

Do Neighborhoods Matter? Exploring Relationships Between Neighborhood Characteristics and Family and Child Outcomes

Michael Vaden-Kiernan, Abt Associates Inc.

Mary Ann D'Elio, The CDM Group, Inc.

Linda Hailey, Abt Associates Inc.

Robert W. O'Brien, The CDM Group, Inc.

Introduction

Neighborhoods have long been recognized in theory and research as important contexts for child development. Children who are exposed to neighborhood violence are at increased risk for lower social competence and negative emotional or behavioral functioning.

Exposure to neighborhood violence may have direct and indirect effects on child outcomes. Other factors, such as maternal depression, may mediate the relationship by serving as the mechanism through which exposure to neighborhood violence leads to problem behavior in children.

This poster explores relationships between neighborhood violence, child behavior, and maternal depression in the FACES sample of 3,156 families ([see Poster 1 for a complete description of sample](#)). A broader set of family variables, as well as parents' participation and experience in Head Start, will be tested to see if they moderate any negative outcomes.

Measure of Neighborhood Violence

In the spring of 1998, respondents were asked to report whether the following experiences happened to them never, once, or more than once, during the past year.

- Seeing non-violent crime take place in their neighborhoods – for example, selling drugs or stealing;
- Seeing or hearing violent crimes take place in their neighborhoods;
- Knowing someone who was a victim of violent crime in their neighborhoods;
- Being a victim of violent crime in their neighborhood; and
- Being a victim of violent crime in their home.

Other Measures

Maternal Depression

Center for Epidemiology Studies – Depression Scale (CES-D)

Child Behavior Check List

Adapted from Achenbach & Edelbrock, 1986

Family Support Scale

Adapted from Dunst, Trivette, & Hamby, 1995

Pearlin Mastery Scale (Locus of Control)

Pearlin & Schooler, 1978

Head Start: Involvement, Experience, Satisfaction, and Support

FACES Research Team and Head Start Quality Research Consortium, 1997

Analyses Conducted

- Correlations to test for associations among neighborhood violence and child and family outcomes.
- Regressions to test if effect of neighborhood violence on child behavior is mediated by maternal depression.
- Regressions to test the interactive effects of neighborhood violence and the following variables on child behavior and maternal depression outcomes:
 - Social support
 - Family size
 - Presence of father
 - Locus of control
 - Family activities
 - Head Start: Support, satisfaction, experience, involvement

Findings

Small, but significant positive correlations were found between neighborhood violence and child behavior problems including aggressive, hyperactive, and withdrawn behavior.

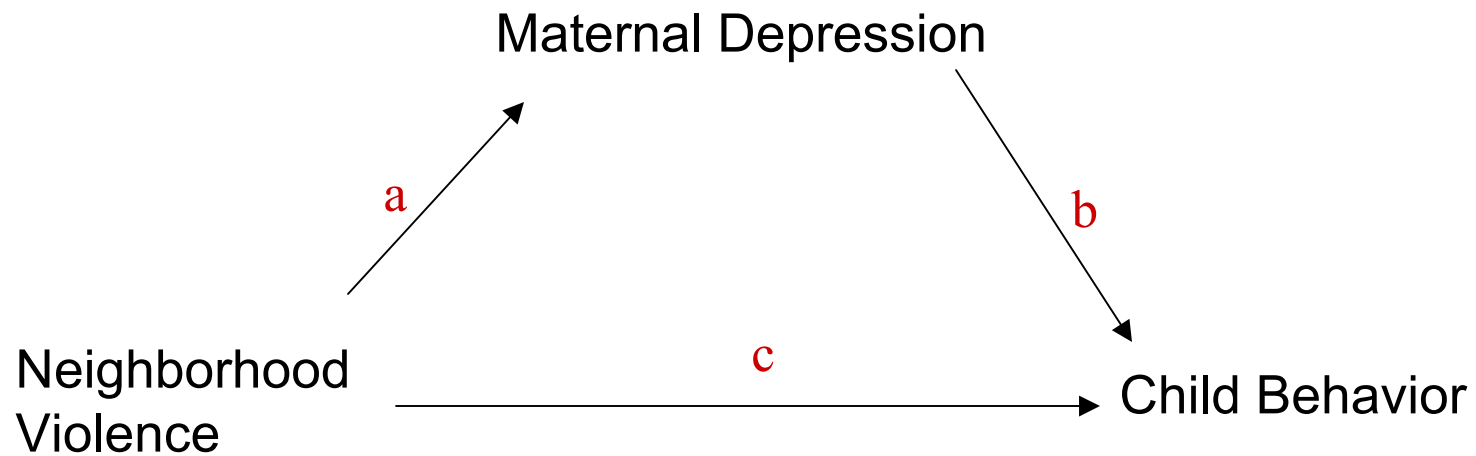
Stronger correlations were found between neighborhood violence and maternal depression, and maternal depression and child behavior problems.

