

# Early Social-Emotional Development in Children of Mothers with Psychological Risk

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## Introduction

Healthy child development depends on the ability of parents to put in necessary involvement and attention to respond to children's emotions and communication cues (Roggman, 2016). Maternal depression (Paulson et al., 2006) and parenting stress (Coyle et al., 2002) can reduce maternal responsiveness and is a risk factor for negative child social-emotional outcomes (El-Sheikh et al., 2009).

## Aims

This study examined the effects of Early Head Start (EHS) participation on social-emotional development in children of mothers with either high or low psychological risk.

## Methods

**Sample:** Extant data from 3,001 infants and their families in the U.S. EHS Research and Evaluation Project were used to examine the effect of maternal psychological risk on child development.

## Measures and Procedures:

### 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 (Parent Stress Index, Abidin, 1991). Scores were standardized and combined into one variable. Scores above the mean were rated as high and scores below the mean were rated as low.

Sample Characteristics	% of Sample
Child Sex	
Female	49%
Male	51%
Maternal Psychological Risk	
High	42%
Low	58%
EHS	
Program	50%
Control	50%

Table 1. Demographic percentages of study sample

### Infant Social-Emotional Development Outcomes:

Infant Aggression scores were calculated based off of parent reporting at 36 months using the Child Behavior Checklist (Achenbach, 1999). Recordings of child interactions were coded for infant emotional regulation and engagement by trained and reliable coders using Bayley-II Rating Scales (BRS; Bayley, 1993).

Infant Emotional Regulation	Infant Engagement	Infant Aggression
Measured using the Emotion Regulation subscale of the Bayley-II Behavior Rating Scales (BRS; Bayley, 1993).	Measured using the Orientation/Engagement subscale of the Bayley-II Behavior Rating Scales (BRS; Bayley, 1993).	Measured using aggression subscale of the Child Behavior Checklist (Achenbach, 1999).

Table 4. Infant social-emotional development outcomes

Infant Social-Emotional Development Measures	Mean	SD	Min	Max
Emotion Regulation Subscale	3.93	.76	1.00	5.00
Orientation/Engagement Subscale	3.79	.73	1.20	5.00
Aggressive Behavior Subscale	11.09	0	37	6.48

