

Offsetting Toxic Stress by Training Parents of Infants and Young Children in Foster Care: The ABC Program Operating in 11 States



Wisconsin Family Impact
Seminar
February 4, 2015

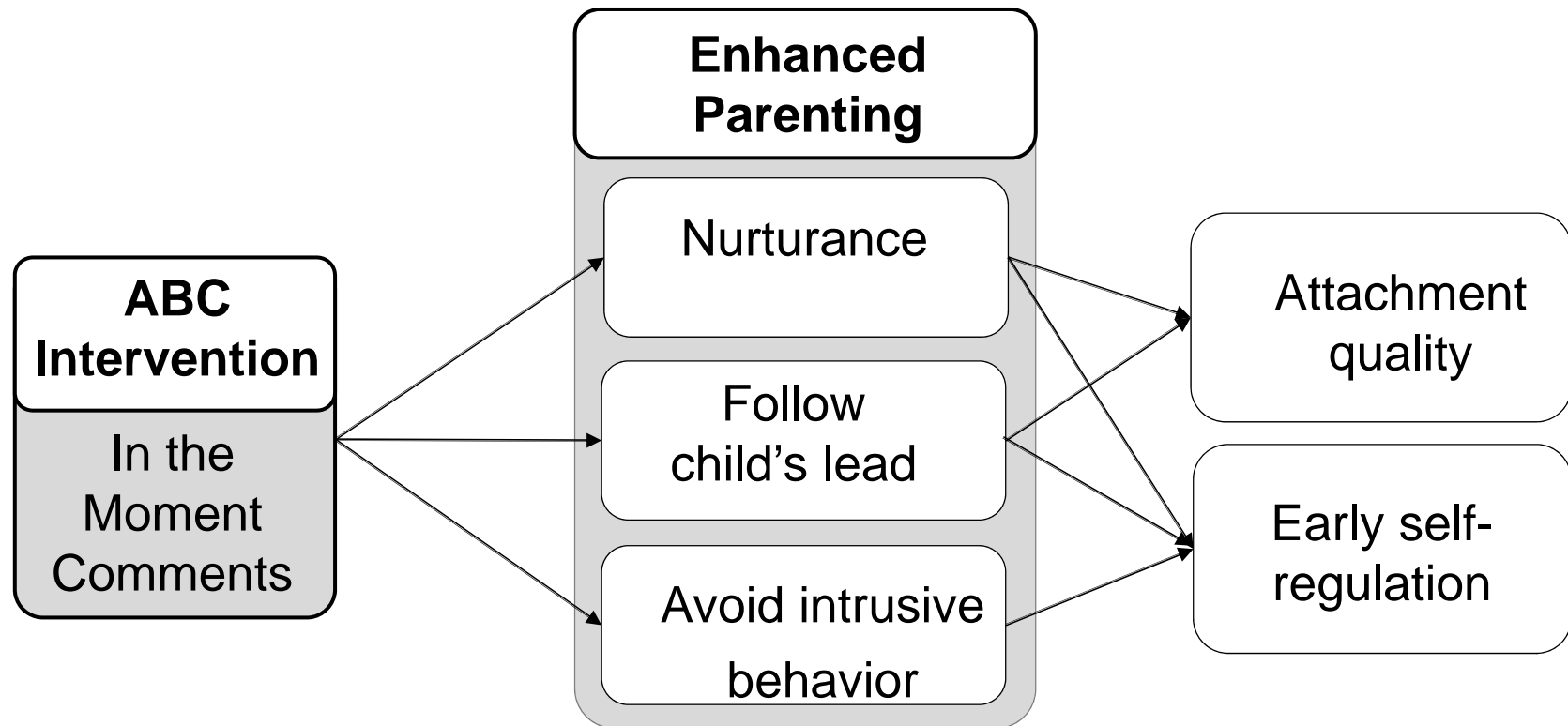
Mary Dozier
Infant-Caregiver Lab
University of Delaware

Attachment and Biobehavioral Catch-up (ABC)

- 10-session intervention
- Targets key issues identified as problematic for children who have experienced toxic stress
- Implemented in home
- Currently implemented in 11 states



Targets of Intervention



Nurturance

- Nurturance especially important for children who have experienced toxic stress
- Two things can get in the way
 - Children may push away
 - Nurturance does not come naturally to some parents





