



## Rationale

Specific parent engagement behaviors have been linked t a number of adaptive outcomes in young children. (Bradley et al., 1989; 2001; 2011; Hart & Risley, 1995; Sheridan, Knoche, Edwards, Bovaird, & Kupzyk, 2010).

Getting Ready is an intervention that aims to strengthen parent-professional collaborative partnerships for the purposes of enhancing parent-child interactions and generating individualized strategies to promote child development (Sheridan, Marvin, Knoche, & Edwards, 2008).

Parent-child engagement behaviors of parents with children enrolled in Early Head Start (EHS) programs have been significantly enhanced as a result of participation in the *Getting Ready* intervention (Knoche, Edwards, Sheridan, Kupzyk, Marvin, Cline, & Clark, 2012).

Language skills have been significantly improved in preschool children enrolled in Head Start augmented with the *Getting Ready* intervention compared to children in "business as usual" Head Start programs (Sheridan, Knoche, Kupzyk, Edwards, & Marvin, 2011).

Greatest benefits from *Getting Ready* intervention for preschool children were noted for those who began the *Getting Ready* intervention with notable developmental delays (Sheridan & Knoche, 2011).

**Purpose:** To investigate the effects of the *Getting Ready* intervention on the language development of infants/toddlers with developmental delays in EHS and the parent-engagement behaviors of their caregivers.

Acknowledgements: This research is supported by a grant awarded to Drs. Susan Sheridan and Carolyn Pope Edwards by the Department of Health and Human Services (DHHS) -- National Institute of Child Health and Human Development (NICHD), Administration for Children and Families (ACF) and Office of the Assistant Secretary for Planning and Evaluation (ASPE); and the Department of Education (ED) -- Office of Special Education and Rehabilitative Services. The opinions expressed herein are those of the investigators and do not reflect the funding agencies (GRANT # 1R01H00436135).

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# Language Outcomes for Children with Developmental Delays in Early Head Start Programs: A Preliminary Investigation Christine Marvin, Ph.D., Miriam Kuhn, Ed.S., and Lisa L. Knoche, Ph.D. Nebraska Center for Research on Children, Youth, Families and Schools

### Methods

to	Subjects
	• Subjects drawn from larger sample of EHS childred
	families participating in study of Getting Ready
).	intervention ( $n=242$ )
	• 41 children (27 boys, 14 girls)
	- Mean age at baseline: 14.6 months
1	- Bayley Scales of Infant Development- II
	Mental Development Index $\leq$ 85 at base
	• 39 caregivers (35 mothers, 4 fathers/grandparent
	• 22 EHS professionals
	Mean early education experience: 4.1 ye
	• Attrition ranged from 72% of treatment group to
	control group participants

#### **Experimental Conditions**

- EHS home visits: "Business as Usual" (n = 13)
- EHS + *Getting Ready* Intervention (n = 28)