Table 5. Infant Social-Emotional measures

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## Results

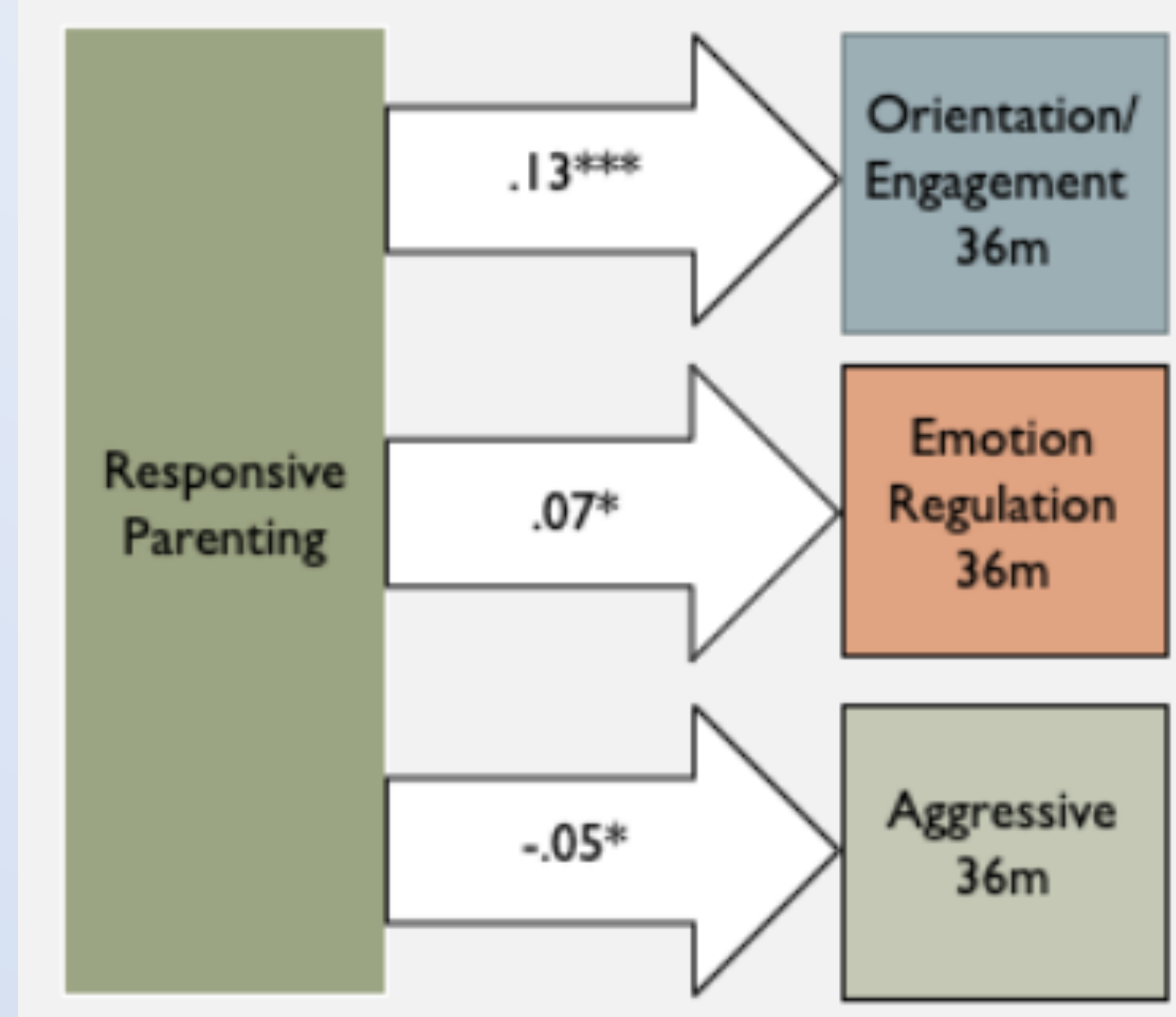


Figure 1. Correlation model for responsive parenting behaviors on social-emotional development outcomes in children at 36 months. \*\*\*p < .001, \*p < .05

