Neighborhood Characteristics, Maternal Parenting, and Health and Development of Children from Socioeconomically Disadvantaged Families

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Abstract

Informed by an ecological perspective (Belsky, 1993; Bronfenbrenner, 1977), the study examined **the direct and indirect effects of neighborhood conditions on the health and development of children from socioeconomically disadvantaged families**, of which findings were consistent with previous expectations that neighborhood conditions affected children's health outcomes both directly and indirectly.

Introduction

Research exists on neighborhood conditions and child development transmitted through parenting practice, including neighborhood conditions and child development; neighborhood conditions and parenting practices; neighborhood conditions, parenting, and child development; and indirect associations between neighborhood conditions and child development. However, none of these studies provided specific implications for socioeconomically disadvantaged families.

Method

Data & Sample

3,565 children (aged 1, 3, and 5) and their mothers from the Fragile Families and Child Wellbeing (FFCW) study were included in this study.

Measures & Variables

The neighborhood characteristics were reported by the mothers, including social cohesion, social cognitive development, and family characteristics. All variables except family characteristics were reported on scales and summarized as a composite score (i.e., a mean value). The measures were:

Focal Variables (Age 3-5)

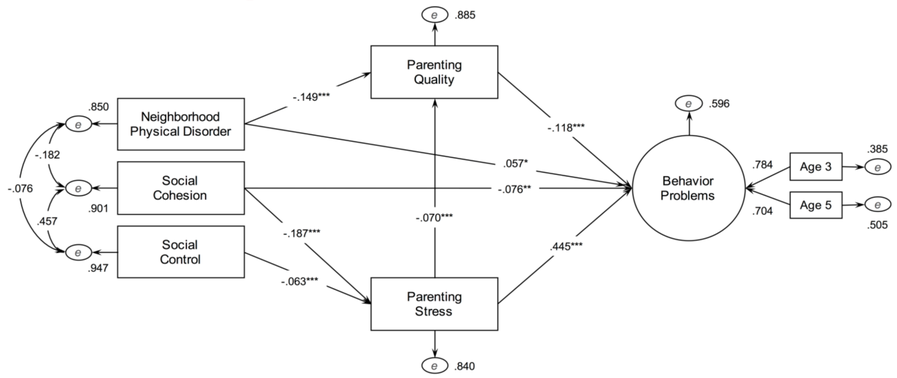
- Neighborhood Social Cohesion (Sampson, Raudenbush, & Earls, 1997)
- Neighborhood Social Control (Sampson, Raudenbush, & Earls, 1997)
- Neighborhood Physical Disorder (Sampson and Raudenbush,1999)
- Maternal Parenting Stress
- Maternal Parenting Quality (HOME scale) (Caldwell & Bradley, 1984)
- Children's Behavioral Problems (CBCL) (Achenbach, 1992)
- Children's General Health Status
- Children's Cognitive Development (PPVT-R) (Dunn, Dunn, Robertson & Eisenberg, 1959)

Control Variables (Age 3)

- Family Characteristics (e.g., child's sex, race, mothers' age, education, marital status, economic hardship, health care coverage)

Results

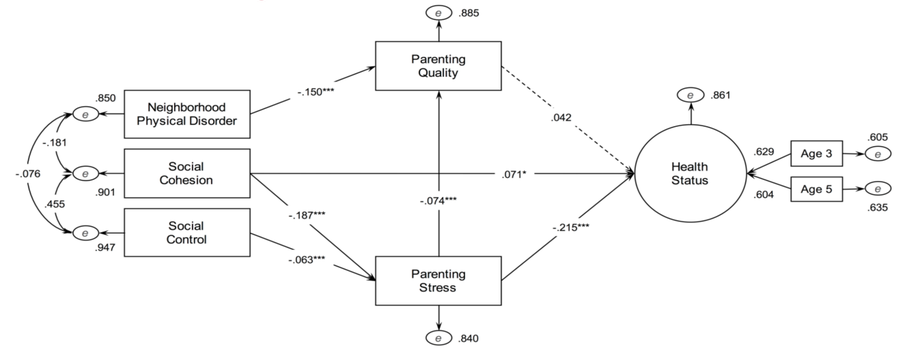
Figure 1 Child Behavior Problems Model



Note. Family characteristics (e.g., child's sex, race, mothers' age, mothers' education, fathers' education, marital status, economic hardship, and health care coverage) were controlled for each variable shown in this model.