Children Push Parents Away

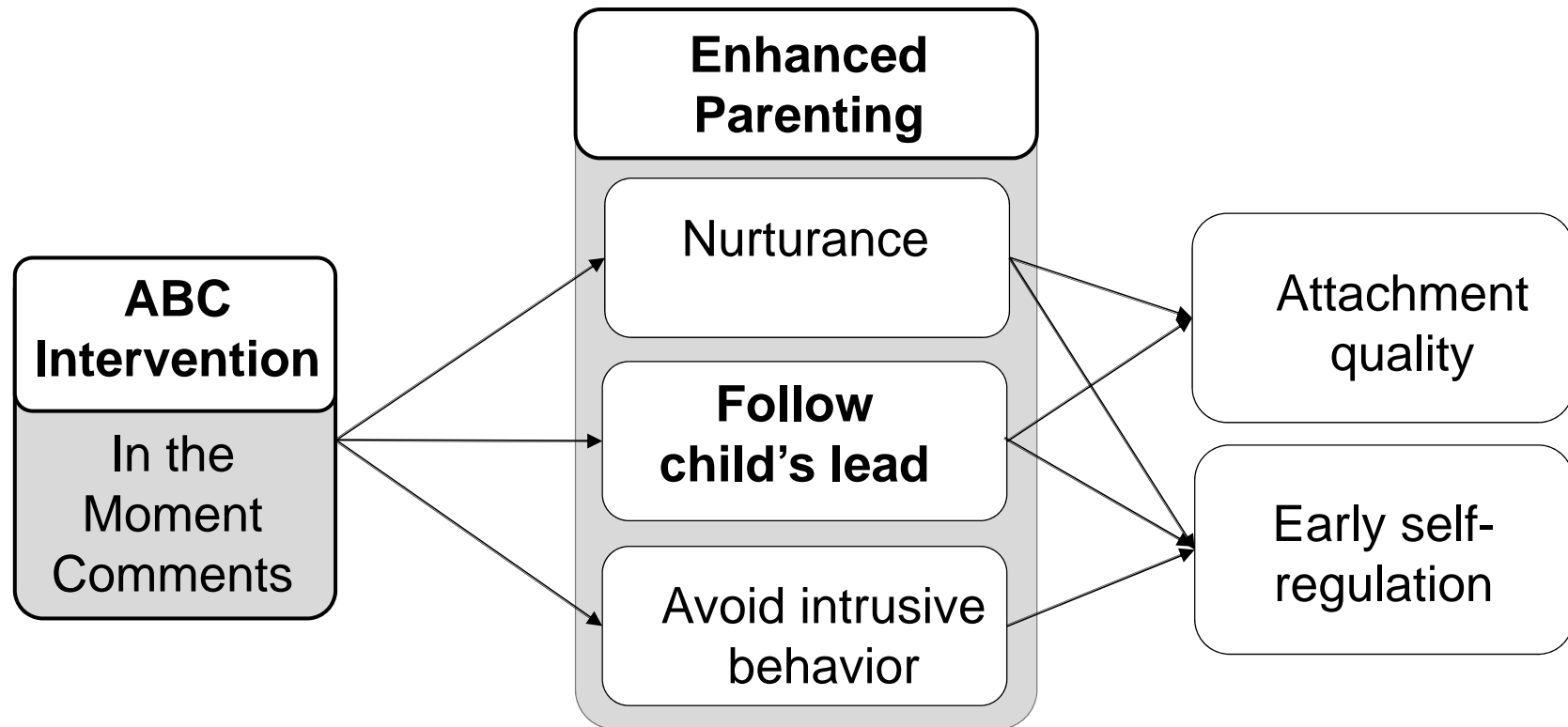
- Contingency analyses reveal that parents respond “in kind”
- 1st intervention target: Parents need to provide nurturing care when children are distressed if children are to develop trusting relationship (secure attachment)

Supporting Nurturance



It's great that you're going over to him just like that. Yes, pick him right up. Oh, that's perfect. That lets him know you're there for him when he needs it.

