Initial Impacts of the Smart Beginnings Intervention on Parental Language and Cognitive Stimulation

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Background

- Wide range of interventions designed to reduce school readiness disparities by promoting positive parenting behaviors.
- Significant efficacy at individual child level, limited impacts at population level.
- Smart Beginnings is a population-scalable, tiered intervention promoting positive parenting and child school readiness.

Objective

- Examine early impacts on support of language and cognitive stimulation assessed at 6 months.

Participants

- 403 low-income mother-infant dyads.
- Inclusion criteria: full-term singleton non-low birthweight births with no significant medical conditions or eligibility for EI. Mothers had no known barrier to communication, spoke English or Spanish, and planned to receive pediatric care at the site.
- Primarily immigrant Latino mothers in NYC (84%) and African-American mothers in Pit (81%).
- No significant differences between treatment groups at baseline.

Measures

**Parent Surveys**
- Parenting Your Baby: how often parents engage in positive parenting behaviors. 2 subscales: Supporting/Enjoying Your Baby & Planning Ahead.
- Stim Q: cognitive stimulation in the home. 3 subscales: Reading Scale (READ), Parent Verbal Responsivity (PVR), & Parental Involvement in Developmental Advance (PIDA).

**Direct Observation**
- Parent-Child Interaction Rating Scales, Infant Adaptation

Results

**Key Impact Findings 6 Months**

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<thead>
<tr>
<th>Parenting Outcomes (Survey)</th>
<th>Impact (SE)</th>
<th>Sig</th>
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<tbody>
<tr>
<td>Supporting/Enjoying Baby</td>
<td>0.01 (0.05)</td>
<td></td>
</tr>
<tr>
<td>Planning Ahead for Baby</td>
<td>-0.01 (0.06)</td>
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<tr>
<td>Cognitive Home Environment</td>
<td>1.22 (0.62)</td>
<td>*</td>
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<tr>
<td>Reading Activities</td>
<td>0.58 (0.36)</td>
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<tr>
<td>Verbal Interactions</td>
<td>0.29 (0.31)</td>
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<tr>
<td>Teaching and Play Activities</td>
<td>0.33 (0.14)</td>
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**Parenting Outcomes (Observation)**

- Sensitivity
- Cognitive Development
- Language Quantity: 0.60 (0.18) ***
- Language Quality: 0.48 (0.16) **
- Affect Mutuality: 0.02 (0.15)

Future Directions

- Future research will examine impacts of combined intervention on parent and child outcomes.
- Will examine effects of parent participation and dose on intervention impacts.

Implications

- Importance of early support and scaffolding of positive parenting behaviors to create positive developmental trajectories over time.
- Parental language and cognitive stimulation key mediators for later school readiness.
- Provides evidence for pediatric primary care as unique point of access in engaging families.
- Support integration of primary and secondary/tertiary preventive interventions in healthcare.

Discussion

- Initial impacts show substantial promise of the Smart Beginnings tiered model in pediatric care.
- Impacts on parent survey responses were further corroborated by observed parent-child interactions.
- Successful transferability and implementation across sites.

References

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