



UNIVERSITY OF
NOTRE DAME

Parenting, Attachment, and the Development of Emotion Regulation

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THE CENTER FOR
CHILDREN & FAMILIES

What is Emotion Regulation?

- Processes involved in changes in emotional dynamics (Thompson, 1990; Campbell-Sills & Barlow, 2007)
- “Up-regulation” vs. “Down-regulation”
 - Intensity
 - Occurrence / Frequency
 - Latency to respond
 - Duration
- Automatic or controlled
- Foundation of organized behavior



Related Concepts (Gross et al., 2006)

- Coping



- Mood regulation



- Defensive Strategies

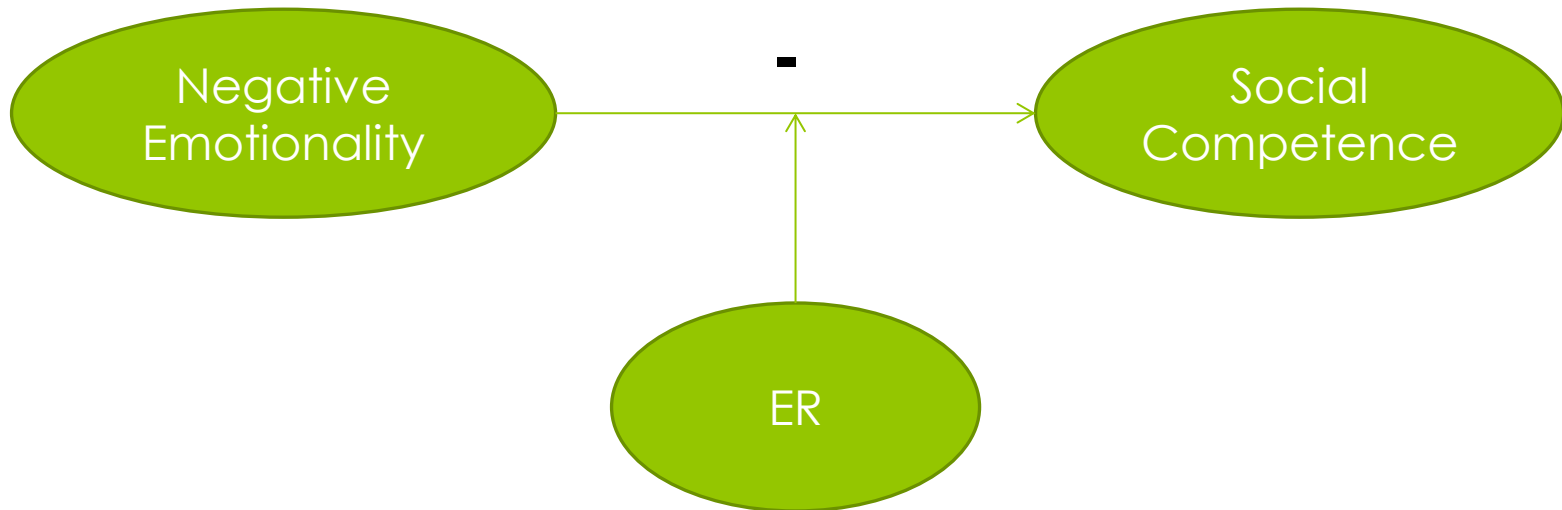


Why ER important?

- When ER is a problem (“dysregulation”; Cole et al., 1994)
- Clinical disorders in children/adolescents
 - Conduct disorders
 - Anxiety disorders
 - Depression
 - Eating disorders
- Commonality: “Maladaptive attempts to regulate unwanted emotions” (Campbell-Sills & Barlow, 2007)

Why ER Important: Prediction

- Low ER as a risk factor (Belsky et al., 2001; Eisenberg et al., 1995)