Targets of Intervention



HPA System: Susceptible to Effects of Toxic Stress

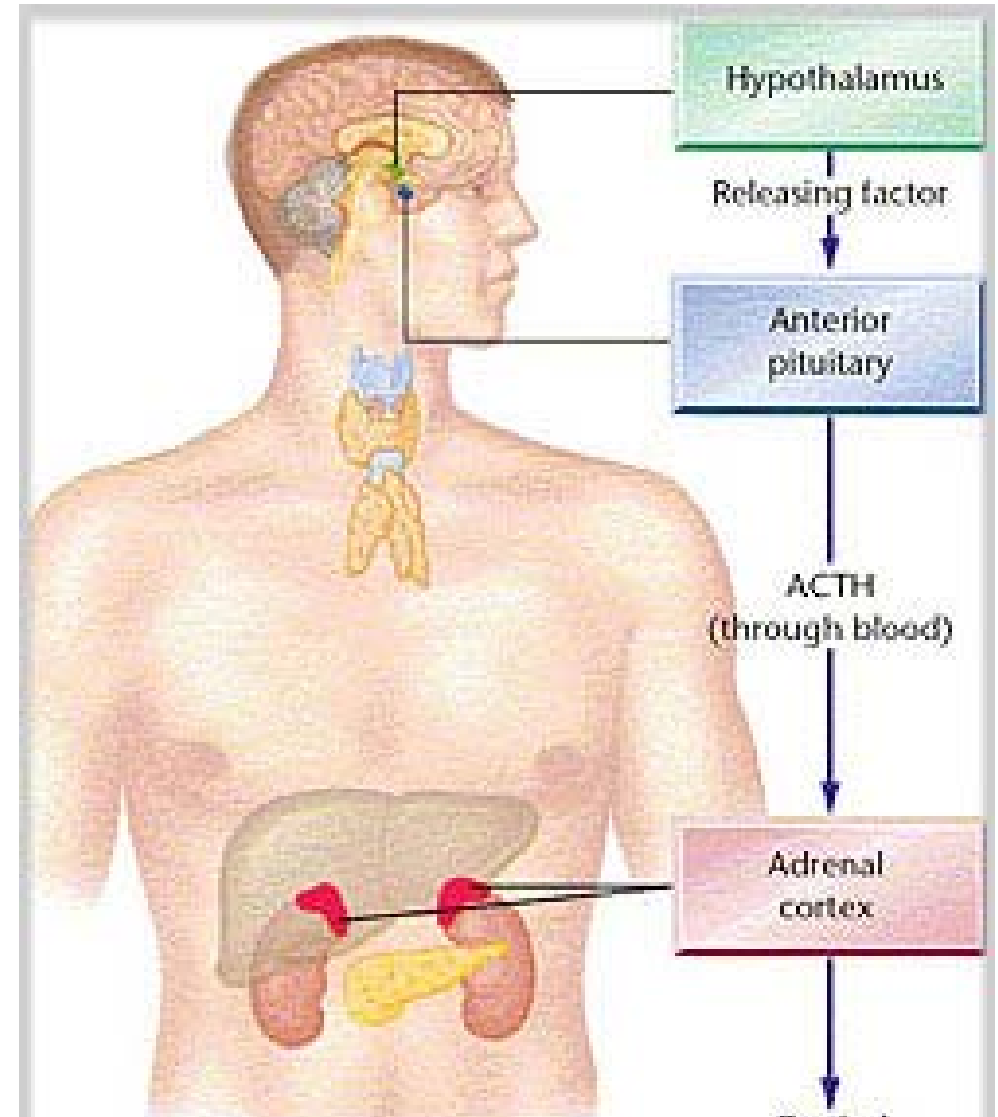
H - Hypothalamus

P - Pituitary

A – Adrenal

Cortisol an end product

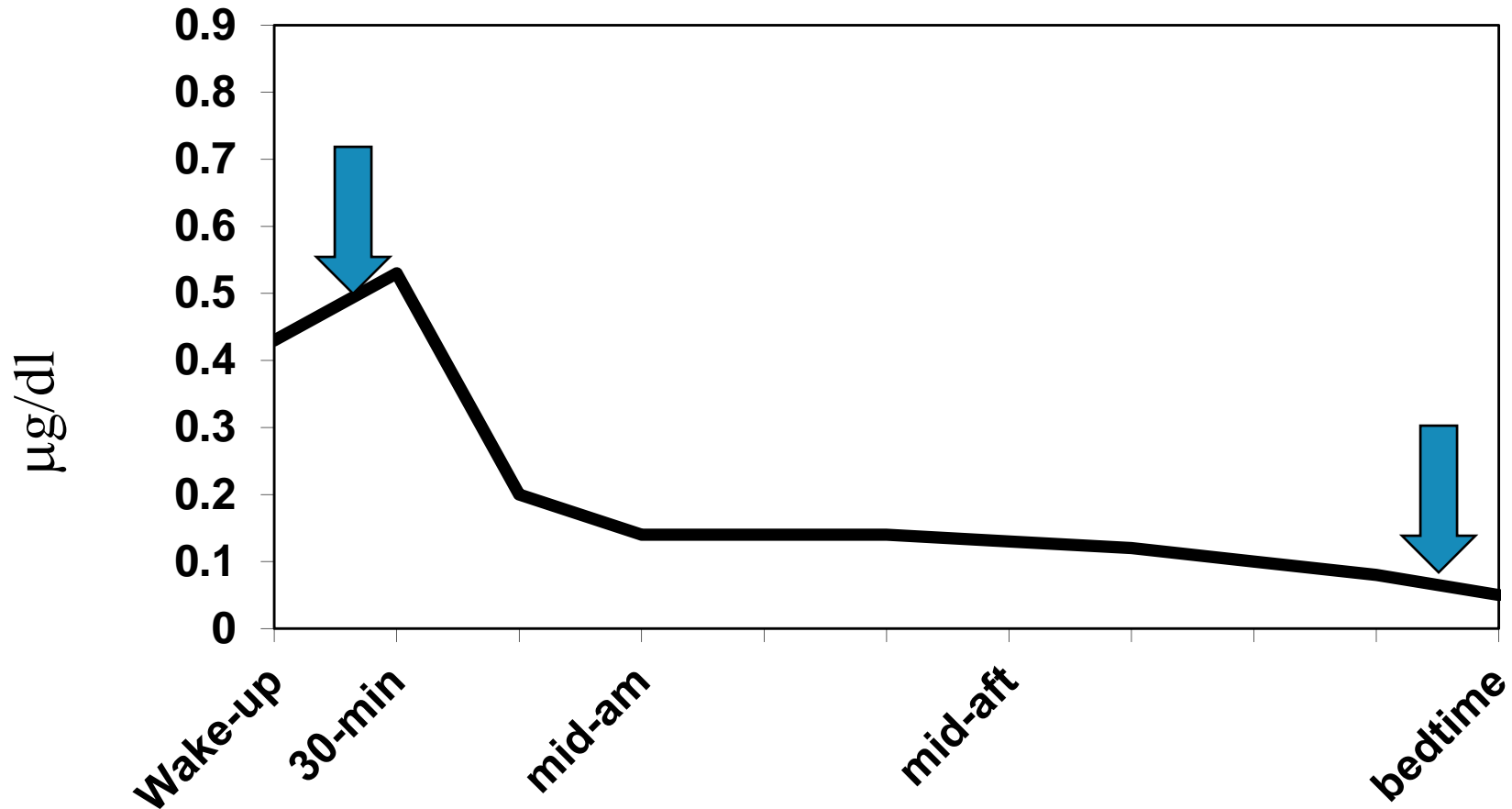
Sensitive to effects of early experience



