

**Mom-and-Pop Narcissism: The Impact of Attention Seeking and Grandiosity on Couples' Experience of the Transition to Parenthood**

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### **Abstract**

Various studies have demonstrated associations between personality disorders and relationship satisfaction. We examine the associations between attention seeking and grandiosity, both features of Narcissistic Personality Disorder, and relationship satisfaction before and after the transition to parenthood. We then expand our analysis to parental satisfaction and post-partum depression (PPD). Non-clinical couples (N=103 couples) expecting their first child, completed measures of grandiosity, attention seeking, and relationship satisfaction before birth, and of relationship satisfaction, parental satisfaction, and PPD symptoms three months afterward. Attention seeking was associated with less parental satisfaction and more PPD symptoms, and with less pre-partum relationship satisfaction for their partners. For men, attention seeking was also associated with pre-partum relationship satisfaction. Grandiosity was associated with a decrease in relationship satisfaction after birth, though surprisingly, with less PPD symptoms for their partners. We discuss how these findings might be related to changes in social support and work-life balance during the TTP.

Keywords: Transition to Parenthood, Narcissism, Personality Disorders, Post Partum Depression, Close Relationships

**Mom-and-Pop Narcissism: Father's Attention Seeking and Mother's Grandiosity impact couples' experience of the transition to parenthood**

Having a first child is an important stage in the life of many romantic couples (Doss & Rhoades, 2017). Although this transition to parenthood (TTP) is often thought of as a joyous event, many couples experience considerable difficulties in the period immediately following the birth of their first baby (Cowan & Cowan, 2000), such as dramatic role changes, fatigue, excessive work, financial burdens, and other sources of stress (Belsky & Pensky, 1988). In addition, while relationship satisfaction (RS) tends to decline over time for both parents and nonparents, the transition to parenthood hastens this decline for many (Doss, Rhoades, Stanley, & Markman, 2009; Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008; Mitnick, Heyman, & Smith Slep, 2009).

In the last two decades, researchers have moved beyond identifying this general phenomenon to focus on identifying which couples are at specific risk for relationship problems in the transition to parenthood (e.g., Trillingsgaard, Baucom, & Heyman, 2014; for review, see Doss & Rhoades, 2017). Various studies have explored infant (e.g., Cox, Paley, Burchinal, & Payne, 1999; Feeney et al., 2001), situational (e.g., unplanned pregnancy: Cox et al., 1999; financial stress: Doss et al., 2009) and relational (e.g., Doss et al., 2009) factors. Some have also examined the role of personality variables in this regard (e.g., Belsky & Pensky, 1988; Trillingsgaard, Baucom, & Heyman, 2014). For example, high trait autonomy and low impulse control have been found to predict greater decreases in relationship satisfaction after birth for women (Levy-Shiff, 1994).

Maladaptive personality traits, particularly those associated with personality disorders, have been linked with unfavorable relationship outcomes (e.g., South, 2014; Stroud, Durbin, Saigal, & Knobloch-Fedders, 2010). South suggested that personality disorders might leave

couples ill-equipped to face the stressors and difficulties of daily life and should therefore be considered (alongside other risk factors) as vulnerabilities for adverse relational outcomes. The current study will investigate how narcissism, a particularly toxic mix of personality traits associated with narcissistic personality disorder, may present difficulties for couples facing the stressful aspects of the transition to parenthood.

### **Narcissism as a vulnerability**

A recent review of research on trait narcissism (Krizan & Herlache, 2017) defined it as entitled self-importance: "narcissistic individuals are those who view their own needs and goals as more significant than others' and exhibit an inflated sense of importance and deservingness (synonyms include egotism and arrogance)." (p. 4).

Narcissistic personality disorder (NPD) has been recognized as a personality disorder since DSM-III (1980). Its lifetime prevalence is estimated at up to 6% of the population (Dhawan, Kunik, Oldham, & Coverdale, 2010). Interestingly, the formal categorical diagnosis of NPD using DSM-IV-TR (APA, 2000) or DSM-5 (APA, 2013) criteria appears to only be partially related to trait narcissism (e.g., Cain, Pincus, & Ansell, 2008; Miller & Campbell, 2008). Fortunately, the updated DSM-5 dimensional definition proposed for further study in Section III of the DSM-5 (APA, 2013) comes closer to that used in trait narcissism research (Skodol, Bender & Morey, 2014). In particular, it recognizes both grandiose self-importance as well as variable and vulnerable self-esteem as core features of the disorder, and highlights the attempted regulatory role of attention and approval seeking alongside overt or covert grandiosity.

To date, most research on narcissism in a relational context has used trait (i.e., dimensional) measures, finding ties to various relationship and parenting difficulties. Narcissism, measured using the widely-used Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988),

was linked to reduced commitment (Campbell & Foster, 2002), a link mediated by narcissistic individuals' increased attention to alternative romantic partners and to their perception of these alternative partners as more viable. It has also been linked to higher aggression (Keller et al., 2014); to more hostile behaviors during a neutral discussion (Lamkin, Lavner & Shaffer, 2017); and women's (but not men's) narcissism has been linked to lower relationship satisfaction for both partners (Lavner, Lamkin, Miller, Campbell, & Karney, 2016).

### **Narcissism and the transition to parenthood**

The transition to parenthood may pose a specific challenge for individuals high in trait narcissism. To date, most studies on parenting and narcissism have focused on the *child's* narcissism (e.g., Horton, Bleau, & Drwecki, 2006; Mechanic & Berry, 2015) rather than the parents'. Studies on *parents'* narcissism have tended to focus on extreme cases such as child abuse, and not on narcissism in the general population of parents. These have indicated that narcissism might be associated with particularly problematic parenting. For example, Wiehe (2003) found that narcissism was higher among abusive parents under investigation by child services than among a control sample of foster parents. This finding was obtained both when parental narcissism was assessed using the NPI and when it was assessed using the Hypersensitivity Narcissism Scale (HSNS; Hendin & Cheek, 1997), an index focused on covert narcissism – i.e., the more vulnerable facet of the trait. In a more recent study, Crouch et al. (2015) found similar results using the HSNS among parents with higher risk for child physical abuse. One recent study that did examine narcissism among parents in the general population (Hart, Bush-Evans, Hepper, & Hickman, 2017) found that the trait, as assessed using the NPI, was associated with less authoritative and more authoritarian parenting.