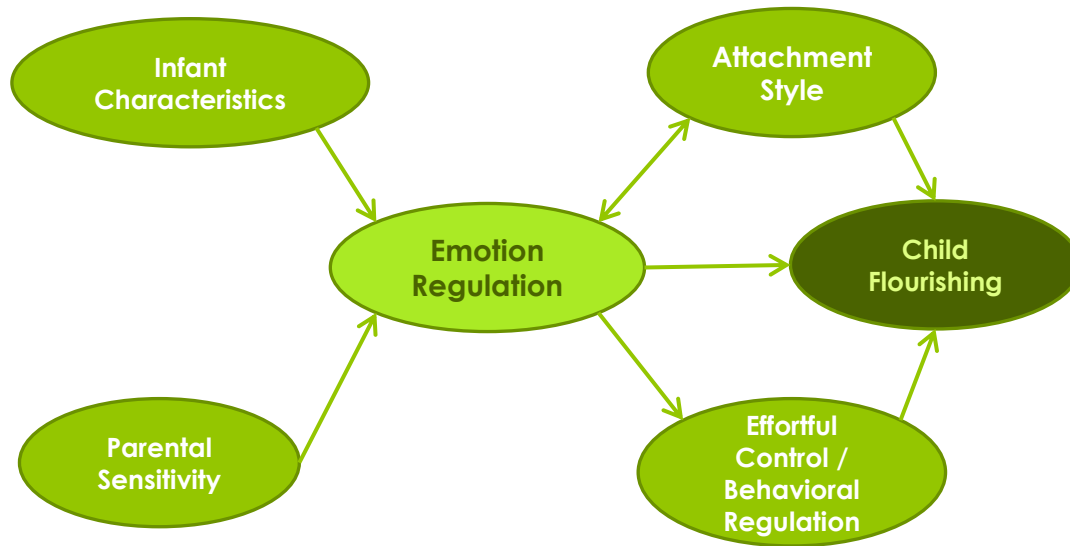


- Regulation especially important for highly emotional children

ER Processes

- Behavioral
- Neurological (e.g., pre-frontal cortex-
Amygdala connections)
- Hormonal (e.g., cortisol)
- Physiological (e.g., vagal tone)
- Cognitive (e.g., appraisals)

Topics in Today's Talk



- What does ER look like during infancy?
- Do ER behaviors actually reduce negative affect?
- ER and predicting infants' emotional changes over time
- Predictors of ER differences
- ER and attachment
- Effortful control / behavioral regulation
- BR and obesity / weight health during preschool

Infant ER: Common Behaviors

Self-Comforting



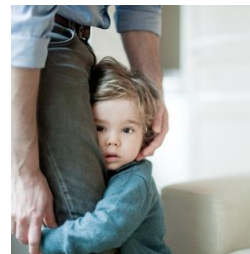
Visual re-orienting, distraction



Avoidance

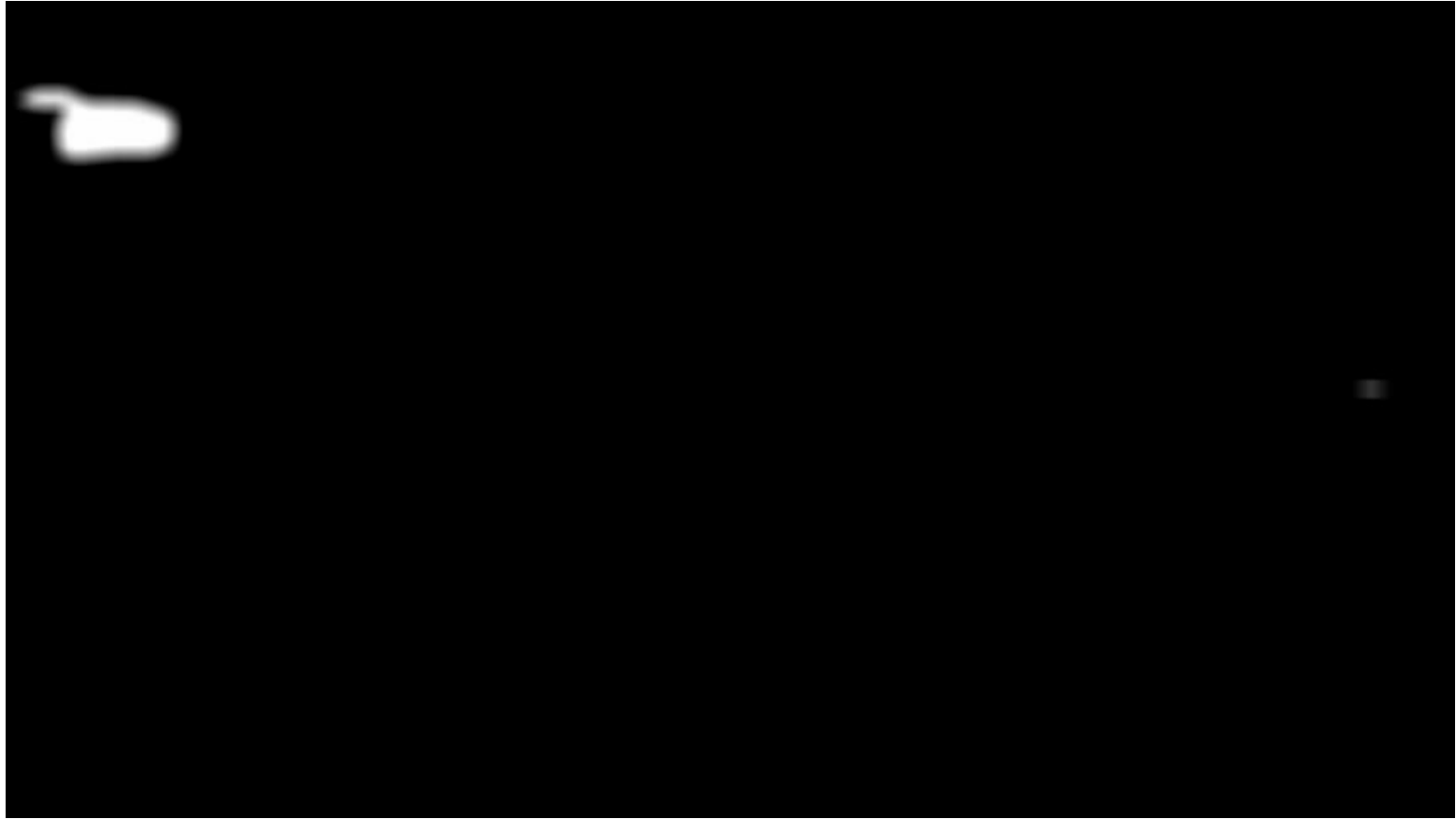
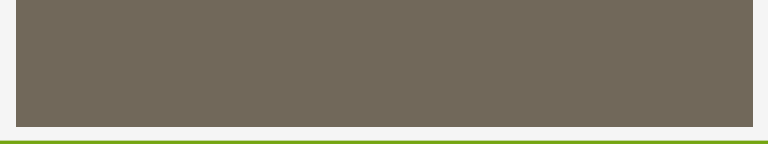