Zero-order Correlations Among Neighborhood Violence, Child Behavior, Maternal Depression, Locus of Control, and Social Support (N=2,686)

Variable	2	3	4	5	M	SD
1. Neighborhood Violence	.09***	.26***	-.07***	.02	6.1	1.8
2. Child Behavior (Total)		.28***	-.29***	-.07***	6.0	3.5
3. Maternal Depression			-.41***	-.05**	3.0	1.7
4. Locus of Control				.13***	1.7	1.4
5. Social Support					1.3	1.5

*p<.01, ***p<.001

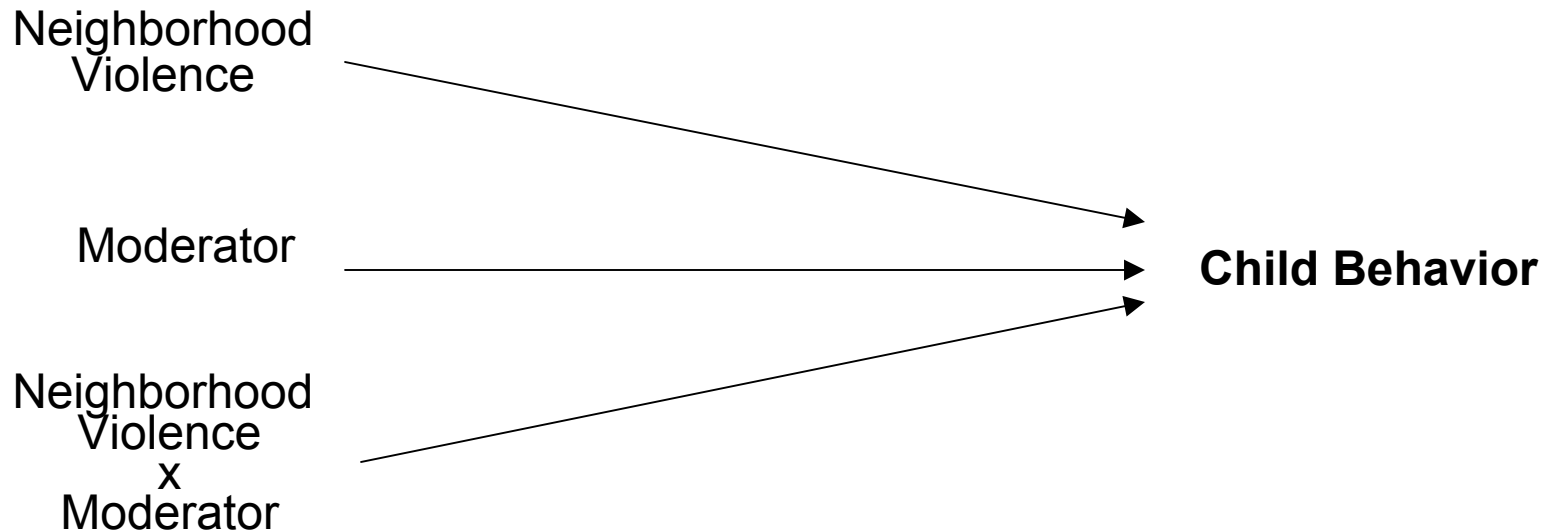
Mediation Model



When paths *a* and *b* are controlled, the previously significant relationship between neighborhood violence and child behavior is no longer significant.

