and these do not differ by gender. Upon closer analysis, this is not surprising given that the PNI was developed to measure narcissism in its pathological presentation, and thus recollections of a warm and nurturing childhood may prevent the emergence of narcissistic maladaptive traits in children, whereas the upbringing of negative and cold parenting practices may, instead, exacerbate maladaptive features which form the child's narcissistic self. These results add some clarity to previous irreconcilable findings regarding the developmental precursors of grandiose and vulnerable narcissism (Cater et al., 2011; Maxwell & Huprich, 2014; Miller et al., 2010; Otway & Vignoles, 2011), and provide support for clinical theories conjecturing that narcissistic disturbances in the child arise from parental coldness (Kohut, 1977) combined with strict and harsh demands (Kernberg, 1975).

Regression analyses suggests there might be divergent developmental precursors of different kinds of narcissism across gender. Partly supporting the second hypothesis of this study, a conflicting pattern emerged where recalling an overprotective father in childhood was predictive of both grandiose and vulnerable narcissism in males. In line with Kernberg's

theory (1975), it could be speculated that reminiscing a strict and harsh father who fails to inculcate warmth and autonomy may cultivate an exaggerated sense of self-worth in the child, consequently forming the belief that others are inferior. Such self-evaluation in males may therefore create a false grandiose self that is sustained in the exploitation of others. However, the same parenting style by the father may also foster features of vulnerable narcissism including a narcissistic sense of entitlement, rage and fluctuating self-esteem in adult males. These findings provide further support for previous research demonstrating a link between paternal parenting and grandiose narcissism (Cramer, 2015; Huxley & Bizumiz, 2017), and are consistent with the research finding a positive relationship between grandiose narcissism and parental monitoring (Cater et al., 2011). However, the results contradict those studies which found parental monitoring to be negatively associated with grandiose narcissism (Horton et al., 2006) and unrelated to vulnerable narcissism (Cater et al., 2011).

While no significant predictors emerged for females with regard to grandiose narcissism, results suggest that recalling a mother as failing to provide a secure base of warmth while inducing psychological control tactics, such as guilt induction and love withdrawal, may foster certain traits of vulnerable narcissism in females. These findings support the third hypothesis of the study and provides credence to the theory proposed by Kohut (1977). Accordingly, females' recollections of maternal neglect may have facilitated traits associated with shame, doubt and contingent self-esteem, which are indicative of vulnerable narcissism. These findings are in congruence with those studies finding an association between maternal parenting and vulnerable narcissism (Cramer, 2015; Huxley & Bizumiz, 2017), and adds novel theoretical knowledge to the scant literature on parenting styles and vulnerable narcissism in females.

Further, the above results reveal marked gender differences, both in parenting styles and narcissistic presentation. One possible explanation for these gender differences is that

parenting styles by mothers and fathers may be influenced and reinforced by behaviours along gendered lines of socialisation. Sons and daughters may be treated differently depending on the gender of the parent, and may internalise stereotyped behaviour and therefore respond to parenting practices in ways that align with society's gendered expectations (Wood & Eagly, 2012). These ideas resonate with research which suggests that gendered parenting influences children's personality (Cramer, 2011; Jonason et al., 2014; Trumpeter et al., 2008).

Overall, the current findings extend the existing literature concerning the developmental origins of narcissism by showing that various features of the personality construct have different patterns of association with recollections of early life experiences, in males and females. The gender difference linking females to vulnerable and subtle manifestations of narcissism offers theoretical implications for the personality construct; a phenomenon which has predominantly been conceptualised through the lens of overt grandiosity indicative of the male gender (Corry et al., 2008). The findings here accentuate the importance of including a multidimensional assessment of narcissism and relevant parental practices in order to more comprehensively understand and disentangle the etiology and presentation of narcissism in relation to gender.

4.1 Limitations and future directions

As is the case with any self-reported study, a limitation of the current findings is its reliance on retrospective reports of childhood experiences, as the possibility cannot be ruled out that the findings reflect differences in recollection rather than differences in original childhood experience. Indeed, it is not beyond the realms of possibility that narcissistic individuals may be more likely to recollect a childhood where they were the very centre of the attention of warm parenting, or perhaps recollect one where they felt the attention they were entitled to was insufficient. Moreover, not only were relationships found only weakly to

moderately correlated, but potential parent-child interactions could not be directly investigated. The current data, therefore, cannot rule out the possibility that the direction of causality may be either bidirectional or reversed. Future research should explore parent-child perceptions (see Brummelman et al., 2015), using a multidimensional assessment of narcissism to further illuminate the origins of this personality construct across gender. This is particularly important considering the research indicating discrepancies between parents and adolescents' views of parenting behaviours exists (Mechanic & Barry, 2015).

