



# Gender Differences in Personality Correlates of Postpartum Distress Among First-Time Mothers and Fathers



Kathleen K. Little & Laura E. Sockol, Ph.D.

Davidson College

## INTRODUCTION

- Personality traits are patterns of emotions, beliefs, and behaviors that an individual displays in a variety of domains across his or her lifespan.
- Personality traits may function as risk factors for symptoms of depression and anxiety during stressful life events, such as the transition to parenthood.
- Previous research in postpartum women has found that neuroticism is associated with postpartum depression.
- Few studies have investigated the relationship between personality traits and psychological symptoms among fathers. This limited research suggests that situational factors, rather than personality traits, may be more strongly associated with psychological symptoms among men.
- Most research on the relationship between personality and psychological symptoms among new parents has focused on three dimensions of personality (extraversion, introversion, & neuroticism), rather than using a five-factor model.
- The relationship between personality traits and symptoms of anxiety during this period has not been investigated in men or women, despite the fact that symptoms of anxiety are common in this population.
- The goal of this study was to investigate gender differences in the relationships between personality traits and symptoms of depression and anxiety during the early postpartum period.

## METHOD

- Data were obtained from two previous studies of first-time mothers (Sockol, Epperson & Barber, 2014) and first-time fathers (Sockol & Allred, 2017).
- In both studies, participants were recruited online through social media and online forums for new parents. Participants were between the ages of 18-45, resided in the United States, and were currently expecting their first child or had experienced the birth of a child within the previous 6 months.
  - For the current study, analyses were restricted to postpartum mothers ( $n = 127$ ) and fathers ( $n = 111$ ) who reported that they were currently in a relationship.
- Gender differences in the magnitude of the relationship between each personality trait and symptoms were assessed by comparing the correlations for mothers and fathers using Z scores (Meng, Rosenthal & Rubin, 1992).
- Participants completed all measures through an online interface:
  - Personality: Big Five Inventory
    - Openness to Experience ( $\alpha_{\text{MOTHERS}} = .79$ ;  $\alpha_{\text{FATHERS}} = .68$ )
    - Conscientiousness ( $\alpha_{\text{MOTHERS}} = .83$ ;  $\alpha_{\text{FATHERS}} = .83$ )
    - Extraversion ( $\alpha_{\text{MOTHERS}} = .90$ ;  $\alpha_{\text{FATHERS}} = .86$ )
    - Agreeableness ( $\alpha_{\text{MOTHERS}} = .77$ ;  $\alpha_{\text{FATHERS}} = .79$ )
    - Neuroticism ( $\alpha_{\text{MOTHERS}} = .87$ ;  $\alpha_{\text{FATHERS}} = .84$ )
  - Depression:
    - Mothers: Edinburgh Postnatal Depression Scale (EPDS,  $\alpha = .88$ )
    - Fathers: Beck Depression Inventory (BDI,  $\alpha = .91$ )
  - Anxiety:
    - Mothers: State-Trait Anxiety Inventory (STAI,  $\alpha = .96$ )
    - Fathers: Beck Anxiety Inventory (BAI,  $\alpha = .91$ )

## RESULTS

Descriptive Statistics for the Big Five Inventory and Comparison of Correlations Between the Big Five Inventory and Postpartum Outcomes for Mothers and Fathers

Personality Trait	Range	Mothers			Fathers				Difference	
		<i>M</i> ( <i>SD</i> )	Depression <i>r</i>	Anxiety <i>r</i>	Range	<i>M</i> ( <i>SD</i> )	Depression <i>r</i>	Anxiety <i>r</i>	Depression <i>p</i>	Anxiety <i>p</i>
Openness to Experience	20-49	37.20 (6.12)	-.07	-.15	25-50	37.97 (5.30)	.20*	.15	.037	.020
Conscientiousness	18-45	35.08 (6.03)	-.24**	-.30**	16-45	31.56 (6.10)	-.27**	-.31**	.826	.912
Extraversion	8-40	25.72 (7.65)	-.23**	-.32***	10-39	24.36 (6.77)	-.02	-.12	.097	.116
Agreeableness	21-45	34.60 (5.58)	-.26**	-.34***	13-45	33.18 (5.82)	.04	-.09	.020	.046
Neuroticism	9-40	22.96 (6.81)	.66***	.75***	9-37	20.85 (6.34)	.35**	.42***	.001	.000

## DISCUSSION

- We identified several gender differences in relationships between personality traits and psychological symptoms:
  - There was a stronger relationship between neuroticism and symptoms of depression and anxiety for mothers than for fathers.
  - There was a significant relationship between agreeableness and symptoms of depression and anxiety for mothers, but not for fathers.
  - There was a significant relationship between openness to experience and symptoms of depression for fathers, but not for mothers.
- Limitations of this study include a cross-sectional design, which prevents conclusions about a causal relationship between personality traits and symptoms of anxiety and depression during the postpartum period.
- Overall, this study shows that there are gender differences in the relationships between personality traits and symptoms of depression and anxiety.
- This study suggests that assessing personality may help identify parents at risk for depression and anxiety during the postpartum period. However, interpretation of personality profiles should take gender into account.