Help-seeking, signaling



Observing Infant Regulatory Behaviors

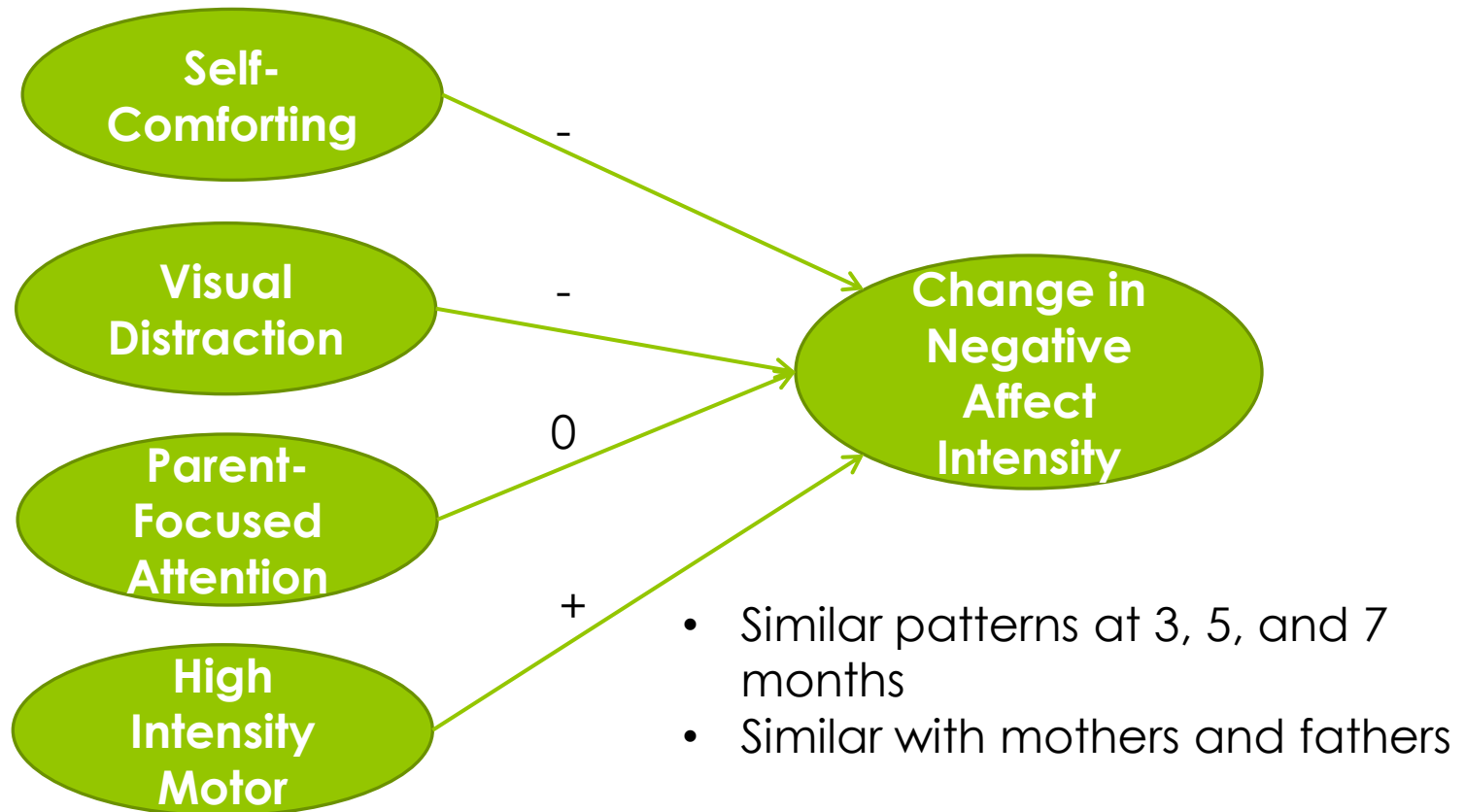
- Still-Face Paradigm (Tronick et al., 1978)
 - Dyadic
 - Face-to-Face interaction
 - Still-Face = violation of expectation
 - Reunion