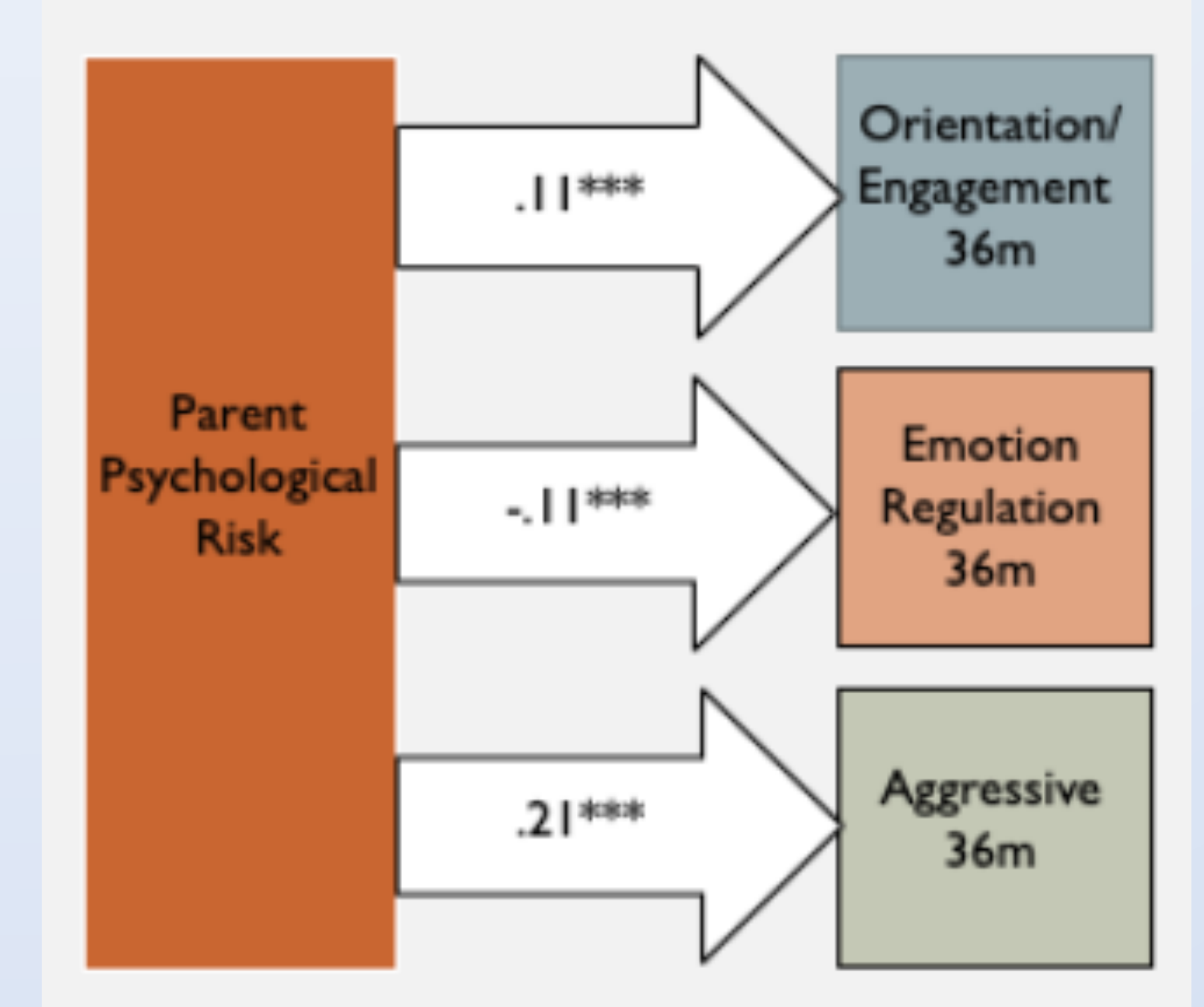


Figure 2. Correlation model on parent psychological risk on social-emotional development outcomes in children at 36 months. \*\*\*p < .05

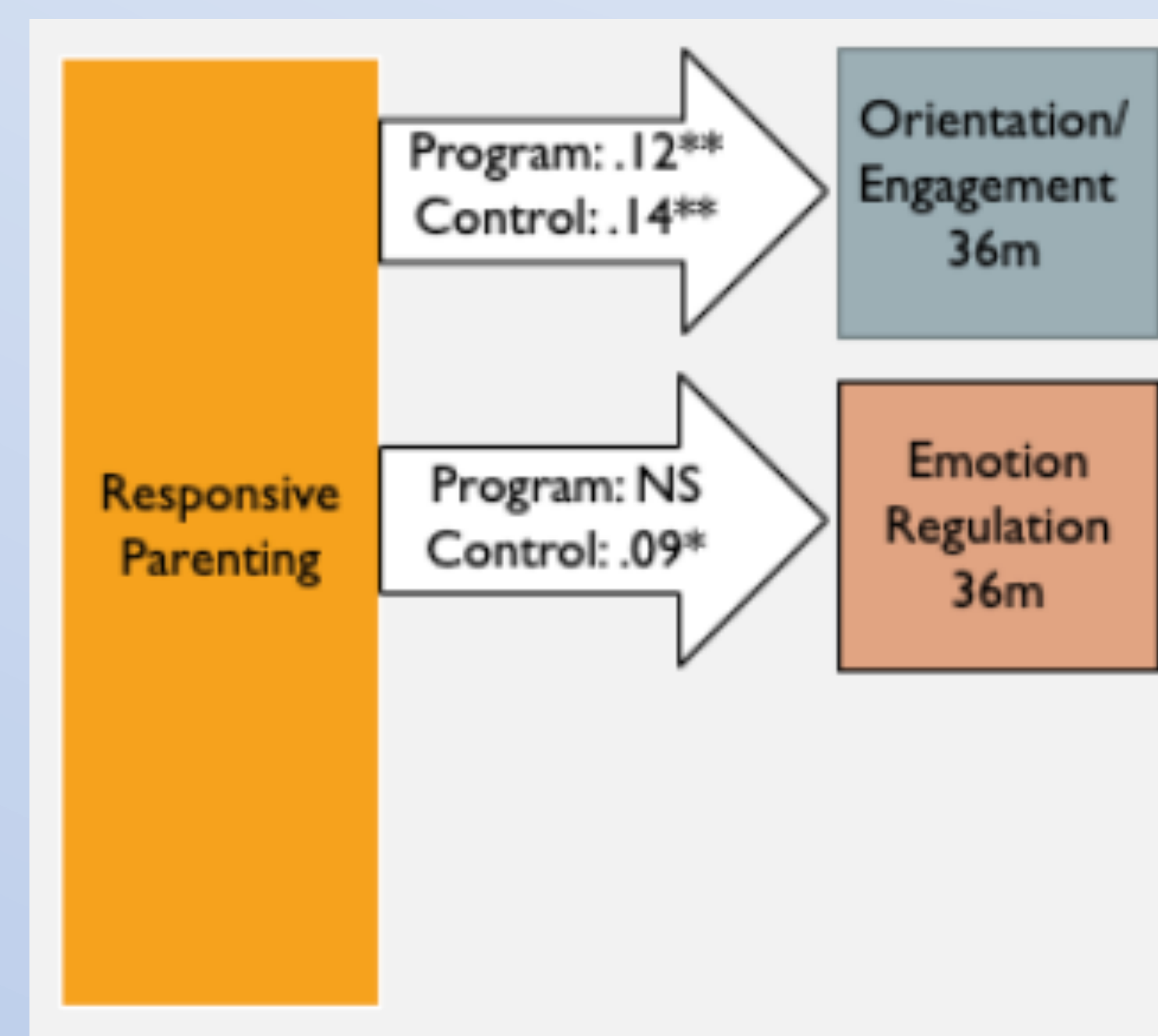


Figure 3. Correlation model for program versus control. Responsive parenting behaviors on social-emotional development outcomes in children at 36 months. \*\*p < .01, \*p < .05