N = 3565, Bayesian Posterior Predictive Checking using Chi-Square Posterior Predictive P-Value = .559 [CI = -38.738, 38.123], Deviance (DIC) = 58880.872, Estimated Number of Parameters (pD) = 84.192, Bayesian (BIC) = 59407.715;
*p < .05, **p < .01, ***p < .001 (One-Tailed).

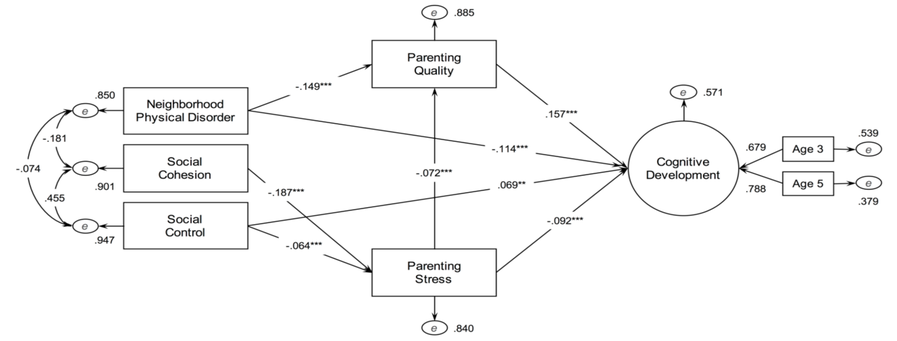
Figure 2 Child Health Status Model



Note. Family characteristics (e.g., child's sex, race, mothers' age, mothers' education, fathers' education, marital status, economic hardship, and health care coverage) were controlled for each variable shown in this model.

N = 3565, Bayesian Posterior Predictive Checking using Chi-Square Posterior Predictive P-Value = .437 [CI = -32.628, 38.212], Deviance (DIC) = 35658.358, Estimated Number of Parameters (pD) = 84.220, Bayesian (BIC) = 36185.115;
*p < .05, **p < .01, ***p < .001 (One-Tailed).

Figure 3 Child Cognitive Development Model



Note. Family characteristics (e.g., child's sex, race, mothers' age, mothers' education, fathers' education, marital status, economic hardship, and health care coverage) were controlled for each variable shown in this model.

N = 3565, Bayesian Posterior Predictive Checking using Chi-Square Posterior Predictive P-Value = .437 [CI = -34.430, 42.093], Deviance (DIC) = 56964.950, Estimated Number of Parameters (pD) = 84.796, Bayesian (BIC) = 57490.611;
*p < .05, **p < .01, ***p < .001 (One-Tailed).

Analyses

Structural equation modeling with latent variables was used to test the direct and indirect contributions of family-, individual-, and neighborhood-level factors to child developmental outcomes. Three separate models were tested for three measures of young children's outcomes, including behavioral problems, general health status, and cognitive development.

Discussion

The three longitudinal structural equation models of the FFCW data partially confirmed the direct and indirect effects of neighborhood characteristics on children's health outcomes.

(1) Social cohesion had both direct and indirect effects on children's behavioral problems and health status, as well as indirect effects on cognitive development transmitted through mothers' parenting stress.
(2) Social control was indirectly associated with all three child outcomes.
(3) Neighborhood physical disorder had a direct effect on children's behavior problems and both direct and indirect effects on cognitive development.
(4) Parenting stress and parenting quality were two of the most salient factors in determining children's outcomes.
(5) Neighborhood was a contextual mechanism that influences maternal parenting, through which it potentially contributes to child development.
(6) Socioeconomic indicators had significant effects on behavioral, health, and cognitive outcomes, even after controlling for maternal parenting and neighborhood characteristics.

Limitations

(1) Neighborhood conditions and characteristics were measured only by mothers' perspectives.
(2) Only mothers were involved in this study, without measuring fathers' personal, psychological, and parenting resources nor teachers.
(3) Immigrant status and ethnicity of the children and mothers were not included.
(4) Interparental or parent-child relations were not included.

***Note:** The findings were published on American Journal of Community Psychology.
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