Is there evidence that some behaviors actually regulate affect?

Ekas, Lickenbrock, Braungart-Rieker (2012)



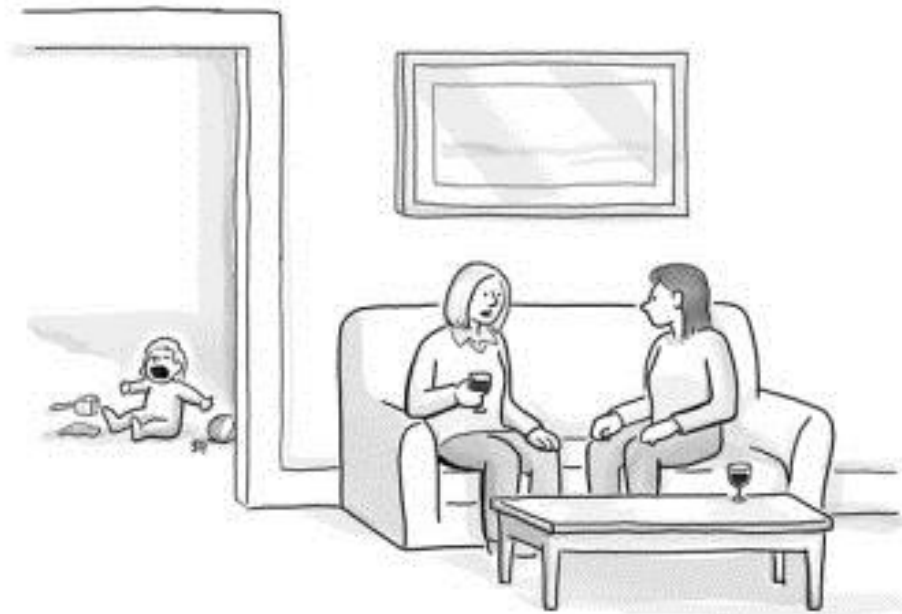
Predictors of ER: Temperament

- Temperament
 - Biologically-based
 - Typical emotional and behavioral reactions that are relatively consistent and stable over time.
- Study of 4-month olds during Still-Face episode
(Braungart-Rieker, Garwood, Powers, & Notaro, 1998, *Developmental Psychology*)
- Infants' higher in Negative Temperament (parent report)...
 - With mothers (but not fathers):
 - Less self-comforting
 - Less visual distraction
- Direction of effects:
 - Temperament → ER
 - ER → Temperament
 - ER = Component of temperament

Predictors of ER: Parent Sensitivity

- Parent's ability to perceive and infer the meaning behind an infant's behavioral signals, and to respond to them promptly and appropriately.

Sensitivity....what NOT to do



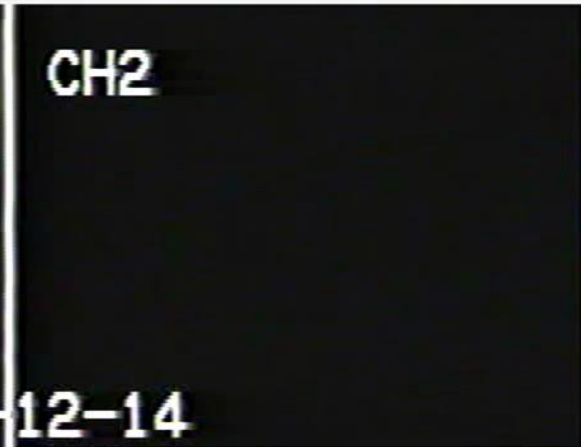
"Oh, she just wants attention or needs help."