While these findings suggest that people with high trait narcissism might demonstrate

extremely maladaptive parenting behaviors, to the best of our knowledge no previous study has examined trait narcissism in the transition to parenthood itself. As an initial, exploratory study, we will examine associations between narcissism and three aspects of the transition to parenthood. First, following evidence on narcissism and low relationship satisfaction, we will examine relationship satisfaction both before the TTP and after it (adjusted for initial satisfaction). Second, as couples become parents, parental satisfaction is also relevant. To the best of our knowledge, the study coming closest to examining directly the link (or lack thereof) between narcissism and parental satisfaction was conducted by Kopelman and Mullins (1992), who demonstrated that narcissism is associated with reduced satisfaction in one's family, as indexed using items adapted from the general job satisfaction measure developed by Hackman and Oldham (1975). There are other indications that narcissism might be associated with reduced parental satisfaction. Parental satisfaction is often correlated with relationship satisfaction (Goetting, 1986). Further, parental satisfaction is reduced in mothers with borderline personality disorder (Newman, Stevenson, Bergman & Boyce, 2007), a disorder that is comorbid with and included in the same cluster as NPD in the DSM-V (APA, 2013). Thus, we will examine if parental satisfaction is also associated with narcissism.

Finally, we will examine possible associations between narcissism and levels of post-partum depression. It is unclear whether narcissism may play a role in post-partum depression (PPD), a relatively common disorder with 13% of mothers (O'hara & McCabe, 2013) and 10% of fathers (Paulson & Bazemore, 2010) reporting significant depressive symptoms following the TTP. Narcissism has been strongly linked to depression in multiple studies, both in clinical and non-clinical samples (e.g., Dawood & Pincus, 2017; Morf et al., 2017). However, there is less research specifically concerning narcissism and post-partum depression. Research on personality

in general and PPD tends to focus on mothers and has found that higher levels of neuroticism (e.g. Dudel et al., 2014) and self-criticism (Besser, Priel, Flett, & Wiznitzer, 2007) are linked to higher levels of PPD. PPD, in turn, may exert negative effects on parenting behavior, reducing the parents' sensitivity, investment in the child, overall quality of parenting, as well as their ability to co-parent (Foster, Garber, & Durlak, 2008) further exacerbating the stress associated with the transition to parenthood.

Studies that have examined personality *disorders* and post-partum depression have either not included individuals high in narcissism or failed to identify such individuals in their samples (e.g. Akman, Uguz & Kaya, 2007; Ramsauer, Mühlhan, Mueller & Schulte-Markwort, 2016) making it unclear whether narcissistic traits may contribute to post-partum depression and the associated parenting difficulties. However, as these studies do find other personality disorders to be associated with PPD, and as previous studies have shown that relationship satisfaction, which is negatively associated with narcissism, can be a factor associated with PPD (Beck, 1996; Yim, Tanner Stapleton, Guardino, Hahn-Holbrook, & Dunkel Schetter, 2015), we examined the possibility that narcissism might be associated with PPD symptoms.

### **The PID-5**

There is considerable debate in narcissism research concerning the interplay between the various scales measuring narcissism, clinical theory, and the DSM diagnosis of NPD. For example, some researchers argue that scales should focus on high discriminant validity, correlating with ratings of NPD and no other personality disorder (Miller, Lyman, & Campbell, 2016). Others argue that the concept of narcissism should go beyond the DSM diagnosis of NPD, and that correlations with other personality disorder scales (Wright, 2016) or even with traits not necessarily associated with any PD (Altmann, 2017) are to be expected, and perhaps even

desired. For brevity's sake, the current study focuses on one measure – the PID-5 (Krueger, Derringer, Markon, Watson, & Skodol, 2012). The PID-5 is based on the revised DSM-5 (APA, 2013) dimensional definition of NPD proposed for further study, which includes criteria tapping grandiosity and attention seeking. This measure was selected for being a validated, relatively brief measure, which has a clearly defined purpose: it is a trait measure which has been developed to be associated with the DSM clinical diagnosis of narcissistic personality disorder and is proposed to be a required part of the diagnosis in the future.

### **The current study**

The current study will be the first to examine the effects of grandiosity and attention seeking on couples' satisfaction with their marriage, parenting satisfaction after the transition to parenthood, and post-partum depressive symptoms. Based on the extant literature, we hypothesized that individuals with high trait narcissism would be less satisfied with their relationship (especially after a major stressful period such as the transition to parenthood), would be less satisfied as parents, and would be at higher risk for post-partum depression. It was less clear whether grandiosity versus attention seeking will operate differently. Thus, we included both types of narcissism in all our models. The following hypotheses guide our work:

**Hypothesis 1.** As mentioned above, personality disorder features are associated with adverse effects on couples' relationships. Therefore, we expect grandiosity and attention seeking to be associated with less relationship satisfaction before birth for both partners.

**Hypothesis 2.** As the transition to parenthood is associated with increased stress and turmoil, we expect facets of narcissism will be associated with reduced post-partum relationship satisfaction (when adjusting for pre-partum satisfaction), as participants with more narcissistic features will have a more difficult time dealing with the transition to parenthood.