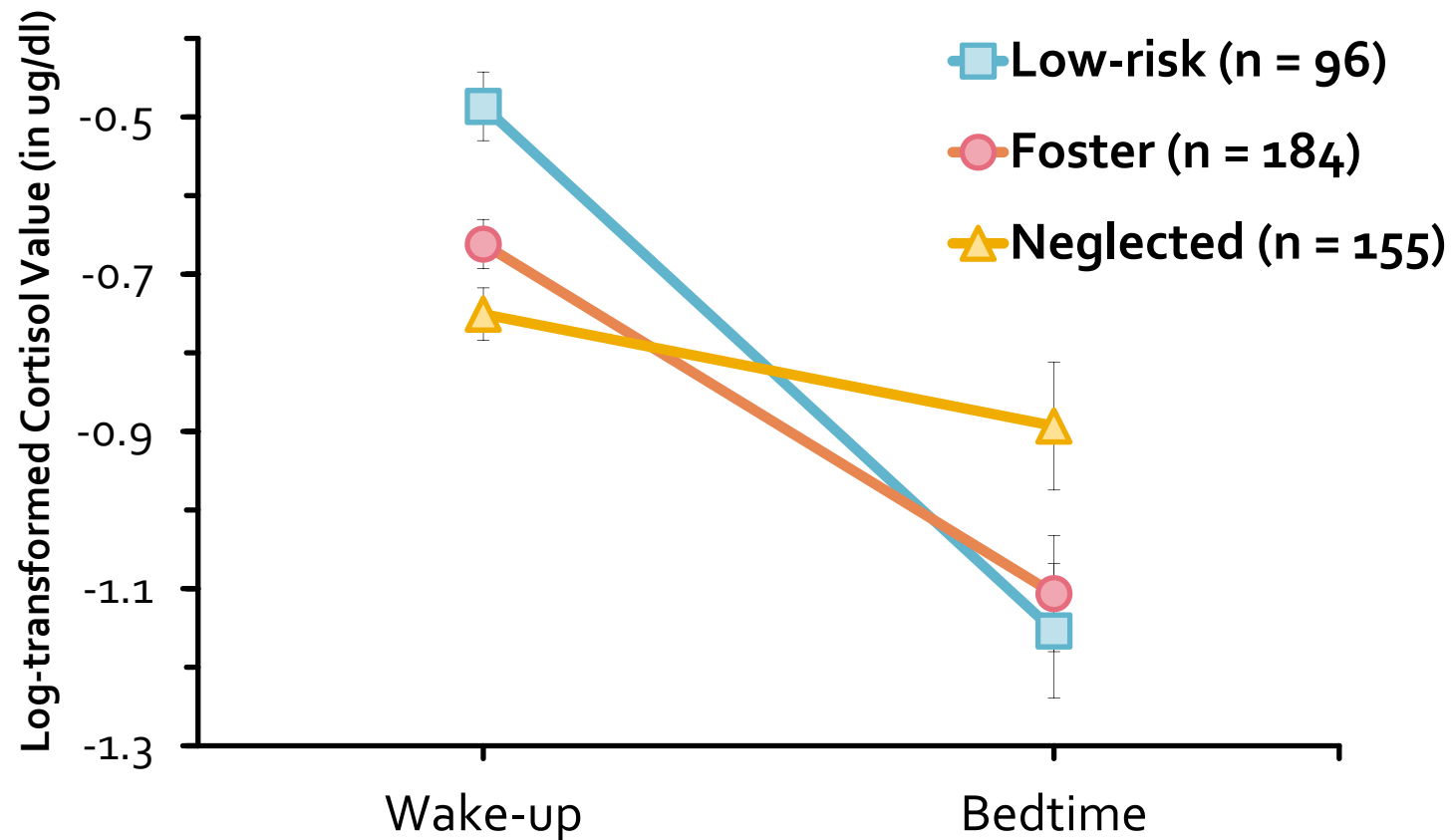
HPA System: 2 Functions

- Stress reactive function
 - Body's mounting a stress response
- Diurnal function
 - Organism functioning as diurnal (or nocturnal) creature

Typical Diurnal Pattern of Cortisol



Early Adversity and Diurnal Cortisol



Bernard, Butzin-Dozier, Rittenhouse, & Dozier, 2010

Dysregulation (Impaired Regulation)

- Biological dysregulation: cortisol
- Behavioral dysregulation:
 - Behavior problems
 - Inhibitory control

Second Target for Intervention: Helping Children Develop Better Regulatory Capacities

- Parents who follow child's lead have children with better regulatory capabilities (Raver, 1996)