PAUL
NOY
CN
COLLECTION

CH1



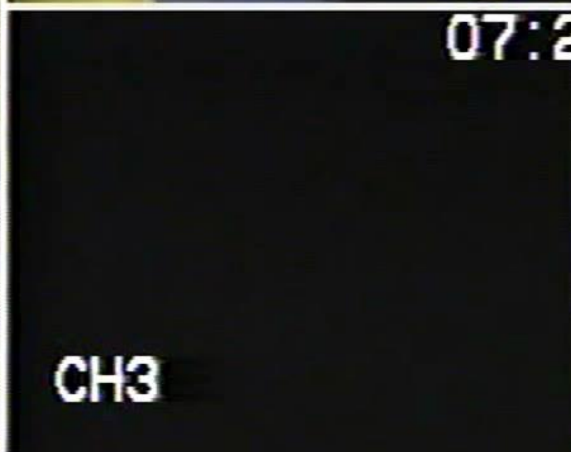
CH2



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CH3



CH4



Parent Sensitivity → Infant Affect and ER Trajectories

(Braungart-Rieker, Zentall, Lickenbrock, Ekas, Oshio, & Planalp, *Journal of Experimental Child Psychology*, 2014)

- Controlled for Infant Temperament
- Mother and Fathers:
 - ↑ Sensitivity...
 - ↑ Increases in Positive Affect from 3-7 months
 - ↑ Increases in Positive Affect and Self-Comforting from SF to Reunion episodes (i.e., recovery)
 - ↑ Visual Orientation toward parents

Attachment

- Special emotional relationship involving comfort, care, and pleasure.
- “...lasting psychological connectedness between human beings.” (Bowlby, 1969, p. 194)
- Parent Sensitivity → Secure Attachment (deWolff & van IJzendoorn, 1997; Luccassen et al., 2011)
- Internal Working Models
 - Representations that help infants to anticipate, interpret, guide interactions with attachment figures
 - Develop through repeated parent-infant interactions
 - May start forming during the phase of “Attachment in the Making” (2 – 8 months)

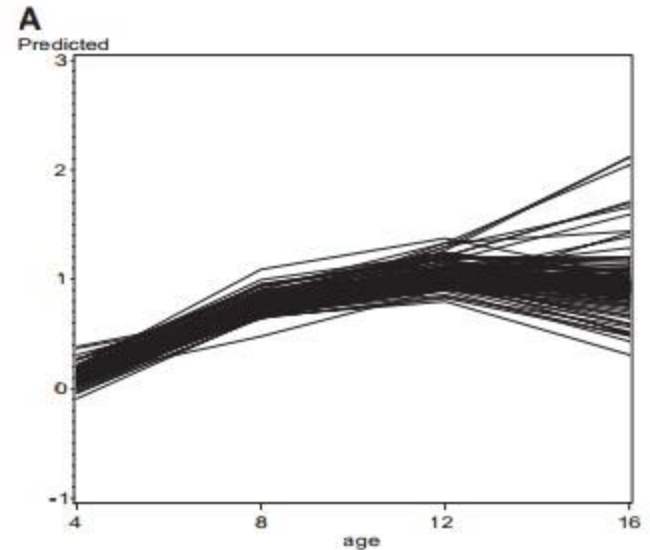
Parent Sensitivity → ER → Attachment

(Braungart-Rieker, et al., 2014)

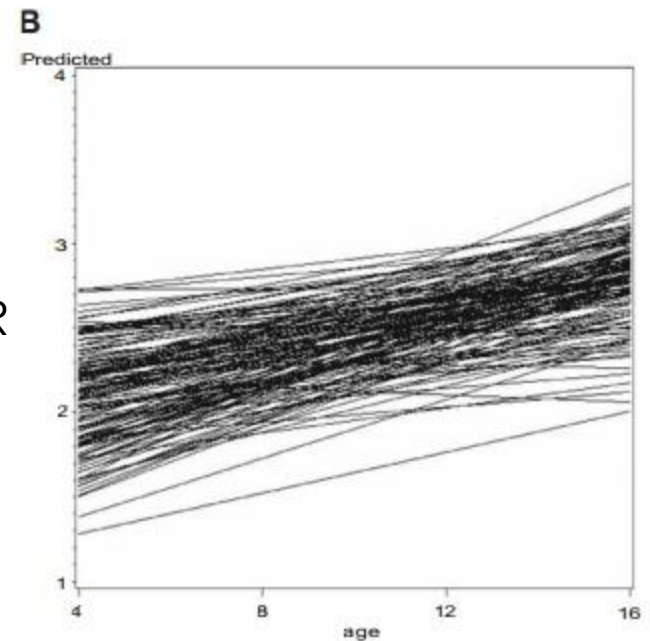
- Sensitivity → positive affect over time, better recover from SF to reunion, and more parent orientation
- Sensitivity → Attachment
- Infant affect/ER (3-7 mo) → Attachment (12-14 mo)
- With mothers
 - Ambivalent infants were less positive over time and showed more self-comforting over time during reunion
 - Disorganized infants showed less parent orientation
- With fathers
 - Disorganized infants showed more self-comforting over time during reunion

