



Maternal Depression and Socioemotional Skill Development in the Midwest Child-Parent Center Expansion

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Background

- Socioemotional skills in early childhood predict a variety of longitudinal outcomes (Jones et al., 2015)
- Children affected by poverty and maternal depression are at increased risk for socioemotional problems (Cummings et al., 1994; Yoshikawa et al., 2012)

The Child-Parent Center Program (CPC)

- Comprehensive educational and support services are provided to low-income children and families (Reynolds, 2000)
 - Collaborative Leadership Team
 - Effective Learning Experiences
 - Aligned Curriculum and Practices
 - Parent Involvement and Engagement
 - Professional Development
 - Continuity and Stability
- Expansion includes a new implementation and longitudinal assessment of sites from PreK through Grade 3 in Chicago IL, Evanston IL, Normal IL, Madison WI, Rochester MN, and St. Paul MN

Research Questions

- Do maternal depressive symptoms predict base levels and growth in socioemotional skills in early childhood?
- Is CPC associated with increased growth in socioemotional skills in early childhood?
- Does CPC moderate the effect of maternal depressive symptoms on socioemotional skill development?

Method

Participants

- 950 children, and their mothers, enrolled at 31 preschools in a low-income area of Chicago
- 702 dyads received CPC, 248 dyads were matched controls
 - Children: 45% male, 59% African American, 40% Hispanic
81% free lunch eligible, 40% native English speakers
 - Mothers: 72% high school graduates, 50% single parents

Measures

- Maternal depressive symptoms (baseline mother-report)
 - Assessed with mailed parent survey
 - 4 items from Brief Symptom Inventory (Derogatis, 1975)
 - "In the past month, how frequently did you feel lonely?"
- Socioemotional skills (annual teacher-report over 4 years)
 - Teacher-Child Rating Scale (T-CRS; Hightower et al., 1986)
 - Task orientation
 - Social skills
 - Behavioral control
 - Assertiveness

Results

Missing Data Patterns

- A large portion of children ($N = 915$) were excluded from the analysis sample
 - 536 did not have mother survey data
 - 381 had outcome data missing at more than 2 time points
- Participants in the analysis sample were more likely to be:
 - White ($t = 2.70, p < .01$)
 - Hispanic ($t = 2.45, p = .01$)
 - In the control group ($t = -2.32, p = .02$)
- Participants did not differ on any of the outcome domains at baseline

Statistical Analyses

- Series of 2-level multilevel models using *R* (version 3.5.1)
 - ICC (children) = .23 to .41; ICC (schools) = .02 to .04
 - Random effects of intercept and time