**Hypothesis 3 (exploratory).** To the best of our knowledge, no previous research has examined the association between parental satisfaction and narcissism; that said, previous research cited above does demonstrate that parental satisfaction is associated with relationship satisfaction (itself negatively associated with narcissism), that narcissism is associated with less family satisfaction, that narcissism is associated with harmful parental behavior, and that comorbid personality disorders are associated with less parental satisfaction. Therefore, we examined this association in an exploratory manner, tentatively expecting grandiosity and attention seeking to be negatively associated with participants' parental satisfaction.

**Hypothesis 4.** As narcissism has been found by previous studies to be associated with depression, we expected grandiosity and attention seeking to be associated with post-partum depression symptoms.

## Method

### Participants

108 Israeli heterosexual expecting couples were recruited for a larger project on relational processes during the transition to parenthood, using social media and forum advertising and flyers posted around the university campus. Couples were required to be over 18 years old, expecting their first child, and only singletons. Four couples asked to be removed from the study after birth, and one more did not complete the three-month follow-up, leaving 103 couples in the study. Average age was 29.5 years ( $SD = 4.27$ ) and average relationship length was 4.91 years ( $SD = 2.93$ ). Participants received a coupon for a breakfast for two for participating in the pre-partum meeting, and the Israeli equivalent of 150 USD for completing the post-partum questionnaires along with other procedures. These include a lab meeting and a daily diary, which were part of the larger study and were performed after all data for the current study was collected

from each couple.

## Measures

**Narcissism.** Narcissism was assessed using the Grandiosity and Attention Seeking facets of the PID-5 questionnaire (Krueger et al., 2012), suggested by the DSM-5 (APA, 2013) for further study as dimensional criteria for Narcissistic Personality Disorder. The questionnaire asks participants to rate statements such as "To be honest, I'm just more important than other people" (Grandiosity) or "I do things to make sure people notice me" (Attention Seeking) on a 4-point Likert-type scale from "Very False or Often False" to "Very True or Often True". Both scales were created by coding the items 0-3 and averaging the scale items. Grandiosity was assessed using 6 items (Cronbach's alpha – 0.73 for men and 0.75 for women) and Attention Seeking using 8 items (Cronbach's alpha – 0.87 for men and 0.91 for women).

**Relationship Satisfaction.** Relationship Satisfaction was assessed both pre- and post-partum using the 4-item version of the Couples Satisfaction Index (CSI-4; Funk & Rogge, 2007) which ask participants to rate statements such as "I have a warm and comfortable relationship with my partner" on 7-point Likert-type scales (e.g. from "Not at all True" to "Completely True"). Items were scored between 0 to 6 and summed, creating a theoretical range of 0-24. The scale was found to be highly reliable (Cronbach's alpha - 0.91 for men and 0.88 for women pre-partum, 0.92 for men and 0.91 for women post-partum). To ensure that post-partum satisfaction reflects changes occurring after birth, analyses including post-partum satisfaction used the residuals of post-partum satisfaction after accounting for the shared variance with pre-partum satisfaction.

**Parental Satisfaction.** Parental Satisfaction was assessed using a single item, "In

general, when I am spending time with my children I am: 1 = not at all happy, 7 = extremely happy", adapted from Lyubomirsky and Lepper (1999) by Ashton-James, Kushlev & Dunn (2013). Ashton-James and colleagues used Lyubomirsky and Lepper's 4-item subjective happiness scale and applied it to spending time with children (the equivalent original question reads "In general, I consider myself: 1 = not at all happy, 7 = extremely happy"). To reduce participant burden in the context of the larger project, we only used the first item.

**Post-partum Depression.** PPD symptoms were assessed using the 10-item Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden & Sagovsky, 1987). The scale includes 10 items, asking participants to rate statements such as "I have been anxious and worried for no good reason" on 4 levels, specific to each question, such as "No, not at all \ Hardly ever\Yes, sometimes\Yes, very often". Items were coded 0-3 and summed, creating a theoretical range of 0-30. The scale was found to be highly reliable (Cronbach's alpha – 0.8 for men and 0.86 for women).

## **Procedure**

Research assistants met with couples in their homes during the last trimester of pregnancy, and asked them to complete various questionnaires, including the grandiosity and attention seeking items and the CSI-4. Three months after birth, participants were asked to complete online questionnaires, including the CSI-4, the EPDS and our parental satisfaction item. A full list of questionnaires employed can be found online at <https://osf.io/tpfgu>.

## **Statistical Analyses**

In families with two parents the transition to parenthood is a dyadic process, in which both partners can affect each other. Therefore, we used an Actor Partner Interdependence Model

(APIM; Kenny, Kashy & Cook, 2006), in which both partners' personalities, which might themselves be correlated (and often are; Caspi & Herbener, 1990), can both have effects on each outcome variable. *Actor effects* are associations between one partner's personality and their own outcome variables (e.g. mothers' grandiosity and mothers' relationship satisfaction). *Partner effects* are associations between one partner's personality and the other partner's outcome variable (e.g. mothers' grandiosity and fathers' relationship satisfaction). An example of the model for one outcome variable (PPD) is illustrated in Figure 1.

Following Kenny, Kashy & Cook's (2006) recommendations for dealing with dyadic data, we conducted a multilevel modeling analysis using the R package nlme (Pinheiro, Bates, DebRoy, Sarkar and R Core Team, 2017). All variables were standardized to a mean of 0 and a variance of 1 before the multilevel analyses, to make effect estimates roughly comparable with each other.

$R^2$  statistics for models were calculated by obtaining  $r$  values for the association between outcome variable values predicted by the model and the actual values and squaring them. Specific effect sizes were computed by obtaining  $R^2$  statistics for variance explained by the whole model, and by the model without each one of the effects. Effect size for a given effect was the variance explained by the model without that variable, subtracted from the variance explained by the whole model (i.e., including that variable). Effect sizes were then converted back to  $r$  scores for clarity.