Fear and Anger Trajectories: 4 – 16 months

FEAR



ANGER



Predictors of Trajectories

- Level of Fear
 - Temperament ↑
 - Visual Distraction ↓
- Change in Fear
 - Maternal Sensitivity ↓
- Level of Anger
 - Temperament ↑
- Change in Anger
 - Visual Distraction ↓

Attachment and ER

Example: 15 month olds' adjustment to childcare (fear, separation anxiety)

Anhert, Gunnar, Lamb, & Barthel, 2004, *Child Development*

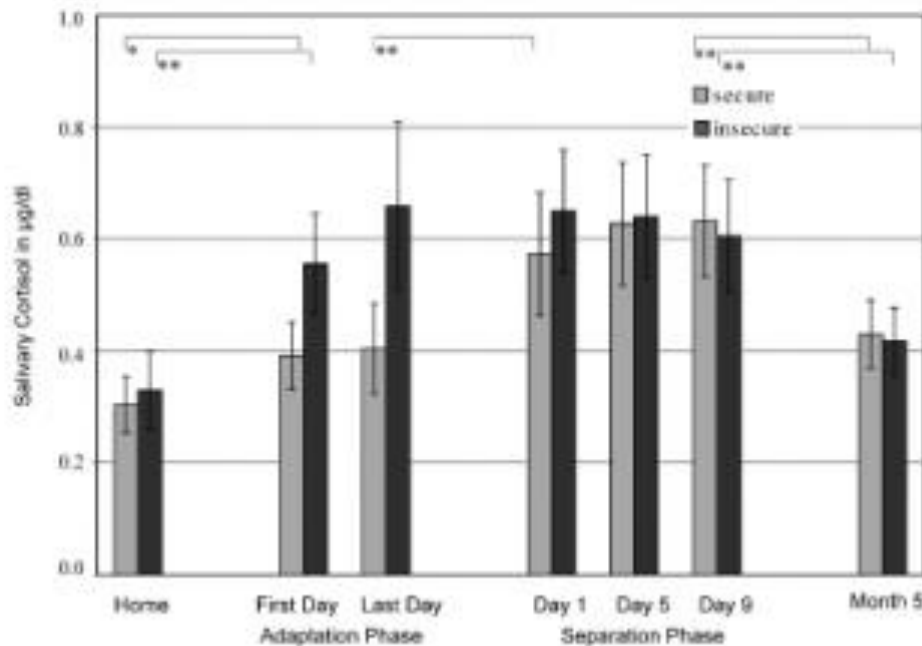
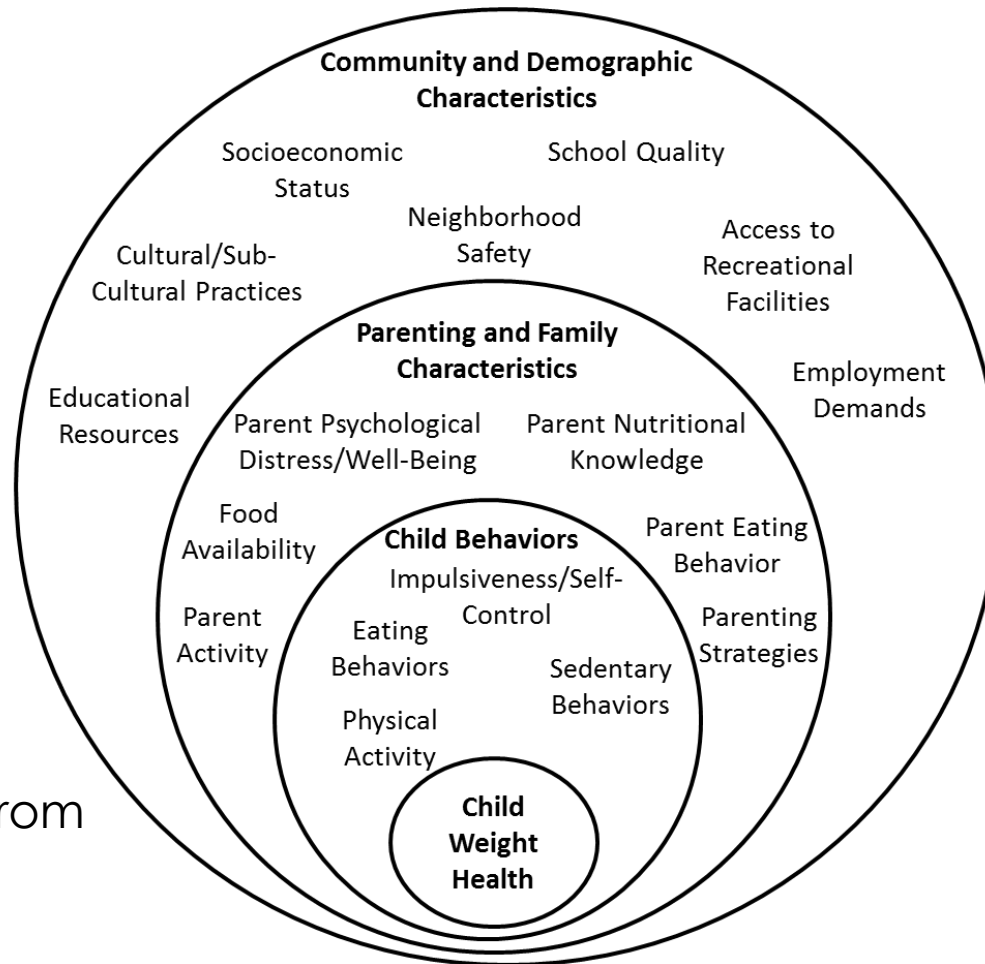


