Maternal Executive Functioning as a Potential Mechanism in the Intergenerational Transmission of Negative Parenting Behaviors
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Introduction

There is growing interest in the role of executive functioning (EF) in parenting behavior and whether EF may be a mechanism in the intergenerational transmission of parenting

- Maternal early life experiences of parenting have been indirectly related to maternal use of sensitivity in parenting through HPA function and spatial working memory
- Research has demonstrated relationships between parenting and children’s executive functioning

The Current Study:
- To investigate the potential mechanistic role of maternal EF in the intergenerational transmission of negative parenting, we examined the direct and indirect effects of maternal exposure to negative parenting in childhood and observed maternal use of negative parenting behaviors through maternal EF
- Broadly, it was anticipated that maternal exposure to negative parenting in childhood would be directly associated with maternal use of negative parenting behaviors with her own child
- More specifically, it was hypothesized that maternal EF would mediate the transmission of negative parenting through generations

Methods

- At four months postpartum mothers completed a questionnaire packet, which included a demographic questionnaire, and attended a laboratory visit in which they completed a number of tasks and questionnaires
  - Letter-Number Sequencing task of the Wechsler Adult Intelligence Scale (WAIS-IV)
  - Verbal Fluency task and Color Word Interference task of the Delis-Kaplan Executive Functioning Scale (D-KEFS)
- At six months postpartum mothers completed another questionnaire packet, which included a demographic questionnaire, and attended a laboratory visit in which they completed a number of tasks and questionnaires
  - Repeated Dyadic Adjustment Scale (R-DAS)
  - Cumulative Risk Index (past/current maternal major depressive episode, maternal education less than high school, teen motherhood (17-19 years), single parenthood, and household income at or below poverty threshold)
- At six months postpartum mothers completed another questionnaire packet
  - Parental Bonding Inventory (PBI)
- At eight months postpartum mothers and infants attended a laboratory visit where they participated in a series of tasks including an unstructured free play task
  - Videos of the task were later coded using the Parent-Child Early Relational Assessment (PCERA) to assess maternal use of 13 parenting behaviors
  - 5 behaviors comprised aspects of negative affect and behavior (e.g., angry, hostile tone of voice, criticism of child; ICC = 0.74)
  - 8 behaviors comprised aspects of intrusiveness and insensitivity (e.g., rigid parenting style, inconsistent parenting; ICC = 0.72)

Findings:
- There was no direct effect of maternal exposure to negative parenting in childhood on observed maternal negative parenting behaviors through maternal EF
- However, the indirect effect of maternal exposure to negative parenting in childhood on observed maternal negative parenting behaviors through maternal EF was significant
- The results of this study suggest that EF, and more broadly self-regulation, may be important mechanisms through which parenting is transmitted from generation to generation
- Findings also suggest that the efficacy of parenting interventions might be enhanced by targeting specific maternal EF skills
- Future studies could examine specific aspects of EF in the transmission of different parenting behaviors

Discussion

Procedure & Measures:

Results

Participants:
- 120 mothers and their infants participated in a larger longitudinal study
- 54.5% of infants were female; 45.5% were male
- Families were predominately Caucasian (70.9%), with 12.0% self-identifying as Hispanic and 12.0% as African American
- Mean maternal age was 27.82 (SD = 6.32, range = 17-42)
- 57.3% of the families were economically stressed, with 23.6% of families at or below the poverty line

Model Fit:
- Model Fit: X² = 25.99, p > .05; RMSEA = 0.03; CFI = 0.95; SRMR = 0.06
- Missing data was estimated using Full Information Maximum Likelihood Estimation
- Direct Effects are above the Maternal Perceptions of Childhood Parenting  Exhibited Maternal Parenting Behaviors Line; Indirect Effects are below the line
- Inteparental relationship adjustment and cumulative risk were included as covariates

References