

# Does Maternal Psychological Risk Affect Responsive Parenting Practices and Infant Emotion Regulation?

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## Introduction

### Background:

- Poor parental mental health outcomes can have negative effects on infant attachment and emotion regulation (Swain et al., 2007).
- Maternal depression (Paulson et al., 2006) and parenting stress (Coyl et al., 2002) have been correlated with reduced maternal responsiveness and negative infant social-emotional outcomes (El-Sheikh et al., 2009).
- Neuroimaging techniques have shown that responsive parenting practices lead to increased emotion regulation and secure attachment throughout childhood (Miller & Commons, 2010).

### Study Aims:

- The purpose of this study is to investigate the influence of maternal psychological risk on:
  - Responsive parenting practices during parent-child Interactions
  - Infant Emotion Regulation

## Sample

Extant data from 1,995 infants and their families in the U.S. EHS Research and Evaluation Project were used to examine the association of maternal psychological risk with child development.

Sample Characteristics	% of Sample
Child Sex	
Female	49%
Male	51%
Maternal Psychological Risk	
High	42%
Low	58%
EHS	
Program	59%
Control	49%

Table 1. Demographic percentages of study sample

## Measures

**Maternal Psychological Risk:** Scores were calculated as an average of baseline parent-reported depression (Center for Epidemiologic Studies Depression Scale), parenting stress, and dysfunctional interaction (Subscales of Parent Stress Index, Abidin, 1991).

- Scores were standardized and averaged into one variable. Scores recorded above the mean were rated as "high psychological risk."

Maternal Psychological Risk		
Depression	Parenting Distress	Dysfunctional Interactions

Table 2. Maternal psychological risk variable

**Parenting Responsiveness:** Ten-minute recordings of mother-child interactions at 14, 24, and 36 months were coded for parent responsiveness behaviors by trained and reliable coders using the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman, et al., 2013).

Parenting Responsiveness
1. Pays attention to what child is doing.
2. Changes activities to meet child's interests or needs.
3. Is flexible when child changes interests.
4. Follows what child is trying to do.
5. Responds to child's emotions.
6. Looks at child when child talks or makes sounds.
7. Replies to child's words and sounds.

Table 3. PICCOLO coding items for parent responsiveness

**Infant Emotional Regulation Outcomes:** Emotion regulation was observed and rated by trained assessors in the family home at ages 14, 24, and 36 months using Bayley-II Rating Scales (BRS; Bayley, 1993).

## Results

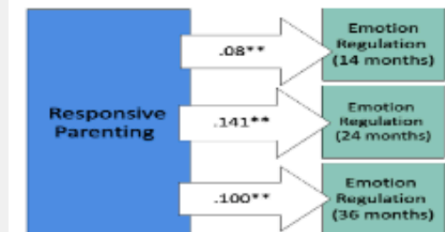


Figure 1. Correlation model for responsive parenting behaviors on emotion regulation in infants at 14, 24 and 36 months. \*\* p < .01

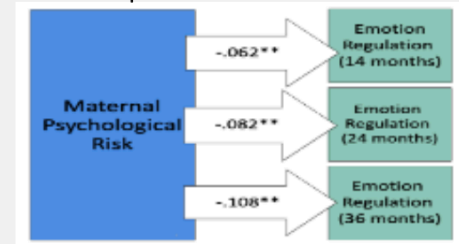


Figure 2. Correlation model on maternal psychological risk on emotional regulation in infants. \*\* p < .01

## Conclusions

- Responsive parenting is negatively correlated with maternal psychological risk and significantly correlated with infant emotion regulation throughout infancy.
  - Mothers with lower psychological risk had higher parental responsiveness and their children showed better emotion regulation.
- Future studies should consider other ways of examining child emotion regulation in the context of maternal responsiveness, perhaps by examining:
  - Bi-directional Effects
  - Neuroimaging: May be used to assess child brain activity related to emotionality during responsive interactions.