Parenting, Attachment, and the Development of Emotion Regulation

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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

Diagram:
- ER
  - Negative Emotionality
  - Social Competence

(ER = Emotional Regulation)
ER Processes

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

- Self-Comforting
- Visual Distraction
- Parent-Focused Attention
- High Intensity Motor

Change in Negative Affect Intensity

- Similar patterns at 3, 5, and 7 months
- Similar with mothers and fathers
Predictors of ER: Temperament

- Temperament
  - Biologically-based
  - Typical emotional and behavioral reactions that are relatively consistent and stable over time.


- 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

“Ob, she just wants attention or needs help.”
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

Braungart-Rieker, Hill-Soderlund, & Karrass (2010) Developmental Psychology
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 childcare. *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

- Child BMI
- Maternal Depressive Symptoms
- Child Male Status
- Demographic Risk
- Child Food Approach
- Child BMI

Authoritarian Parenting: .92***
Permissive Parenting: .75***
Hyperactivity: .94***
Attention Problems: .77***
Effortful Control: -.38**
Maternal Depressive Symptoms: .31*
Child Male Status: .36*

Effortful Control: -.38**
Child Food Approach: .49***
Child Male Status: .30*

- Results show significant correlations between variables such as parental styles, child impulsivity, and BMI.

- Child Male Status and Maternal Depressive Symptoms also play a role in the model.
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

Prenatal Depressive Symptoms → Positive Parenting 4-8 mo. → Child Impulsivity 18-30 mo. → Infant Birth Weight

-0.15** → 0.12* → -0.31*** → 0.21** → 0.22**

Child BMI 36 mo.
Summary

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