This strongly suggests that maternal depression mediates the relationship by serving as the mechanism through which exposure to neighborhood violence leads to problem behavior in children.

Moderator Models



Significant Interactions (Modifiers)

Among Latino Families (overall problem behavior as outcome):

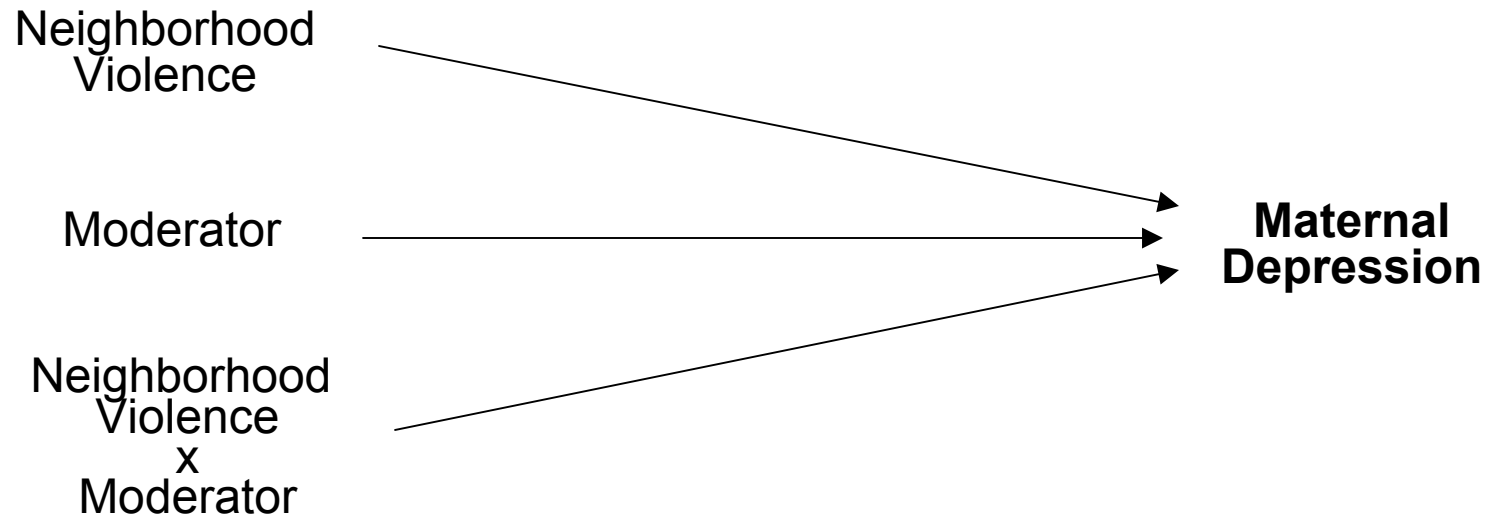
Neighborhood Violence x Head Start Satisfaction ($p=.006$)

Among Anglo Families (withdrawn behavior as outcome):

Neighborhood Violence x Head Start Experience ($p=.04$)

Among All Families or African American Families (all behavior outcomes)

No significant interactions



Significant Interactions (Modifiers)

Among All Families:

Neighborhood Violence x Locus of control ($p < .0001$)

Among Latino Families:

Neighborhood Violence x Locus of Control ($p < .0001$)

Neighborhood Violence x Head Start Experience ($p = .04$)

Neighborhood Violence x Head Start Involvement ($p = .01$)

Among Anglo Families:

Neighborhood Violence x Locus of Control ($p < .0001$)

Neighborhood Violence x Head Start Experience ($p = .05$)

Among African American Families

No significant interactions

Summary

Findings suggest that exposure to neighborhood violence does negatively impact child behavior, even in children as young as 3- and 4- years old.