Support Following the Lead



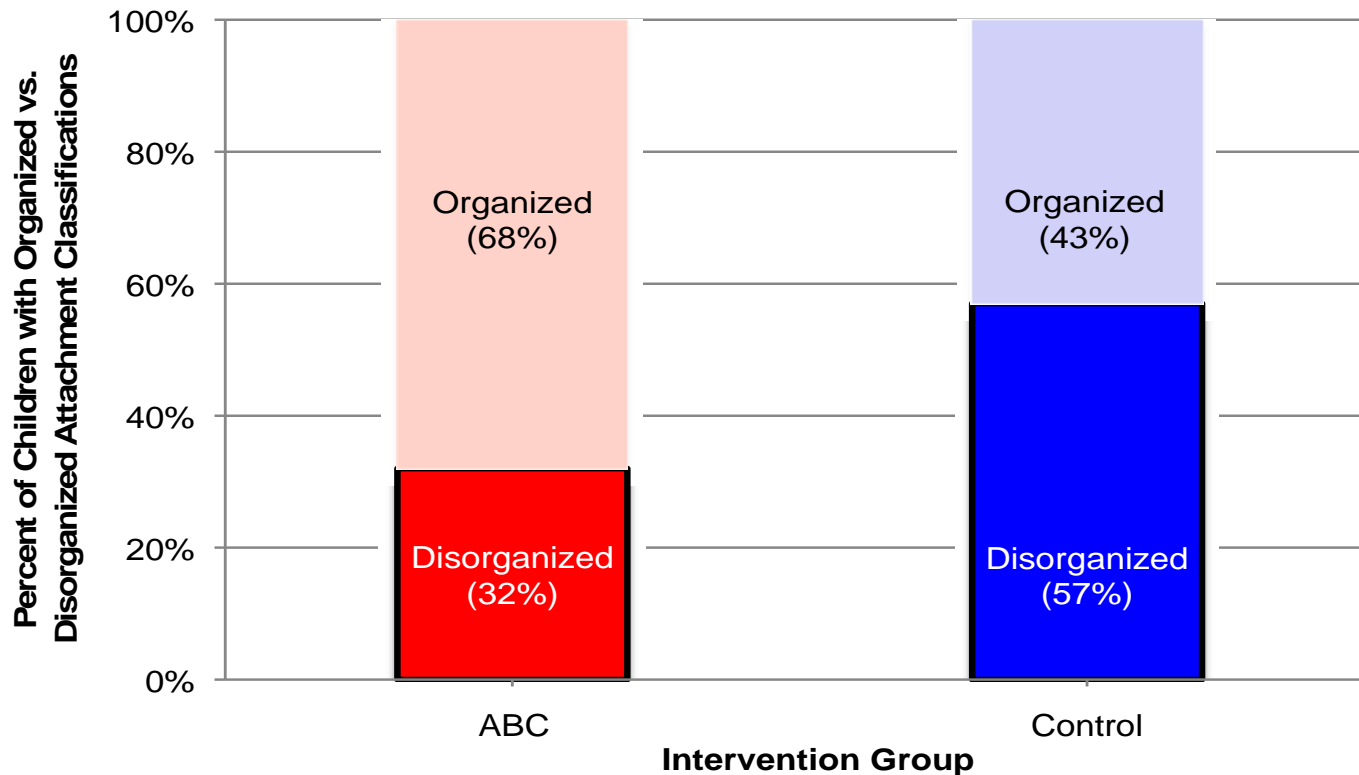
Assessing Effectiveness of ABC Intervention

Randomly assigned children and parents to Attachment and Biobehavioral Catch-up (ABC) or to an alternate intervention (DEF)

120 children, half in ABC, half in DEF

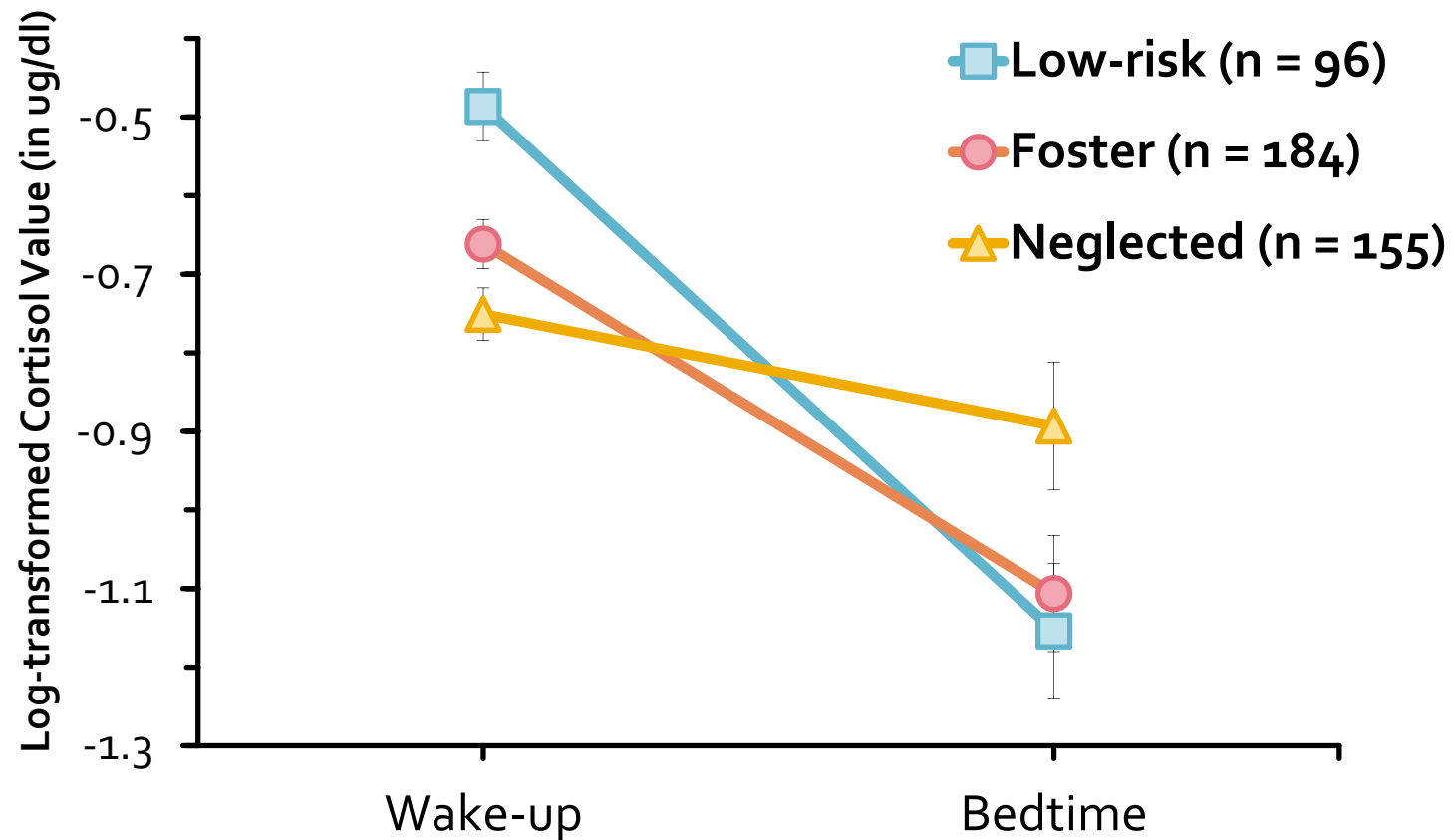
Assessed attachment
Cortisol production
Emotion expression
Mothers' brain activity