Figure 1. Cortisol levels in secure and insecure infants before and during the adaptation to child care. * $p < .05$. ** $p < .001$.

ER and Child Flourishing: Weight health

- Overweight/obesity rates (REF):
 - 1/5 preschoolers
 - 1/3 for children at-risk
 - Low-income
 - Latino, African American, Pacific Islander
- Family Lifestyles Project
 - Braungart-Rieker, Moore, Planalp, & Lefever, 2014, *Eating Behaviors*)
- Pilot Study (N = 40)
- Preschool-aged children and mothers of low-income

Ecological Systems Perspective



Adapted from

Regulation during Early Childhood

Behavioral regulation / Effortful Control

- Inhibit dominant response and perform sub-dominant response (Rothbart, xxxx)
- Emotion regulation
- Motor control
- Attentional control

Laboratory Tasks

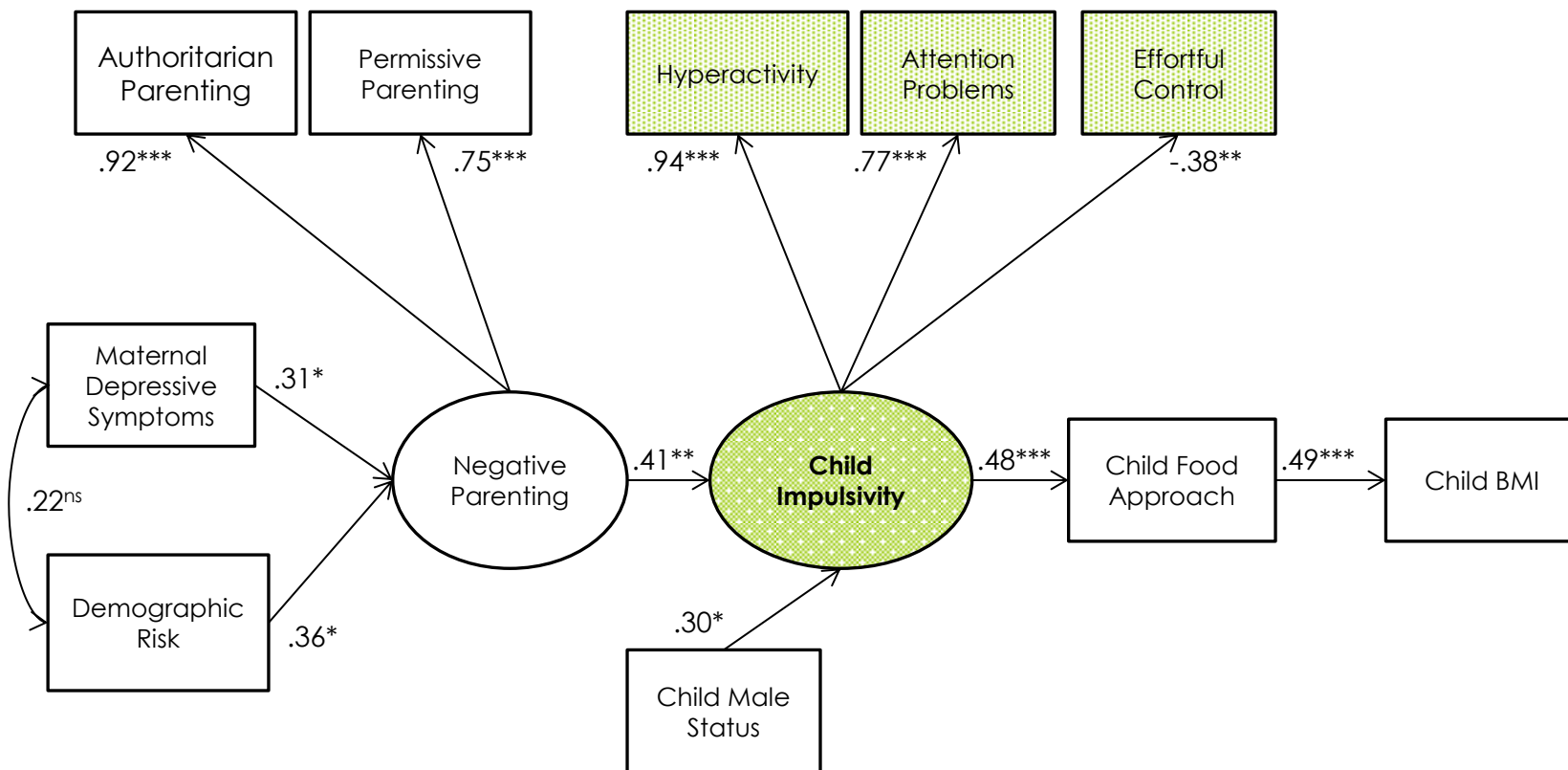
(Kochanska et al., 2000; Gerstadt et al., 1994)