Because maternal depression was found to mediate the relationship between neighborhood violence and child behavior, that effect is most likely indirect, with depression serving as the mechanism through which exposure to neighborhood violence leads to problem behavior in children.

It appears that being involved in and having a positive experience at Head Start may serve as protective factors against exposure to neighborhood violence. Locus of control is also a significant moderator of the relationship between neighborhood violence and maternal depression.

Cultural differences seem to play a role in determining what factors moderate negative outcomes on maternal depression and child behavior. No differences were found by urban/rural status.

Introduction

The goals of the FACES Case Study are to:

- Provide a more complete profile of Head Start families, their neighborhoods and the nature of their interactions with Head Start; and
- Support and expand on the findings from the larger FACES study, pursue research questions independent of the larger study, and generate hypotheses for future research.

The purpose of this poster is to answer the following research questions:

- What are other important neighborhood factors that may influence child and family outcomes from the FACES case study?
- Do other family or social processes mediate or moderate the relationship between neighborhood characteristics and child and family outcomes?
- Does involvement in Head Start moderate negative outcomes?

FACES Case Study Sample

- 120 Head Start families randomly selected from the larger FACES sample (3 families per site).
- There were no statistically significant differences between the case study sample and the larger FACES sample of families on basic demographic information, including: household income, marital status, ethnicity, educational attainment, employment status, receipt of welfare, Medicaid or food stamps, and language spoken in the home.
- Overall case study attrition rate of 12% over 16 month period of following these families (September, 1997 - December, 1998).

FACES Case Study Measures

Three primary data collection components were used:

Home Visit Parent Interviews

- Semi-structured interviews included open-ended questions regarding parent's perceptions of themselves and their family, their experiences with Head Start, and their neighborhoods.

Home and Neighborhood Observation Checklists

- Checklists were completed by interviewers and by families during home visits.

Monthly Telephone Contacts

- Monthly updates on changes in family's household composition, child care arrangements, employment status, health status, and Head Start participation.

Data Analyses

Data from the FACES case study as well as main study were analyzed as follows:

- Correlations to test for associations among neighborhood factors and child and family outcomes.
- Regressions testing family and social processes as mediators or moderators of the relationship between neighborhood factors and: 1) child behavioral outcomes; and 2) maternal depression.

Key Study Variables Include:

Neighborhood Factors

- Safety
- Interactions with Neighbors
- Physical/Social Indices
- Violence

Child & Family Outcomes

- Child Behavior Checklist
- Maternal Depression

Family & Social Processes

- Head Start Participation
- Neighborhood Resources
- Family Resources
- Social Support

Conceptualization of Neighborhood

Content analyses of caregivers' descriptions of their neighborhoods indicated that most caregivers used three set of criteria to determine whether their neighborhood was a good or bad place to raise their children.

Safety

Caregivers rated the safety of their neighborhood on a 5-point scale.

- 66% indicated that their neighborhood was safe.
- 86% of neighborhoods that were perceived as a good place to raise children were safe.

Quality of Interactions with Neighbors

Caregivers' descriptions of their interactions with neighbors were coded as good, bad, or both.

- 48% indicated that they had good interactions with neighbors.
- 60% of families in neighborhoods that were perceived as a good place to raise children had good interactions with neighbors.

Physical and Social Quality Indices

Caregivers indicated the presence of five physical and social quality indices in their neighborhoods.

- 60% indicated that they had 3 or less indices in their neighborhoods.
- 76% of neighborhoods that were perceived as a good place to raise children had 2 or less indices.

Correlations Between Neighborhood Factors and Outcomes

- Neighborhood Factors from case study and main study are significantly correlated with each other.
- Neighborhood Factors are not significantly correlated with child behavior problems and maternal depression. Therefore, no mediation models were tested.