Percentage Disorganized Attachment Among Children in ABC and DEF Interventions



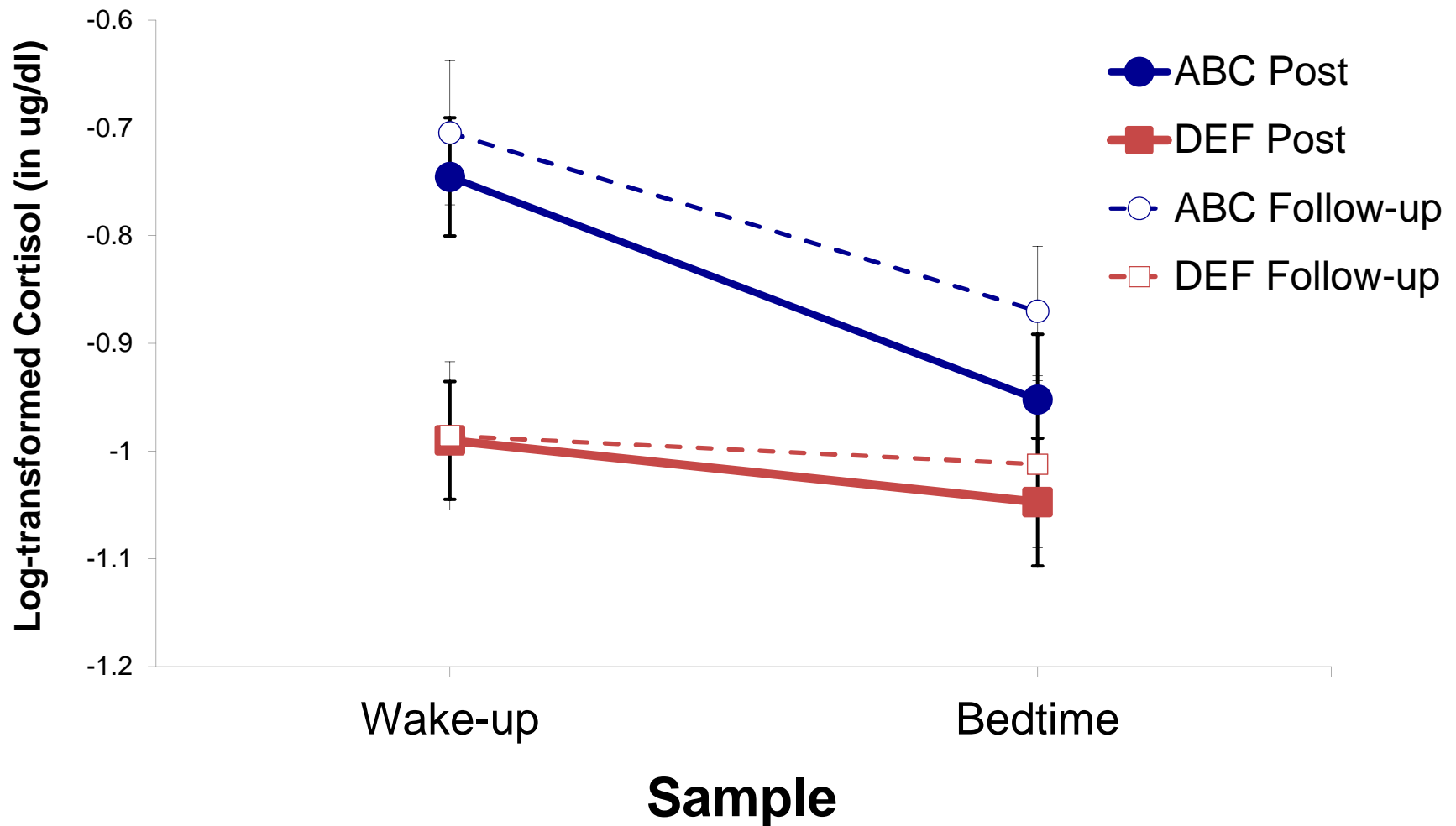
Bernard, Dozier et al., *Child Development*, 2012