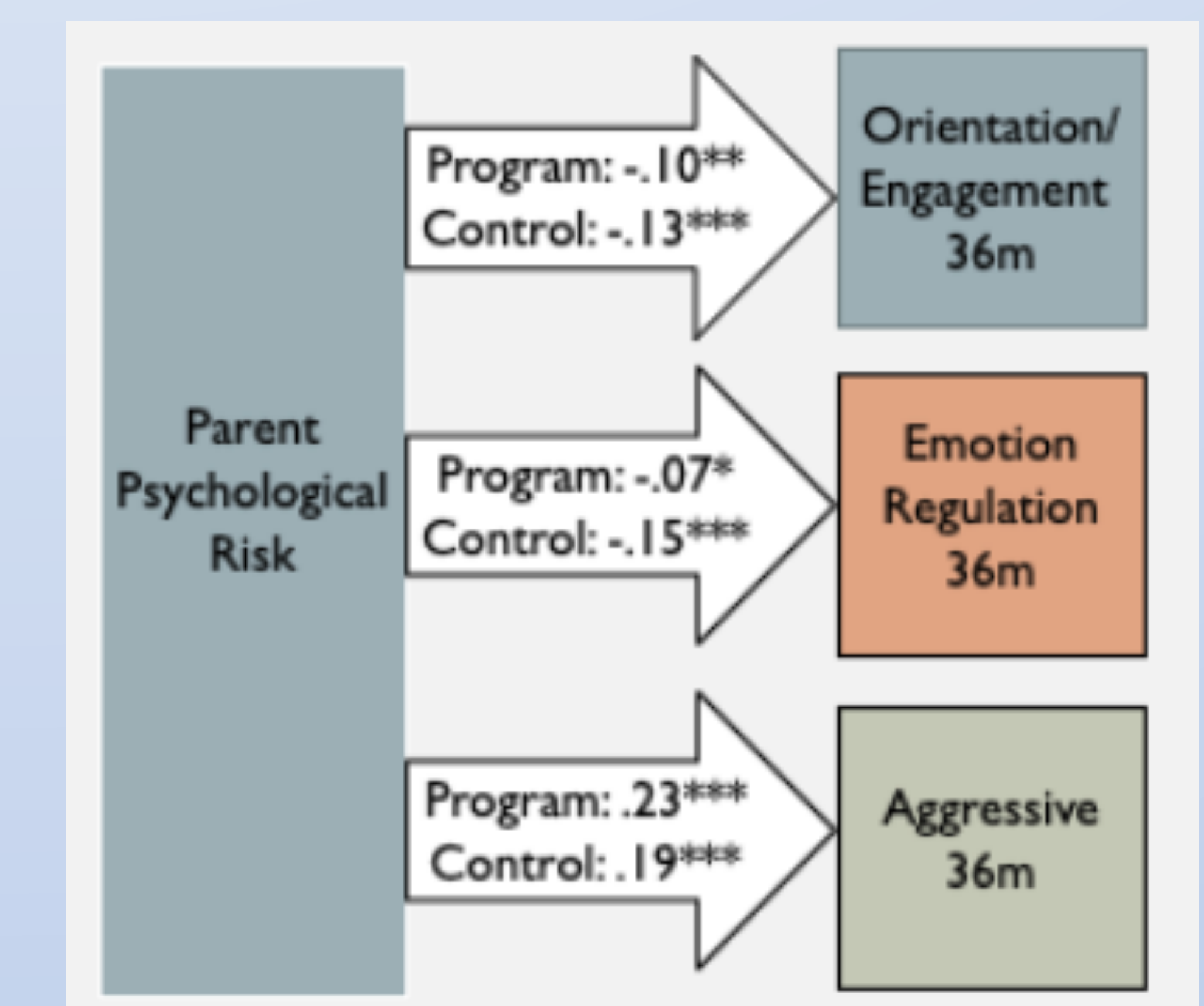


Figure 4. Correlation model for program versus control. Parent psychological risk on social-emotional development outcomes in children at 36 months. \*\*\*p < .001, \*\*p < .01, \*p < .05

## Conclusions

Families participating in EHS had higher average parenting interaction quality scores than families in the control group. Parent-infant interaction quality, particularly responsiveness, is negatively correlated with maternal depression and parenting distress, and positively correlated with child social-emotional development. Mothers with lower psychological risk had higher parental responsiveness and children with better social-emotional development, especially for families participating in EHS. These results support previous research indicating that better early responsiveness is correlated with better social-emotional development.

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 parenting behaviors resembling responsiveness 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