Research has also suggested that narcissism is a moderately heritable personality trait and is partly rooted in early emerging temperamental traits (Vernon et al., 2008). It is recommended that longitudinal research study the bidirectional link between parenting and adolescent narcissism via genetic influences on parenting as this may help account for child characteristics which could evoke certain parental responses (see Ayoub et al., 2018). In addition, since there are clear cultural differences in parenting (see Bornstein, 2012), it would be interesting to look further into this. As this was not a specific focus of the current study, cultural information was not recorded, but it is likely that the sample was not UK-specific. In order to determine specifically the influence of culture on parenting styles in the emergence of narcissism, future research could either look at homogenic monocultural samples as well as comparing between cultures.

Overall, future research is required to create a clearer picture of the combination of factors, parenting and otherwise, which contribute to narcissistic personality features in males and females. Despite the current limitations, this study provides novel insights into how gender is expressed differently in the presentation of narcissism, and how these differences are related to recollections of paternal and maternal parenting practices. These findings can inform the development of preventative educational and effective parenting programs in the treatment of narcissism.

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Table 1*Gender differences in narcissism using independent samples t-tests*

	Males (<i>n</i> = 152)		Females (<i>n</i> = 176)		<i>t</i> (df)	<i>p</i>	<i>Cohen's D</i>
	Mean (SD)						
Grandiose narcissism	2.8 (.82)		2.7 (.84)		.863 (326)	.389	.12
Vulnerable narcissism	1.9 (.86)		2.7 (1.0)		-7.440 (324)	<.001	.85

Table 2*Correlation matrix (Pearson's *r*) between grandiose and vulnerable narcissism and parental styles.*

	Grandiose narcissism			Vulnerable narcissism		
	Males	Females	Fisher-Z	Males	Females	Fisher-Z
	<i>r</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>r</i>	<i>p</i>
Psychological control (Father)	.262** (148)	.288** (170)	.802	.226** (148)	.308** (170)	.435
Psychological control (Mother)	.224** (151)	.332** (176)	.293	.191* (151)	.366** (176)	.089
Overprotection (Father)	.328** (145)	.211** (167)	.271	.330** (145)	.256** (167)	.477
Overprotection (Mother)	.235** (152)	.261** (176)	.802	.183* (152)	.309** (176)	.230
Warmth (Father)	-.260** (145)	-.239** (167)	.841	-.227** (145)	-.309** (167)	.441
Warmth (Mother)	-.288** (152)	-.269** (176)	.857	-.318** (152)	-.406** (176)	.362

Note. Number of participants in brackets. **p*<0.05 (2-tailed). ***p*<0.01 level (2-tailed).

Table 3
Summary of independent variables predicting grandiose narcissism

Males (<i>n</i> = 144)					
Predictor variables	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Psychological control (Father)	.046	.222	.024	.205	.838
Psychological control (Mother)	.281	.206	.163	1.363	.175
Overprotection (Father)	.364	.181	.244	2.010	.046*
Overprotection (Mother)	-.092	.161	-.072	-.572	.568
Warmth (Father)	-.101	.117	-.087	-.864	.389
Warmth (Mother)	-.183	.141	-.135	-1.301	.195
Females (<i>n</i> = 166)					
Predictor variables	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Psychological control (Father)	.224	.180	.163	1.246	.215
Psychological control (Mother)	.226	.191	.158	1.187	.237
Overprotection (Father)	-.109	.166	-.090	-.661	.510
Overprotection (Mother)	.099	.151	.092	.658	.511
Warmth (Father)	.079	.092	-.084	-.852	.396
Warmth (Mother)	-.068	.095	-.073	-.719	.473

Note. **p*<0.05.

Table 4
Summary of independent variables predicting vulnerable narcissism

Males (<i>n</i> = 143)					
Predictor variables	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Psychological control (Father)	-.023	.225	-.012	-.101	.920
Psychological control (Mother)	.249	.209	.144	1.195	.234
Overprotection (Father)	.471	.183	.313	2.570	.011*
Overprotection (Mother)	-.198	.163	-.154	-1.214	.227
Warmth (Father)	-.071	.19	-.060	-.598	.551
Warmth (Mother)	-.229	.142	-.167	-1.607	.110
Females (<i>n</i> = 164)					
Predictor variables	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Psychological control (Father)	.227	.220	.130	1.031	.304
Psychological control (Mother)	.095	.234	.052	.406	.686
Overprotection (Father)	-.130	.203	-.084	-.638	.525
Overprotection (Mother)	.190	.185	.138	1.023	.308
Warmth (Father)	-.150	.113	-.125	-1.320	.189
Warmth (Mother)	-.267	.117	-.222	-2.285	.024*

Note. **p*<0.05.