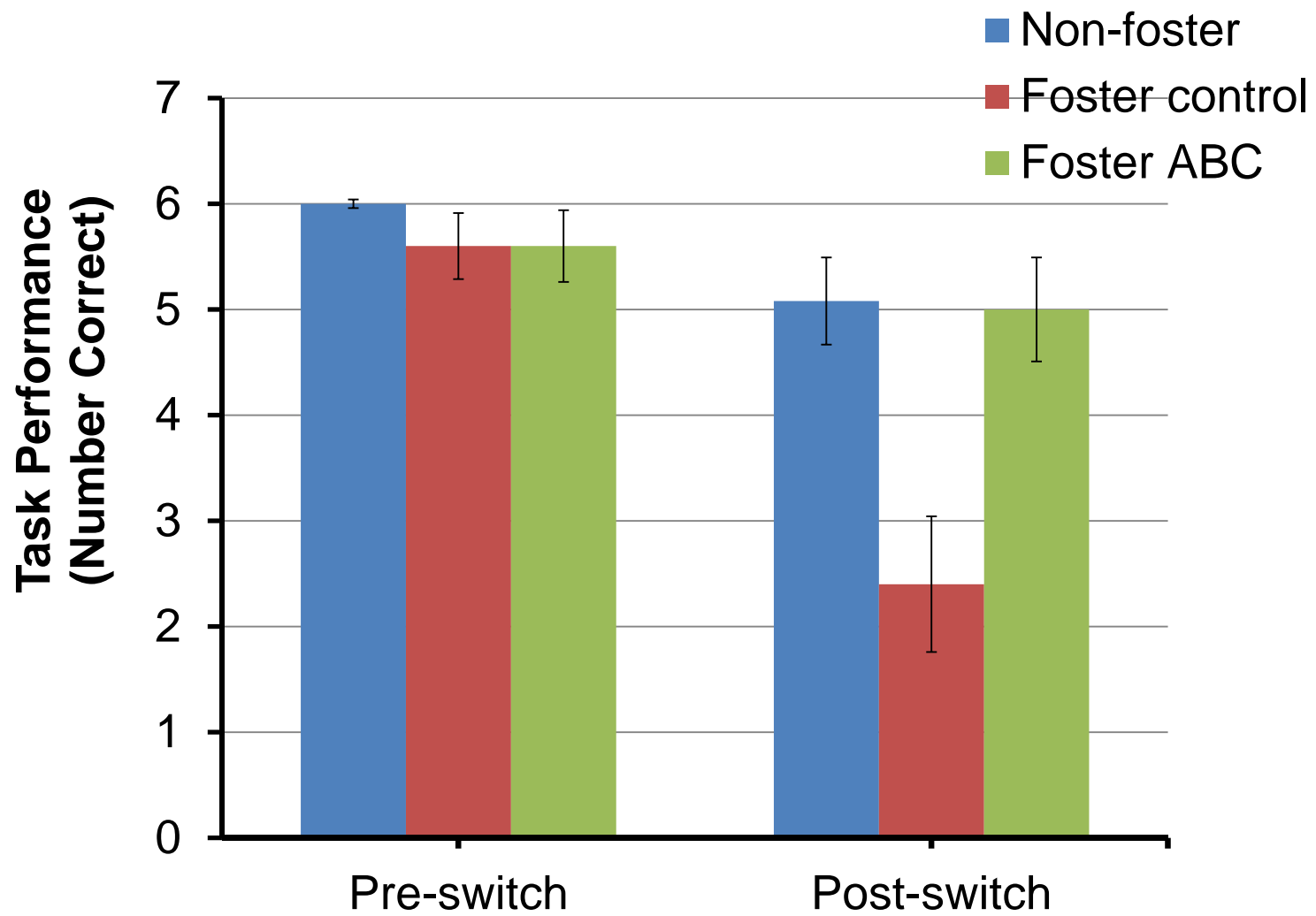
Early Adversity and Diurnal Cortisol



Bernard, Butzin-Dozier, Rittenhouse, & Dozier, 2010

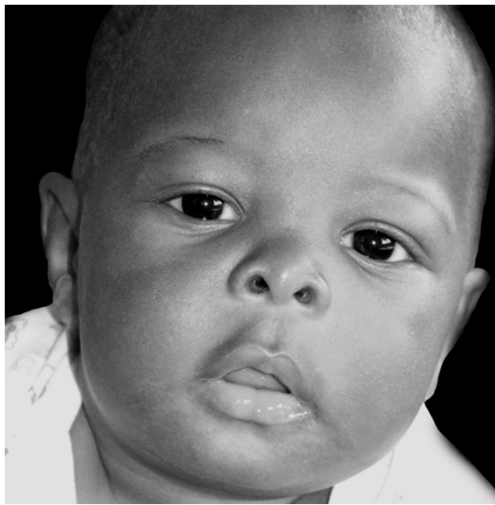
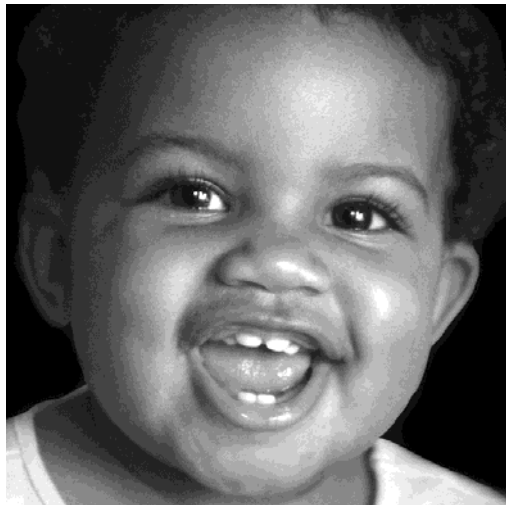
Intervention Effects on Diurnal Cortisol Production



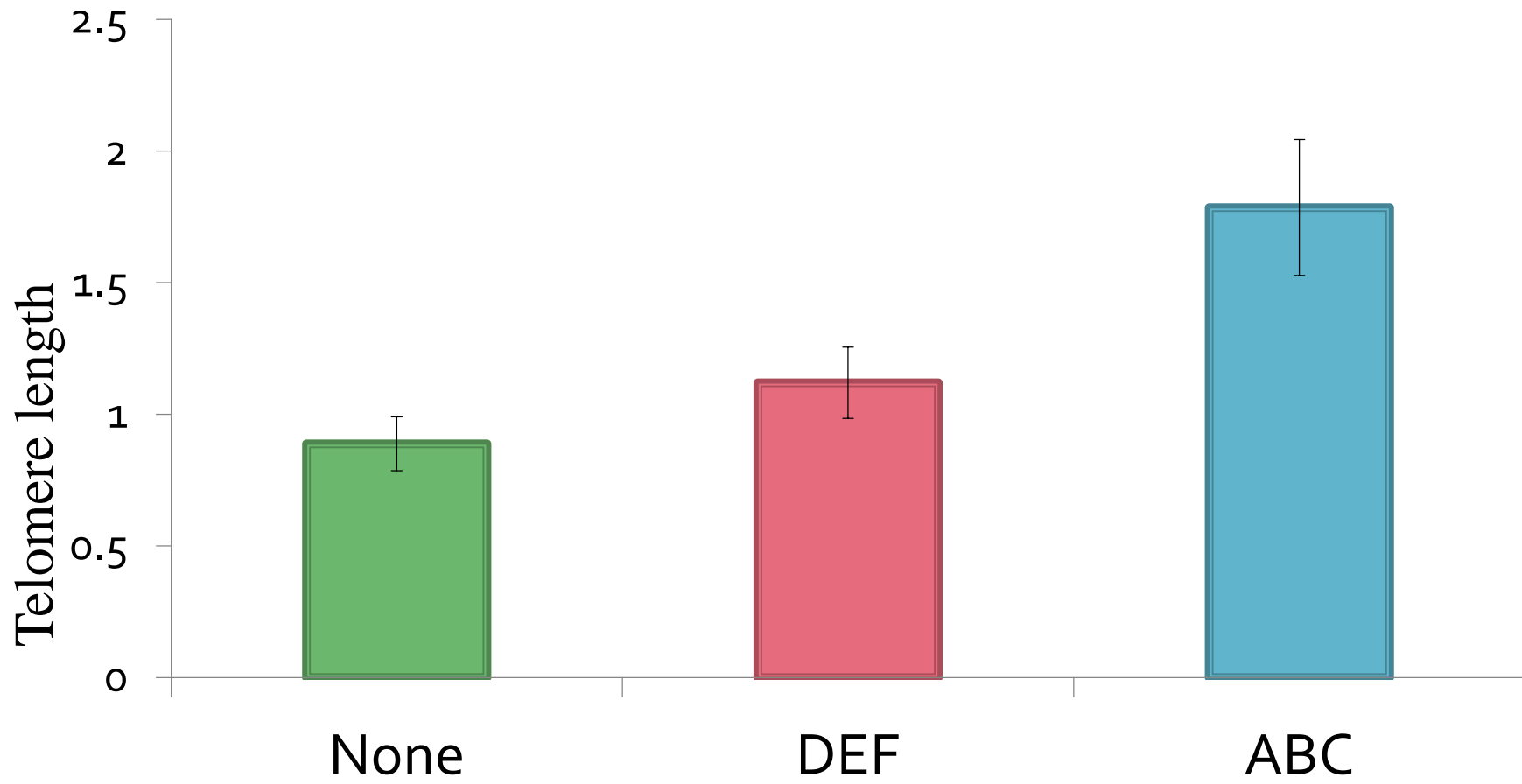


ERP Task with Mothers

View and categorize pictures of laughing, neutral, and crying children's faces



DNA Telomere Length at age 5





Early Intervention

- Targets effects of toxic stress
- Impacts on children's behavior and physiology
- Enduring (at least 4 years after intervention)
- Family based

Acknowledgments

- NIMH R01 52135, 84135, 74374
 - Philadelphia DHS
 - Delaware DFS
 - Edna Bennett Pierce
-
- Infant-Caregiver Lab