We included a random intercept to account for non-independence, and to assess main effects (across genders) and to test for gender differences, we used a single intercept model. For example, for Hypothesis 1:

$$(1) \text{ Pre-partum RS}_{ij} = b_{0j} + b_1 + b_{1G} * \text{Gender}_{ij} + b_2 * \text{Grandiosity}_{ij} + b_{2G} * \text{Gender}_{ij} * \text{Grandiosity}_{ij} + b_3 * \text{Attention Seeking}_{ij} + b_{3G} * \text{Gender}_{ij} * \text{Attention Seeking}_{ij} + e_{ij}$$

In this equation, Gender is coded -0.5 for men and 0.5 for women,  $b_1$ ,  $b_2$  and  $b_3$  are the fixed effects across genders for the intercept ( $b_1$ ) and for each predictive variable, and  $b_{1G}$ ,  $b_{2G}$  and  $b_{3G}$  are the fixed gender effects.  $b_{0j}$  is the random intercept for couple  $j$  – the deviation of this couples' average RS from their RS as predicted by the fixed effects.  $b_1$  is the fixed intercept (i.e. mean RS).  $e_{ij}$  is the remaining error for person  $j$  of couple  $i$ .

Where gender effects were significant, to estimate effects separately for each gender, we used a double intercept model, multiplying each effect by a dummy-coded variable for each gender. For example, for Hypothesis 1, looking into the association between grandiosity and attention seeking and pre-partum RS, we used the following equation:

$$(2) \text{ Pre-partum RS}_{ij} = b_{0i} + b_{10} * \text{Male}_{ij} + b_{11} * \text{Female}_{ij} + b_{20} * \text{Male}_{ij} * \text{Grandiosity}_{ij} + b_{21} * \text{Female}_{ij} * \text{Grandiosity}_{ij} + b_{30} * \text{Male}_{ij} * \text{Attention Seeking}_{ij} + b_{31} * \text{Female}_{ij} * \text{Attention Seeking}_{ij} + e_{ij}$$

Here,  $b_{10}$  is the intercept for men, and  $b_{11}$  is the intercept for women. Similarly,  $b_{20}$  fixed effect for grandiosity for men,  $b_{30}$  is the fixed effect for attention seeking for men, and  $b_{21}$  and  $b_{31}$  are the equivalent effects for women. In this equation, we model satisfaction for person  $j$  in couple  $i$ .  $\text{Male}_{ij}$  is coded 1 if person  $j$  in couple  $i$  is male and 0 otherwise;  $\text{Female}_{ij}$  is coded similarly but with 1 for females.

## Results

### Descriptives

Means and standard deviations for all study variables are presented in Table 1. There were no gender differences in pre-partum or post-partum RS or in parental satisfaction. We also performed a series of paired T-tests to examine whether post-partum RS was lower than pre-partum RS, and indeed, post-partum RS was lower for both men ( $t(102) = 5.677; p < .0001$ ) and women ( $t(102) = 8.705; p < .0001$ ). PPD was significantly higher for women than for men ( $t(102) = 3.535; p < .001$ ). 5 men and 11 women were found to be over the clinical threshold for PPD (EPDS > 12; Cox, Holden & Sagovsky, 1987).

No gender differences were found for grandiosity and attention seeking, in accord with a recent meta-analysis on the subject (Grijalva et al., 2015). Seven men (6.8%) had clinically elevated attention seeking (Attention Seeking  $\geq 2$ ; Samuel, Hopwood, Krueger, Thomas, & Ruggero, 2013), 2 of which (1.9%) also had clinically elevated grandiosity (Grandiosity  $\geq 2$ ; Samuel et al., 2013). One man (1%) had clinically elevated grandiosity, and not clinically elevated attention seeking. Eight women (7.8%) had clinically elevated attention seeking, 3 of which (2.9%) also had clinically elevated grandiosity. Three women (2.9%) had clinically elevated grandiosity and not clinically elevated attention seeking.

Zero-order correlations between all variables are presented in Table 2. Relationship satisfaction was highly correlated (all  $r$  values  $> .4$ ;  $r$  values above .19 or below -.19 are significant) between partners and between phases (pre- and post-partum; note that as these are zero-order correlations, post-partum RS is raw and not adjusted for pre-partum RS). Post-partum depression was correlated with post-partum relationship satisfaction and parental satisfaction for both men and women (all  $r$  values  $> .24$ ). Attention seeking was correlated with grandiosity for both men and women ( $r = .4$  for men, .42 for women). Attention seeking was negatively correlated with relationship satisfaction both pre- and post-partum and with parental satisfaction,

and positively correlated with post-partum depression for men ( $r = -.26, -.28, -.24$  and  $.43$  respectively). For women, out of the outcome variables, it was only significantly correlated with post-partum depression ( $r = .23$ ). Grandiosity was not significantly associated with any outcome variables for men; it was significantly associated with post-partum relationship satisfaction for women.

### **Hypothesis 1 – Pre-partum Relationship Satisfaction**

In a multilevel model, partner's attention seeking was associated with significantly less relationship satisfaction ( $p < .05$ , Effect size  $r = .164$ ). The effects of actor's attention seeking differed significantly between genders ( $p < .01$ , Effect size  $r = .211$ ). Therefore, a dual-intercept model was used to examine specific gender effects. For men, higher attention seeking was associated with significantly less relationship satisfaction ( $b = -.359$ ,  $SE = .113$ ,  $t(94) = -3.188$ ,  $p = .002$ , Effect size  $r = .249$ ). This was not the case for women ( $b = .05$ ,  $SE = .104$ ,  $t(94) = .479$ ,  $p = .633$ , Effect size  $r = .036$ ). No other effects were found. Estimates, standard deviations and t values for main effects and gender differences are given in Table 3.