Correlations Among Neighborhood Factors, Children's Behavioral Problem Index, and Maternal Depression (N = 120)

Variable	2	3	4	5	6	M	SD
1)Safety-Unsafe	.65**	.64**	.59**	.01	.17	2.2	1.1
2)Neg. Interactions w/Neighbors		.54**	.55**	.02	.20	1.7	.74
3)Physical/Social Indices			.49**	.04	.18	1.9	1.7
4)Neighborhood Violence				.07	.27**	6.2	1.9
5)Child Behavior-total					.20*	6.4	3.9
6)Depression						7.7	6.7

*p≤.05 **p≤.01

Neighborhood Factors and Child Behavior

Participation in Head Start activities positively moderates the relationship between neighborhood factors and child behavior. These results were not changed when controlling for individual demographic variables.

Neighborhood Factor	Behavior Problems	Moderator	Regression Coefficient	R ²	N
Physical/Social Indices	Total	Volunteer in classroom	No=1.50**	.42	N=16
			Yes= .14		N=36
Violence	Total	Volunteer in classroom	No=1.81*	.34	N=17
			Yes= .86		N=36
Violence	Total	Volunteer on field trips	No=1.20*	.17	N=25
			Yes= .20		N=32
Violence	Total	Participate in parent meetings	No=1.15*	.15	N=31
			Yes= .03		N=32
Violence	Aggressive	Participate in parent meetings	No= .53*	.13	N=31
			Yes= .06		N=32
Physical/Social Indices	Hyperactive	Volunteer in classroom	No= .45*	.30	N=16
			Yes= .07		N=36
Unsafe Neighborhood	Withdrawn	Volunteer in classroom	No=1.01*	.36	N=16
			Yes= -.60*		N=36
Neg. Interactions w/ Neighbors	Withdrawn	Volunteer in classroom	No=1.13*	.42	N=16
			Yes= -.32		N=36
Physical/Social Indices	Withdrawn	Volunteer in classroom	No=.58**	.51	N=16
			Yes=-.17		N=36
Neighborhood Violence	Withdrawn	Volunteer in classroom	No=.60*	.34	N=16
			Yes=.22		N=36

*p≤.05 **p≤.01

Neighborhood Factors and Maternal Depression

- Neighborhood Factors from case study are not significantly correlated with maternal depression although the neighborhood violence measure from the main study is.
- The size of the primary caregivers' social support network across 3 types of social support measured (intimate, informational, instrumental) and the size of their informational social support network positively moderates the relationship between neighborhood factors and maternal depression. These results were not changed when controlling for individual demographic variables.

Significant Moderating Effects between Neighborhood Factors and Maternal Depression

Neighborhood Factor	Moderator	Regression Coefficient	R ²	N
Neighborhood Violence	Informational Social Support Network Size	≤1= 3.62**	.47	N=20
		≥1= -.35		N=21
Neighborhood Violence	Total Social Support Network Size	≤1= 1.96**	.18	N=37
		≥1= .24		N=40

*p≤.05 **p≤.01

Summary

- Findings indicate that neighborhood factors from the case study were significantly correlated to one another and the neighborhood violence measure from the main study.
- Neighborhood factors from the case study were not significantly related to child behavior outcomes or maternal depression. The neighborhood violence measure from the main study did significantly predict maternal depression but not child behavioral outcomes in the case study sample.
- Participation in Head Start activities positively moderated the relationship between neighborhood factors and child behavior indicating that parent involvement may play a significant role in reducing the negative effects of neighborhood factors on children's behavioral problems.
- The size of the social support network positively moderated the relationship between neighborhood violence and maternal depression indicating a parents' support network may play a significant role in reducing the negative effects of neighborhood violence on depression.
- The findings indicate that neighborhood factors are important to understand child and family outcomes, particularly under certain conditions of family and social processes. The findings lent less support to the direct relationship between neighborhood factors and child and family outcomes.