- Snack Delay
- Tower Task
- Day/Night Task
- Simon Says
- Wrapped Gift





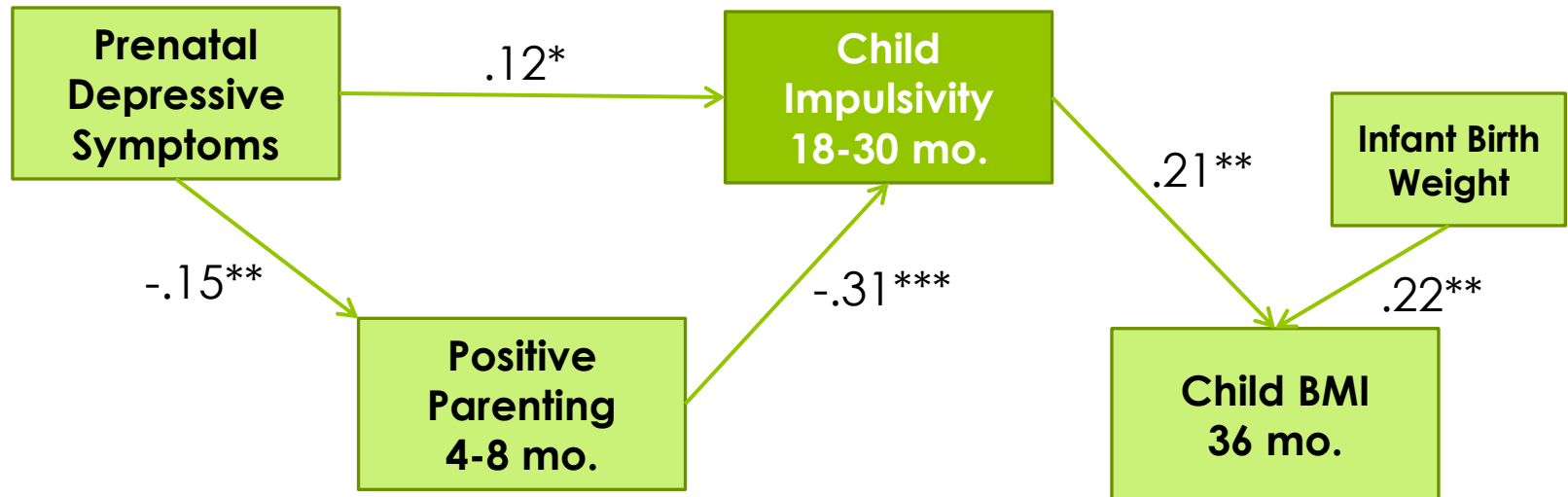
Results



Results using Longitudinal Data

- Parenting for the First Time Project (REFS)
- $N > 600$
- Prenatal – age 3
- 3 groups of mothers
 - Teen mothers
 - Adult low-educated mothers
 - Adult high-educated mothers (at least 2 years of college)

Results



Summary

- Self-comforting and visual distraction serve as down-regulators of negative affect during infancy
- Temperament → ER
- Maternal and paternal sensitivity → ER
- Early affect and ER foreshadow attachment classifications
- Behavioral regulation mediates parenting and weight health during preschool
- Implications for prevention/intervention