### **Hypothesis 2 – Post-partum Relationship Satisfaction**

In a multilevel model, looking at the residuals of post-partum RS after accounting for pre-partum RS, actor grandiosity was associated with lower relationship satisfaction ( $p < .05$ , Effect size  $r = .156$ ). This effect did not differ by gender. A test for gender effects found only a significantly lower intercept for women ( $p < .022$ , Effect size  $r = .131$ ), meaning that for women relationship satisfaction declined significantly more after birth. No other effects were found. Estimates, standard deviations and t values for main effects and gender differences are given in Table 4.

### **Hypothesis 3 – Parental Satisfaction**

In a multilevel model, actor attention seeking was associated with reduced parental satisfaction after birth ( $p < .01$ , Effect size  $r = .191$ ). No other effects were found, and no effects were found to significantly differ across genders. Estimates, standard deviations and t values for main effects and gender differences are given in Table 5.

### **Hypothesis 4 – Post-partum Depression**

In a multilevel model, Actor attention seeking was significantly associated with more PPD symptoms ( $p < .0001$ , Effect size  $r = .296$ ). Notably, partner grandiosity was associated with **less** PPD symptoms ( $p < .05$ , Effect size  $r = -.135$ ). No other effects were found. The only significant gender effect found was a significant difference between the intercept terms ( $p < .0001$ , Effect size  $r = .213$ ), reflecting the fact the women had more PPD symptoms than men on average. Estimates, standard deviations and t values for main effects and gender differences are given in Table 6.

## **Discussion**

The current study set out to evaluate the associations between two facets of narcissism (*grandiosity* and *attention seeking*, as defined by the DSM-V trait model proposed for future research; APA, 2013) and relational as well as parental outcomes in the transition to parenthood. The result pattern, summarized in Table 7, was mixed. Our hypotheses were partially confirmed, particularly when it came to attention seeking, and to a lesser extent when it came to grandiosity.

### **Hypothesis 1**

Our first hypothesis was partially confirmed, as actor attention seeking was associated with less pre-partum relationship satisfaction for men and partner attention seeking was



associated with less pre-partum relationship satisfaction. However, no effect was found for neither actor nor partner grandiosity.

The attention seeking actor effects for men could be related to the fact that fathers often experience a lack of social support surrounding birth, as extended family members and other support providers tend to focus on the mother and the newborn (Deave, Johnson, & Ingram, 2008). Importantly, this dynamic could be already present three months before birth, at the time of our pre-partum assessment. Indeed, one study found that fathers who went to antenatal preparatory classes often felt excluded (Deave & Johnson, 2008).

The lack of social support might be experienced as interpersonal rejection which might pack a greater punch for those high in attention seeking. In a study on narcissism, failure and rejection, Besser & Priel (2010) asked participants to picture themselves in hypothetical scenarios of either interpersonal rejection or achievement failure, and examined the resulting negative affect. Interpersonal rejection was associated especially high negative affect in participants who scored high on the conditional self esteem (CSE) subscale of the PNI; this subscale was found by Wright and colleagues (2013) to be associated with attention seeking ( $r=.39$ ) much more than with grandiosity ( $r = .13$ )<sup>1</sup>, which could explain why there were no effects for grandiosity.

The attention seeking partner effects could be general effects, unrelated to the transition to parenthood. A previous study which examined general associations between narcissistic personality disorder symptoms and relationship satisfaction in a non-clinical sample found only

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<sup>1</sup> To verify that the effects are different, we tested them using Wilson's modification of the Hotelling t-test, as recommended by Dunn and Clark (1971). As we did not have the correlation between attention seeking and grandiosity in the sample we pessimistically assumed them to be uncorrelated. Effects were significantly different,  $t(1650) = 8.53$ ,  $p < .0001$ .

partner effects (South, Turkheimer & Oltmanns, 2008).

## **Hypothesis 2**

Our second hypothesis was partially confirmed. When adjusting for pre-partum relationship satisfaction, only actor grandiosity was found to be negatively associated with post partum relationship satisfaction. No effect was found for partner grandiosity or for actor or partner attention seeking.

The effect of grandiosity could be tied to the sense of achievement failure experienced after birth. Previous studies have found that post-childbirth, family and child-related goals tend to take the place of personal ones (Salmela-Aro, Nurmi, Saisto, & Halmesmäki, 2000), and parents tend to experience reductions in self-esteem (Bleidorn et al., 2016).

This explanation goes along with some indications of gender differences in grandiosity effects, that our study might have been underpowered to find significant. The gender difference effect size was larger than .1 ( $b = -.19$ ,  $SE = .112$ ,  $t(94) = -1.7$ ,  $p = .092$ ; Effect size  $r = .121$ ), and a dual-intercept model revealed a significant effect for women ( $b = -.217$ ,  $SE = .078$ ,  $t(94) = -2.771$ ,  $p = .007$ , Effect size  $r = .196$ ) but not for men ( $b = -.027$ ,  $SE = .078$ ,  $t(94) = -0.349$ ,  $p = .728$ , Effect size  $r = .025$ ). Thus, it may be the case that only women with high trait grandiosity experienced a reduction in relationship satisfaction after birth. This is in line with the fact that the reductions in self-esteem and changes in personal goals found in previous research (Bleidorn et al., 2016; Salmela-Aro et al., 2000), which might be driving the grandiosity main effect, were larger for women. Of course, this line of reasoning is contingent on the grandiosity gender effect being replicated in future studies.

As for the fact that these effects were not found for attention seeking, this could be a

confound created by the fact that we tested the effects of grandiosity and attention seeking in the same analysis; when repeating the analysis without including grandiosity, the attention seeking effect was also significant ( $b = -.11$ ,  $SE = .052$ ,  $t(98) = -2.111$ ,  $p = .037$ , Effect size  $r = .151$ ).

