

Early Head Start University Partnership Grants: Buffering Children from Toxic Stress, Research Grantees

New York University

Project Title: The Playing and Learning Strategies (PALS) Intervention in Early Head Start Programs: Reducing the Effects of Toxic Stress for Children in Poverty

Principal Investigator: Clancy Blair

Co-Principal Investigator: Cybele Raver

Project Funding Years: 2011 – 2016

Project Abstract: The primary purpose of this study is to implement an evidence-based parenting intervention, Playing and Learning Strategies (PALS) to evaluate the role of parenting quality in buffering children from toxic stress associated with poverty. Specifically, the project will: (1) measure young children's exposure to 15 indicators of poverty related hazards, constituting "toxic stress" and determine the extent to which exposure to these dimensions are associated with lower levels of parenting quality and elevated levels of stress physiology biomarkers for children; (2) implement the ABC parenting intervention and document how the intervention can be adapted and implemented within existing EHS activities; and (3) evaluate the efficacy of the PALS parenting intervention. For the third goal, families will be randomly assigned to either (1) home-visiting services where they will receive 14 weeks of intervention in addition to regularly delivered services or to a (2) 'business as usual' control condition. Results from this study are expected to advance applied developmental neuroscience and contribute to the field's knowledge base regarding the role of Early Head Start in supporting parenting and buffering children from the effects of toxic stress.

Sample:

- 160 low-income families enrolled in 7 EHS programs in New York City
- 80 moderate to higher income children and families

Proposed Measures: Material, Psychosocial and Neighborhood Measures (15 indicators from parental survey, observer report and 2010 U.S. Census data)

- Income-to-need calculations
- Economic need and economic sufficiency: Economic Strain Questionnaire
- Employment status
- Maternal and paternal level of educational attainment
- Economic safety
- Use of public assistance
- Adult exit and entrance from the household
- Maternal psychological distress: Center for Epidemiologic Studies Depression Scale (CES-D Scale)
- Parenting Stress Index – Short Form

- Family exposure to substandard housing quality
- Neighborhood violence crime victimization
- Proportion of female headed households with children
- Rate of adult unemployment

Parent-Child Interaction:

- Mothers' sensitivity, detachment, intrusiveness, positive regard, negative regard, stimulation and animation in interaction with the child (using the Three-bag observation assessment)

Child Measures:

- Allostatic Load (saliva samples, electrocardiogram (ECG) data)
- Child Reactivity and Regulation to fear evoking mask and frustration eliciting toy removal tasks
- Self-regulation: effortful control
- Infant Behavior Record
- Preschool Self-Regulation Assessment
- Infant Behavior Questionnaire
- Children's Behavior Questionnaire

University of Colorado Denver

Project Title: An Evaluation of Parent Child Interaction Therapy and the Emotional Availability Intervention: Mitigating Toxic Stress among American Indian Children in Early Head Start

Principal Investigator: Michelle Sarche

Co-Principal Investigator: Misty Boyd

Project Funding Years: 2011 – 2016

Project Abstract: The University of Colorado- Anschutz Medical Campus in partnership with a tribal Early Head Start and behavioral health program program will evaluate Parent-Child Interaction Therapy Intervention (PCIT) and the Emotional Availability Caregiver Intervention (EAI) to better understand the relationship between major environmental stressors and American Indian children's early development. Specifically, the project will: (1) examine the nature, extent and developmental course of environmental stressors among American Indian children between the ages of 10 and 48 months and explore hair cortisol as a marker of toxic stress; (2) implement PCIT with and without an EAI enhancement in a tribal behavioral health setting to serve American Indian children and families enrolled in Early Head Start; and (3) test the effectiveness of PCIT with and without EAI enhancement for decreasing the chronic stress response among children and their caregivers, increasing caregiver sensitivity, and decreasing behavior problems among children experiencing environmental stressors. The study will yield information about environmental stressors for American Indian children and their impact on development, and establish an evidence base for parenting interventions that may buffer children from the impact of stressors.