#### Measures

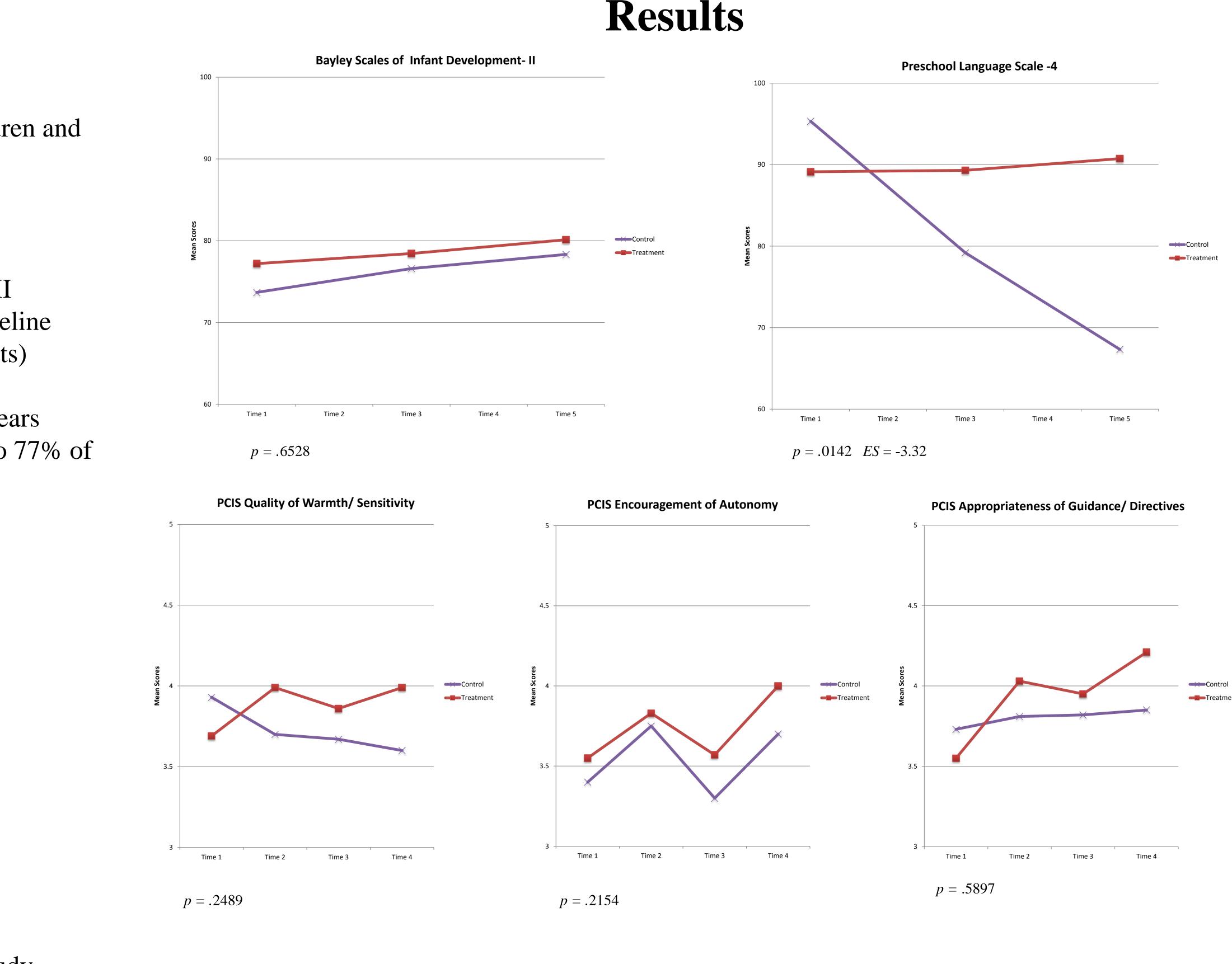
- Bayley Scales of Infant Development- II
- Preschool Language Scale- 4
- Parent/Caregiver Involvement Scale

#### **Data Collection**

- Scheduled every 4 months over the 18-month study
- Direct child assessments (Bayley-II, PLS-4)
- Video-taped observation of parent-child interactions

#### **Design and Analysis**

- Cluster randomized trial with repeated measures
- Multilevel modeling analysis using SAS PROC GLIMMIX
- Outcomes predicted by experimental condition by time interaction
- Effect Size (*ES*): ratio of difference in Tx and C slope *M*s divided by the SD of slope growth factor
- Missing data due to attrition– accounted for by use of Full Information Maximum Likelihood. Data from all subjects with at least one measure were retained for analysis



## Implications

- *Getting Ready* intervention provides added value to EHS programs' efforts to stabilize the trajectory for language development in children with developmental delays.
- Since language competencies are foundational for other school-readiness skills (Ex. academic, social-emotional competencies), maintaining growth in language development for young children who have risk factors associated with poverty and developmental delay may be key to later school success.
- While this preliminary investigation did not reveal significant changes in parent-child *Ready* intervention, further study of this population is warranted to tease out the relationships among parent-engagement behaviors, other salient features of the *Getting Ready* intervention, and the language development of this vulnerable group of children.



engagement behaviors for parents of children with evidence of delays participating in the *Getting*