Differential Effects of General and Parenting-Related Stress on Parent-Child Interaction in Early Head Start and a Comparison Group

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Background

A developmental pathways approach examines dynamic and increasingly integrated systems as a way to understand the variation in development. This approach takes into account the child’s developmental context. The nature of the interaction between the primary caregiver and child plays a significant role in defining the context in which the child’s pathway develops. Further, the parent-child relationship is in itself constructed within the family system and the stressors that affect the parenting process. Parenting stress is a complex construct that represents parent, child, and family characteristics as they relate to the parent’s appraisal of his or her role as a parent (Everly & Lating, 2002).

Higher levels of parenting stress have been implicated in less positive interactions between parents and children, including greater conflict and greater likelihood of child maltreatment (Coyl, Roggman, & Newland, 2002). On the other hand, general distress experienced by parents includes the social and emotional difficulties external to the child. Parents’ depression, anxiety, and isolation tend to dominate this form of stress and have significant negative consequences for parent-child interaction, including rigid and controlling ways of interacting (Fischer et al., 1998; Gladstone & Beardslee, 2002; Shields, Cicchetti & Ryan, 1994). Children whose parents have high levels of stress are at increased risk for problems in language, cognition, attachments, emotional regulation, social competence and behavior problems.

Research Questions

1. What is the impact of demographic risk on general stress, stress-related risk, maternal sensitivity, and cognitive stimulation?
2. What is the impact of general stress on maternal sensitivity and cognitive stimulation?
3. What is the impact of parenting-related stress on maternal sensitivity and cognitive stimulation?

Methods

Sample: This study is a secondary analysis of data from the Early Head Start Research and Evaluation (EHSRE) project, a prospective study of 3,001 children and their families when the children were 14, 24, and 36 months of age. Half of the families were randomly assigned to participate in a Early Head Start (EHS) group at entry to the study, and half were assigned to a control group.

Measures:
- Family demographic risks, measured in a parent interview at entry to the study, included teen parenting, TANF receipt, maternal education, unemployment, and single parenting.
- Parents’ stress was measured using the Parenting Stress Index Short Form (PSI-SF; Abidin, 1992). Two sub-scales were derived from this measure to examine two different types of stress parents experience: General Stress and Parenting-Related Stress (Whiteside-Mansell et al., 2007).
- Parent-child interaction was observed during a semi-structured interaction that was videotaped and rated on parent interaction characteristics, including cognitive stimulation and maternal sensitivity (Love et al., 2005).

Analysis: We fit a series of growth models using SAS PROC Mixed, full maximum likelihood method of estimation, with observations nested within families and within EHSRE study sites over time. We tested a series of mediation models to determine how demographic risks and parents’ stresses impact parent-child interaction in the EHS and control group separately.

Results

Both demographic risks and parent stresses acted independently to affect parent-child interaction. Table 1 lists the effects of each predictor on each outcome for the control and Early Head Start intervention groups.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Outcome</th>
<th>Effect for Control</th>
<th>Effect for EHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Risks</td>
<td>General Stress</td>
<td>-1.6361***</td>
<td>-1.4511***</td>
</tr>
<tr>
<td></td>
<td>Parenting Stress</td>
<td>-0.5860**</td>
<td>-0.4005</td>
</tr>
<tr>
<td>Demographic Risks</td>
<td>Sensitivity</td>
<td>-0.6294***</td>
<td>-0.6872***</td>
</tr>
<tr>
<td></td>
<td>Stimulation</td>
<td>-0.8165**</td>
<td>-0.3689</td>
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<tr>
<td>General Stress</td>
<td>Sensitivity</td>
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<td>-0.0588*</td>
</tr>
<tr>
<td></td>
<td>Stimulation</td>
<td>-0.1358</td>
<td>-0.0871</td>
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<tr>
<td>Parenting Stress</td>
<td>Sensitivity</td>
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<td>-0.0582*</td>
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<tr>
<td></td>
<td>Stimulation</td>
<td>-0.1478</td>
<td>-0.1069</td>
</tr>
</tbody>
</table>

Discussion

- Demographic risks were more associated with general stress than parenting-related stress.
- EHS intervention did not change the effect of general, adult-based stress, which likely reflects difficulties like depression and isolation.
- EHS and control group differences included the effect of both demographic and parenting-related stress on cognitive stimulation in the control group, but no effect of parenting-related stress on cognitive stimulation for the intervention group.

References