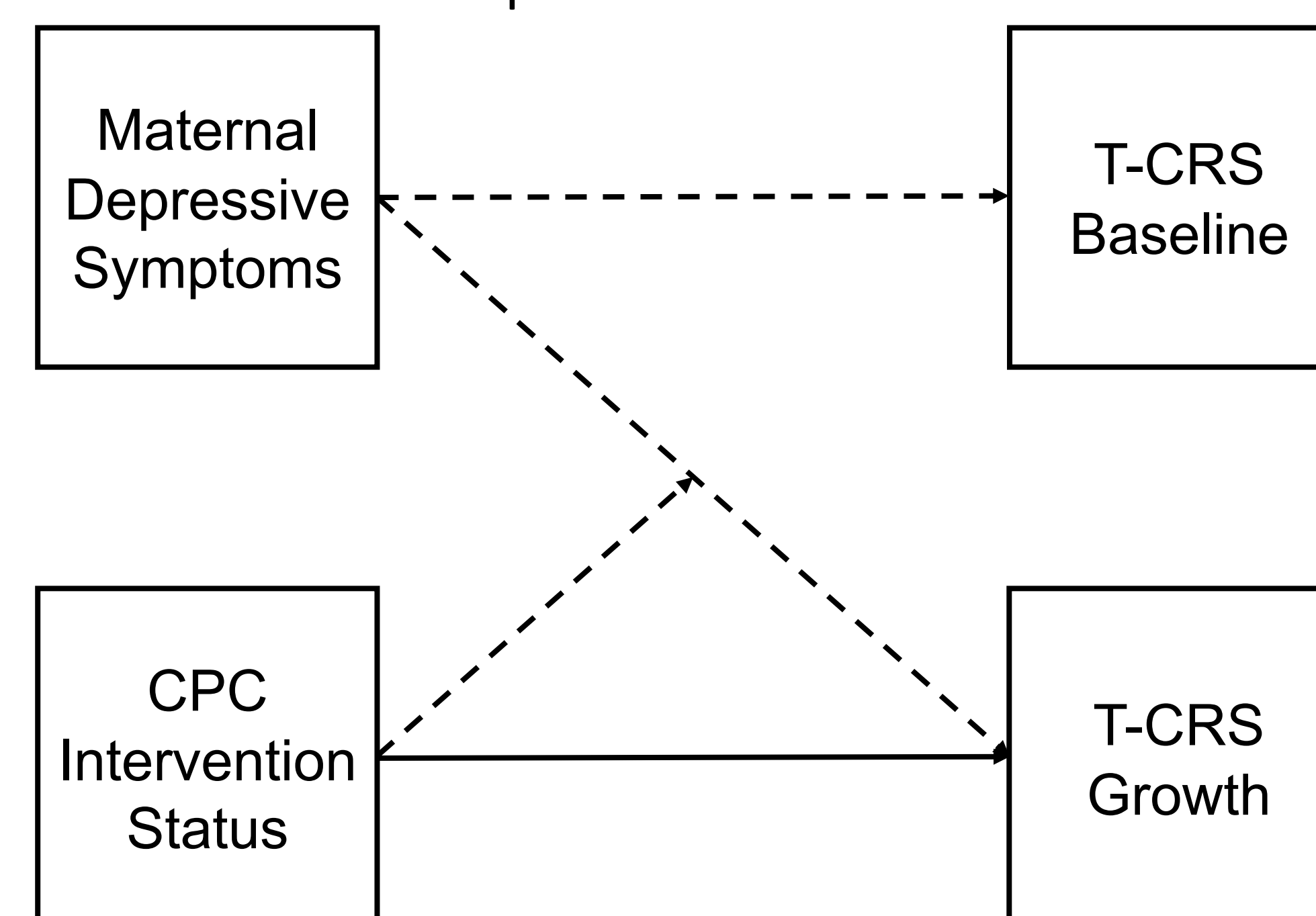


Figure 1: Conceptual Model for Effects of CPC and Depression on Socioemotional Development

Maternal Depressive Symptoms Associated with Reduced Growth

- No effect on base socioemotional skills
- Slower growth over transition to school for children with mothers at risk

Domain	Effect of Depression	<i>p</i>
Task Orientation	-0.33	<.01
Peer Social Skills	-0.25	.03
Behavioral Control	-0.33	<.01
Assertiveness	-0.14	.22

Table 1: Fixed Effect Estimates for Year : Depression Interaction

CPC Associated with Accelerated Growth

- Increased growth over transition to school for children in CPC

Domain	Effect of CPC	<i>p</i>
Task Orientation	0.16	.04
Peer Social Skills	0.13	.05
Behavioral Control	0.12	.08
Assertiveness	0.14	.04

Table 2: Fixed Effect Estimates for Year : CPC Interaction

CPC Does Not Moderate Effects of Maternal Depressive Symptoms

- No effect of interaction on growth in any of the domains

Discussion

Conclusions

- Maternal depressive symptoms do not appear to be related to socioemotional ability before Kindergarten
- Maternal depressive symptoms predict significantly slower growth in socioemotional skills through the first years of elementary school
- CPC increases socioemotional growth rates from PreK to the first years of elementary school, but does not reduce the risk associated with maternal depressive symptoms

Outlook

- Early childhood interventions like CPC may serve as a protective factor for children at-risk for poor socioemotional adjustment and classroom problems
- Children with significant risk factors may benefit from targeted interventions, and parents may benefit from family support services and referrals, as needed
- Future focus on mechanisms: What could account for CPC's enhancing effect on socioemotional growth?
- Increasingly sophisticated analysis will increase reliability of results, including multiple imputation and replication in other school districts

Strengths

- Large sample in an understudied population
- Quasi-experimental design enhances causal inference
- Assessment of socioemotional learning in multiple domains

Limitations

- Limited mother data: many mothers did not return the survey and could not be included in the analysis sample
- High attrition rate
- Data is not yet available for later school years

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