### **Hypothesis 3**

Our third hypothesis was partially confirmed. Actor attention seeking was negatively associated with parental satisfaction. No effect was found for partner attention seeking or for actor and partner grandiosity. The effects of attention seeking could again be associated with experiences of interpersonal rejection, as external support is typically decreased a few months after birth, when excitement among friends and family members subsides (Bost, Cox, Burchinal, & Payne, 2002). They might also be related to the lower relational satisfaction associated with attention seeking, which has been shown to be associated with less parental satisfaction (Goetting, 1986).

### **Hypothesis 4**

Our fourth hypothesis was partially confirmed, although surprisingly, results for partner grandiosity were in direct contrast with our hypothesis. Actor attention seeking was tied to increased post-partum depression. No effect was found for partner attention seeking or for actor grandiosity. Partner grandiosity was found to be *negatively* associated with post-partum depression.

The effects of actor attention seeking could again be associated with experiences of interpersonal rejection. Beyond the reduction in external support discussed above, Crockenberg and Leerkes (2003) have suggested that one of the phenomena underlying post-partum depression might be interpreting various behaviors of the baby as rejection of the parent, an

interpretation which might be typical in parents with high trait attention seeking. Finally, the lower relational satisfaction associated with attention seeking, has also been shown to be associated with post-partum depression (Yim et al., 2015).

As for the surprising effects of partner grandiosity, there is reason to believe that they indicate differences between attention seeking and grandiosity and not an inherent grandiosity effect. When running the same analysis without including grandiosity, the effect became non-significant ( $b = -.102$ ,  $SE = .067$ ,  $t(98) = -1.528$ ,  $p = .129$ , Effect size  $r = .104$ ). The difference may be related to the relationship between social support and social pressure. In their review, Yim and colleagues (2015) find that a lack of partner support can be associated with increased post-partum depression. Lannin, Gyll, Krizan, Madon, and Cornish (2014) found that in situations where there is high social pressure to support, which may very well be the case after birth, individuals with narcissism as measured by the HSNS are affected by the pressure and tend to provide support which did not differ from individuals with low levels of HSNS narcissism. Miller and colleagues (2014) found HSNS to be more associated with grandiosity ( $r = .41$ ) than with attention seeking ( $r = .21$ ) although we could not check whether the difference is statistically significant<sup>2</sup>.

### **Broader Implications, Limitations, and Future Directions**

The transition to parenthood is a difficult time for many parents (Belsky & Pensky, 1988), and might result in deterioration of couples' relationships (Doss, Rhoades, Stanley, & Markman, 2009) or post-partum depression (Paulson & Bazemore, 2010). The results of the

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<sup>2</sup> Miller and colleagues did not report on the association between attention seeking and grandiosity; Using Wilson's test as recommended by Dunn and Clark (1971), the difference was not significant if conservatively assuming that they were not associated in the sample,  $t(95) = 1.51$ ,  $p = .13$ . However, assuming an association of .43 which was found for men in our sample, the difference would be significant,  $t(95) = 1.99$ ,  $p = .049$ .

current study might help identify couples at greater risk for such adverse outcomes.

According to our results, while the partners of individuals with high attention seeking are generally less satisfied with their relationships, childbirth might introduce additional risks to the attention seeking partners themselves: they are likely to be less satisfied with their parenting and are prone to post-partum depression. Men with high attention seeking were also less satisfied with their relationships, although it is unclear if this is related to pregnancy and birth or if it is a general phenomenon. Couples who are aware of this vulnerability and of its potential downstream consequences could prepare for it in certain ways (or, alternatively, clinicians working with both or either partner could help with such preparation). For example, partners with high attention seeking (especially male ones) could make efforts to strengthen external social ties, so as not to rely in an unrealistic manner on their over-taxed partners or on the immediate network of social support for caring, companionship, or validation. They should also try to prepare for the fact that the extra attention and care from their social circles will naturally decline as life goes on.

In those couples in which one partner has high levels of grandiosity, a different set of adverse outcomes looms, but it may be averted with forethought. Specifically, in such couples, individuals with high grandiosity tend to feel less satisfied with their relationships, while their partners might experience more post-partum depression symptoms. Though speculative, it seems likely that the narcissistic insult involves difficulties in pursuing personal and professional goals. Couples who can anticipate such feelings could consider an earlier return to the workforce for the grandiose partner. Clinicians working with such couples (or with one of the partners) could help identify other sources of esteem that can be magnified, celebrated, or pursued.

These ideas notwithstanding, the current study is not free of limitations. First, though the

current study used a prospective longitudinal design, it cannot be used to infer causality. Specifically, though the narcissism was measured pre-partum and the outcomes were measured post-partum reducing the likelihood of reverse causation, it could still be the case that some third variable (e.g., attachment style) influenced both the personality measures and the various outcome measures.

Second, because these data were drawn from a larger study in which narcissism was not the sole focus, our assessment of narcissism was based on subscales from one single instrument (the PID-5; Krueger et al., 2012). As noted above, other narcissism scales appear to tap into somewhat different aspects of the trait (Cain, Pincus, & Ansell, 2008). The current study also demonstrates the difficulty of applying existing research to research performed using these new measures. We therefore look forward to future studies which would examine narcissism in the transition to parenthood with more varied measures.

Third, to reduce participant burden, our measure of parental satisfaction was based on a single item. The 4-item measure it was taken from was found to be modestly correlated with child centrism in a previous study (Ashton-James et al., 2013;  $r = .27, p < .05$ ), and the item itself was correlated with post partum depression in the current study ( $r = -.36$  for men and  $-.31$  for women), and thus demonstrates some convergent validity. However, it is by no means a thoroughly validated measure, and future studies should consider using additional or alternative measures and further examining this item's validity.

Fourth, the current study examined the effects of narcissism on the transition to parenthood for the first three months after birth. Future studies could follow couples for a longer period, to determine if these effects persist over the years. Importantly, such studies could link parental narcissism and its proximal post-partum effects (noted above) with longer-standing

parental behavior (e.g., aggression towards one's children: Wiehe, 2003) as well as with child outcomes.

