



# Infant and Maternal Temperament Characteristics as Contributors to Parenting Stress in the First Year Postpartum



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## Introduction

- Although previous research has identified many factors that contribute to parenting stress,<sup>1-5</sup> the influence of parent and infant temperament has largely been unexplored.
- Given associations between temperament and emotion regulation difficulties,<sup>6</sup> parent and infant temperament characteristics are potentially important contributors to parenting stress.
- No studies were identified that examined the influence of maternal temperament characteristics on the experience of parenting stress.
- Previous research examining the influence of infant temperament on the experience of parenting stress has largely focused on difficult infant temperament (i.e., poor regulation, high negative emotionality), to the exclusion of other potentially important temperament characteristics (e.g., positive affectivity).<sup>7-10</sup>
- The present study sought to examine the influence of maternal and infant temperament on the experience of parenting stress, globally and in relation to specific aspects of the parenting role (e.g., stress related to the mother-infant attachment relationship).

## Hypotheses

- In light of previous work, it was anticipated that:
  - Higher maternal extraversion (MEX), better maternal effortful control (MEC), and better infant orienting/regulation (IO/R) would predict less total parenting stress
  - Higher maternal negative affect (MNA) and higher infant negative emotionality (INE) would predict greater total parenting stress
- Although previous research has not evaluated the impact of infant positive affectivity (IPA) on the experience of parenting stress, it was anticipated that higher IPA would predict less total parenting stress.
- Due to limited work examining factors that influence stress related to specific aspects of the parenting role, these analyses were exploratory and specific hypotheses were not made.

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## Method

- 159 mothers of healthy, four-month-old infants, participated in the present study.
- Mothers predominantly self-identified as Caucasian (92.2%), ranged in age from 20 to 46 years ( $M = 30.43$ ) and, based on income-to-needs ratios (INR), were of middle class status ( $M_{INR} = 3.04$ , range = .33 – 7.95), on average.
- To assess maternal internalizing problems (IP) and maternal temperament, mothers completed the following measures when their infants were four months of age:
  - Beck Depression Inventory, Second Edition<sup>11</sup>
  - Beck Anxiety Inventory<sup>12</sup>
  - Adult Temperament Questionnaire short form<sup>13-14</sup>
- To assess infant temperament, mothers completed the Infant Behavior Questionnaire-Revised<sup>15</sup> when infants were six months of age
- To assess maternal parenting stress, mothers completed the parent domain of the Parenting Stress Index<sup>16</sup> when infants were eight months of age.

## Results

**Table 1. Temperament Variables Predicting Total Parenting Stress**

Predictor	$\beta$	$R^2$ Increase	$F$
		<b>0.09</b>	<b>3.10**</b>
Maternal Age	0.10		
Maternal Education	0.10		
Family INR	<b>-0.25***</b>		
Infant Sex	-0.04		
Partnership Status	0.06		
		<b>0.25</b>	<b>58.94***</b>
Maternal IP	<b>0.43***</b>		
		<b>0.10</b>	<b>8.73***</b>
MNA	0.08		
MEX	<b>-0.18**</b>		
MEC	<b>-0.22***</b>		
		<b>0.10</b>	<b>10.59***</b>
IPA	-0.07		
INE	<b>0.32***</b>		
IO/R	-0.02		

## Results (continued)

**Table 2. Temperament Variables Predicting Parenting Stress Related to Specific Aspects of the Parenting Role**

DV	Predictor	$\beta$
Stress Related to Parenting Competence	Family INR	<b>-0.15*</b>
	Maternal IP	<b>0.34***</b>
	MEC	<b>-0.34***</b>
	IO/R	<b>-0.24**</b>
Stress Related to the Mother-Child Attachment Relationship	INE	<b>0.28***</b>
	IO/R	<b>-0.40***</b>
Stress Related to Feelings of Restriction in the Parenting Role	Maternal Education	<b>0.19*</b>
	Family INR	<b>-0.18*</b>
	Maternal IP	<b>0.35***</b>
	MEC	<b>-0.27***</b>
	INE	<b>0.30***</b>
Stress Related to Feelings of Depression	Maternal Age	<b>0.20**</b>
	Family INR	<b>-0.28***</b>
	Maternal IP	<b>0.43***</b>
	MEC	<b>-0.16*</b>
	INE	<b>0.17**</b>
Stress Related to the Spousal Relationship	Family INR	<b>-0.20**</b>
	Maternal IP	<b>0.34***</b>
	MEC	<b>-0.24***</b>
	INE	<b>0.39***</b>
Stress Related to Feelings of Isolation in the Parenting Role	Family INR	<b>-0.18*</b>
	Maternal IP	<b>0.31***</b>
	MEX	<b>-0.41***</b>
	INE	<b>0.23***</b>
Stress Related to Maternal Health	Maternal Education	<b>0.15*</b>
	Family INR	<b>-0.24***</b>
	Maternal IP	<b>0.32***</b>
	MNA	<b>0.20**</b>
	INE	<b>0.24***</b>
	IO/R	<b>0.19*</b>

Note. For tables with full results, please visit [www.niu.edu/emotionreg](http://www.niu.edu/emotionreg)

## Discussion

- Higher MEX and better MEC predicted less total parenting stress while higher INE predicted greater total parenting stress.
- Higher MNA predicted greater stress related to health while higher MEX predicted less stress related to feelings of isolation in the parenting role. Better MEC predicted less stress related to parenting competence, feelings of role restriction and depression, and the spousal relationship.
- Higher INE predicted greater stress related to every aspect of the parenting role, with the exception of parenting competence. Better IO/R predicted less stress related to parenting competence, the mother-infant attachment relationship, and health.
- Unexpectedly, IPA was not found to contribute to parenting stress.
- Findings in the present study suggest that mothers with better EC experience less stress in the parenting role, potentially because they are better able to regulate their feelings of distress and manage the day-to-day demands of parenting.
- In light of these findings, it may be useful for interventions which target parenting stress to include a component aimed at improving self-regulatory abilities.
- Given that mothers of infants high in negative emotionality tend to report experiencing high levels of stress, the identification of these mothers, through parental report measures of infant temperament, may be useful.
- Once identified, these families would likely benefit from a parenting stress intervention that is temperament-based (see 17-18 for a review).

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