Finally, it would also be useful to examine these links in diverse socio-cultural settings. Couples' experiences in the first few months after birth can be highly influenced by the surrounding society and by socio-economic norms and status. In particular, the length of maternity and paternity leave can have dramatic effects on the transition to parenthood (e.g., Feldman, Sussman, & Zigler, 2004). In Israel, new mothers usually receive 14 weeks of paid maternity leave, whereas paternity leave options are rarely exercised, and in effect strongly discouraged: fathers asking for them are often treated as liars who do not actually plan to care for their newborn during their paid leave (Perez-Vaisvidovsky, 2017). In countries with different cultures and policies, gender effects are likely to be different. To further explore this, we hope to see cross-cultural studies, studies on same-sex parents, and studies on families in which the fathers stay at home after birth that could test the generalizability of our findings.

## **Conclusion**

The current study examined the links between the attention-seeking and grandiosity – on the one hand, and personal, relational, and parental outcomes in the transition to parenthood on the other. Attention seeking was associated with various deleterious outcomes; we argued that this unique vulnerability may have to do with the experience of many new parents who, after an initial rush of support from their social circles subsides, may experience rejection. Attention seeking men might also be affected by the fact that mothers tend to be at the center of attention surrounding pregnancy and childbirth. Grandiosity was associated with a reduction in relationship satisfaction after birth, which we suggested may be linked to the experience of many new parents whose self-esteem suffers post-partum, and for whom personal and professional

goals are often neglected or even eschewed once children enter the picture. It was also associated with *low* levels of post-partum depression on the part of grandiose individuals' partners. We reasoned that this might be related to a tendency to be more supportive when there is strong societal pressure to help one's partner which might be associated with trait grandiosity. We believe these results demonstrate the importance of assessing disordered personality – in this case, narcissism – in a sensitive multi-faceted manner, and in specific contexts, which can help reveal unique patterns of experiences and symptomatology.



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**Table 1. Descriptive Statistics**

	Men			Women			Gender Differences	
	Mean	SD	Range	Mean	SD	Range	t(df)	p
RS (Pre-Partum)	18.718	2.731	7-21	19.029	2.415	7-21	-1.279(102)	.204
RS (Post-Partum)	17.203	3.612	7-21	16.815	3.599	3-21	1.126(102)	.263
Parental Satisfaction	6.311	.919	2-7	6.136	.829	4-7	1.566(102)	.121
Post-Partum Depression	4.903	3.86	0-17	6.767	4.514	0-21	-3.635(102)***	<.001
Grandiosity	.958	.554	0-2.667	.932	.558	0-2.167	.353(102)	.725
Attention Seeking	.956	.631	0-2.75	1.015	.693	0-2.625	-.597(102)	.552

\*\*\*p < .001 RS – Relationship Satisfaction

**Table 2. Zero-Order Correlations**

	1	2	3	4	5	6	7	8	9	10	11
1. Men's RS (Pre-Partum)											
2. Women's RS (Pre-Partum)	.55										
3. Men's RS (Post-Partum)	.67	.45									
4. Women's RS (Post-Partum)	.45	.7	.53								
5. Men's Parental Satisfaction	.2	-.03	.22	.16							
6. Women's Parental Satisfaction	.07	.14	-.01	.12	.16						
7. Men's Post-Partum Depression	-.3	-.23	-.36	-.3	-.34	-.02					
8. Women's Post-Partum Depression	-.04	-.12	-.04	-.31	-.1	-.24	.24				
9. Men's Attention Seeking	-.26	-.2	-.28	-.3	-.24	-.06	.43	.11			
10. Women's Attention Seeking	-.05	.1	-.05	-.03	.08	-.1	-.07	.23	-.12		
11. Men's Grandiosity	-.01	-.03	-.08	-.1	-.01	-.03	.16	-.05	.4	.01	
12. Women's Grandiosity	.02	.06	-.04	-.19	.1	-.01	-.13	.17	.04	.42	.11

RS – Relationship Satisfaction. Correlations at  $r > .19$  or  $r < -.19$  are statistically significant

**Table 3. Multilevel analysis of the antecedents of pre-partum relationship satisfaction (Hypothesis 1)**

	Main effects				Gender differences			
	b(SE)	t(df)	p	r	b(SE)	t(df)	p	r
Intercept	-.012(.085)	-.14(102)	.889	.001	.12(.095)	1.274(94)	.206	.06
<b>Actor</b>								
Grandiosity	.078(.074)	1.052(94)	.296	.08	-.08(.155)	-.515(94)	.608	.04
Attention seeking	-.154(.079)	-1.946(94)	.055 <sup>†</sup>	.153	.408(.147)	2.773(94)	.007**	.211
<b>Partner</b>								
Grandiosity	.061(.074)	.815(94)	.417	.062	-.016(.155)	-.101(94)	.92	.01
Attention seeking	-.165(.079)	-2.076(94)	.041*	.164	-.097(.147)	-.656(94)	.513	.047

<sup>†</sup>p < .1 \* p < .05 \*\*p < .01 positive b values for gender differences indicate larger positive effects and smaller negative effects for women

**Table 4. Multilevel analysis of the antecedents of post-partum relationship satisfaction, adjusting for pre-partum satisfaction (Hypothesis 2)**

	Main effects				Gender differences			
	b(SE)	t(df)	p	r	b(SE)	t(df)	p	r
Intercept	-.009(.057)	-1.149(102)	.882	.001	-.194(.084)	-2.32(94)	.022*	.131
<b>Actor</b>								
Grandiosity	-.122(.055)	-2.239(94)	.027*	.156	-.19(.112)	-1.7(94)	.092 <sup>†</sup>	.121
Attention seeking	-.057(.057)	-1.003(94)	.319	.072	.085(.109)	.779(94)	.438	.054
<b>Partner</b>								
Grandiosity	-.013(.055)	-.231(94)	.818	.016	.05(.112)	.449(94)	.654	.032
Attention seeking	-.103(.057)	-1.805(94)	.074 <sup>†</sup>	.13	-.174(.109)	-1.601(94)	.113	.111

<sup>†</sup>p < .1 \*p < .05 positive b values for gender differences indicate larger positive effects and smaller negative effects for women.

Dependent variable values are residuals remaining after adjusting for the effect of pre-partum relationship satisfaction.

**Table 5. Multilevel analysis of the antecedents of parental satisfaction (Hypothesis 3)**

	Main effects				Gender differences			
	b(SE)	t(df)	p	R	b(SE)	t(df)	p	r
Intercept	-.006(.075)	-.076(102)	.94	.001	-.183(.127)	-1.434(94)	.155	.091
<b>Actor</b>								
Grandiosity	.072(.076)	.94(94)	.35	.065	-.065(.154)	-.42(94)	.675	.029
Attention seeking	-.211(.078)	-2.7(94)	.008**	.191	.211(.153)	1.38(94)	.171	.096
<b>Partner</b>								
Grandiosity	.046(.076)	.603(94)	.548	.042	-.109(.154)	-.705(94)	.483	.05
Attention seeking	-.035(.078)	-.444(94)	.658	.031	-.07(.153)	-.46(94)	.647	.032

\*\*p < .01 positive b values for gender differences indicate larger positive effects and smaller negative effects for women

**Table 6. Multilevel analysis of the antecedents of post-partum depression symptoms (Hypothesis 4)**

	Main effects				Gender differences			
	b(SE)	t(df)	P	r	b(SE)	t(df)	P	r
Intercept	.009(.072)	.125(102)	.901	.001	.426(.113)	3.765(94)	<.0001****	.213
<b>Actor</b>								
Grandiosity	.044(.071)	.623(94)	.535	.041	.091(.144)	.634(94)	.527	0
Attention seeking	.32(.073)	4.373(94)	<.0001****	.296	-.198(.142)	-1.397(94)	.166	.091
<b>Partner</b>								
Grandiosity	-.146(.071)	-2.059(94)	.042*	.135	.001(.144)	.006(94)	.995	0
Attention seeking	.122(.073)	1.668(94)	.099 <sup>†</sup>	.111	.162(.142)	1.145(94)	.255	.075

<sup>†</sup>p < .1 \*p < .05 \*\*\*\*p < .0001 positive b values for gender differences indicate larger positive effects and smaller negative effects for women

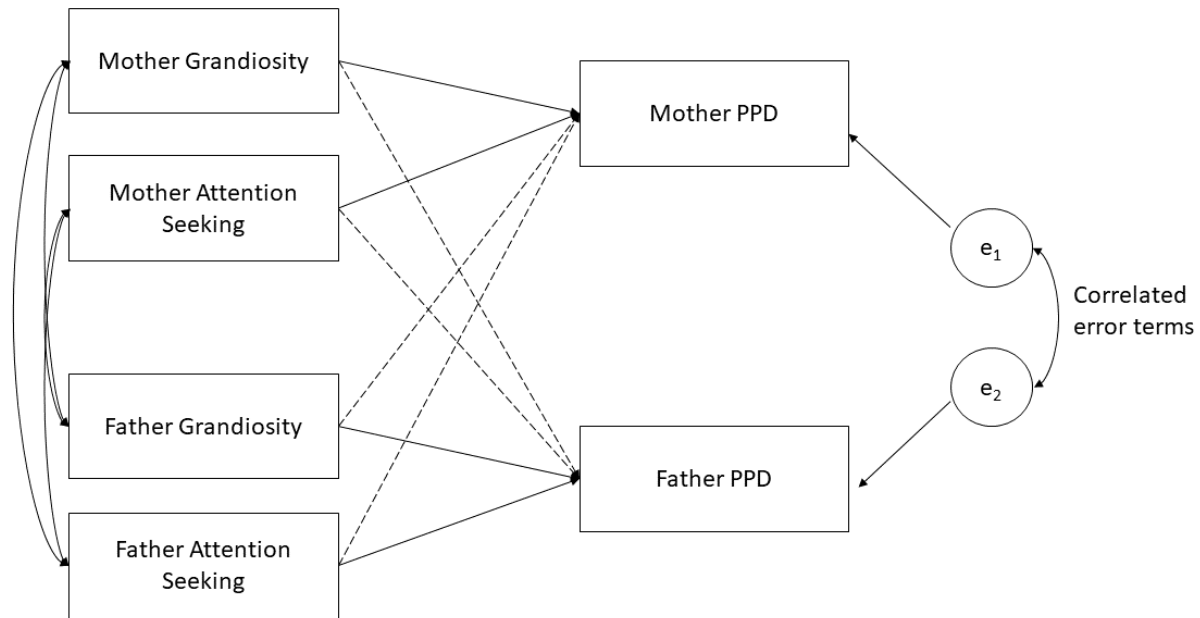
**Table 7. Summary of statistical significance and effect sizes**

	Pre-partum RS	Post- partum RS	Parental Satisfaction	PPD symptoms
<b>Actor</b>				
Grandiosity	n.s.	.156*	.n.s.	n.s.
Attention seeking	.249** (Men only)	n.s.	.191**	.296*****
<b>Partner</b>				
Grandiosity	n.s.	n.s.	n.s.	.135* (effect contrary to hypothesis)
Attention seeking	.164*	n.s.	n.s.	n.s.

\*p < .05 \*\*p < .01 \*\*\*\*\*p < .0001 RS – relationship satisfaction PPD – post-partum depression



**Figure 1. Sample actor-partner independence model (APIM) for post-partum depression**



Dashed lines represent partner effects. PPD – post-partum depression.