

Relationship of Family and Parental Characteristics to Children's Cognitive and Social Development in Head Start



Mary Ann D'Elio, M.S.
Robert W. O'Brien, Ph.D.
Michael Vaden-Kiernan, Ph.D.
The CDM Group, Inc.

Risk Factors

- ❑ Maternal Depression
- ❑ Exposure to Violence and Domestic Violence
- ❑ Involvement with Criminal Justice System

Protective Factors

- ❑ Family Activities
- ❑ Family Support from Head Start

N = 2,573



Maternal Depression

One Fourth of the Parents Were Classified
as Moderately or Severely Depressed

Not Depressed 47.7%

Mildly Depressed 27.0%

Moderately Depressed 13.6%

Severely Depressed 11.7%



Maternal Depression Was Significantly Associated with Parent Outcomes

Group differences found that parents who were moderately or severely depressed, compared to those who were mildly or not at all depressed...

- Had lower household incomes
- Had a more external locus of control
- Had more authoritarian parenting styles
- Spanked their children more frequently
- Participated in fewer activities with their children
- Were less involved in their children's Head Start programs



Maternal Depression

Positively correlated with:

Parent reported

- Aggressive
- Hyperactive
- Withdrawn behavior

Teacher reported

- Aggressive
- Hyperactive
- Overall problem behavior

Negatively correlated with:

Parent reported

- Emergent literacy
- Positive social behavior

Child Assessments

- One-to-one counting
- Early math



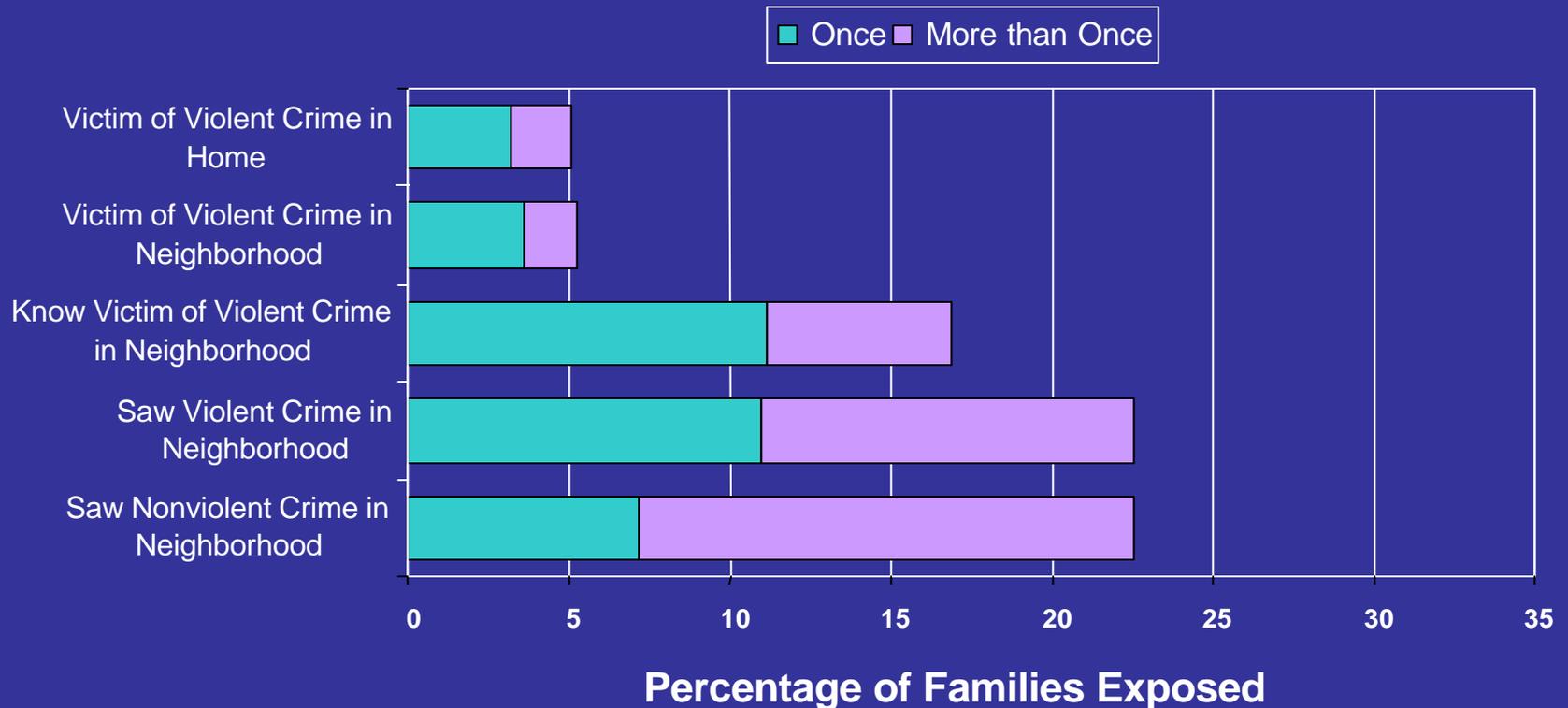
Adjusted Odds Ratios and 95% Confidence Intervals for Moderate or Severe Maternal Depression

| <u>Predictor Variable</u> | <u>Adjusted OR</u> | <u>95% CI</u> |
|------------------------------|--------------------|---------------|
| Exposure to Violence | 1.69 | (1.38-2.06) |
| Domestic Violence | 2.99 | (2.33-3.84) |
| Alcohol Use | 1.36 | (1.12-1.65) |
| Criminal Justice Involvement | 1.97 | (1.57-2.47) |
| Single Parent | 1.45 | (1.17-1.79) |

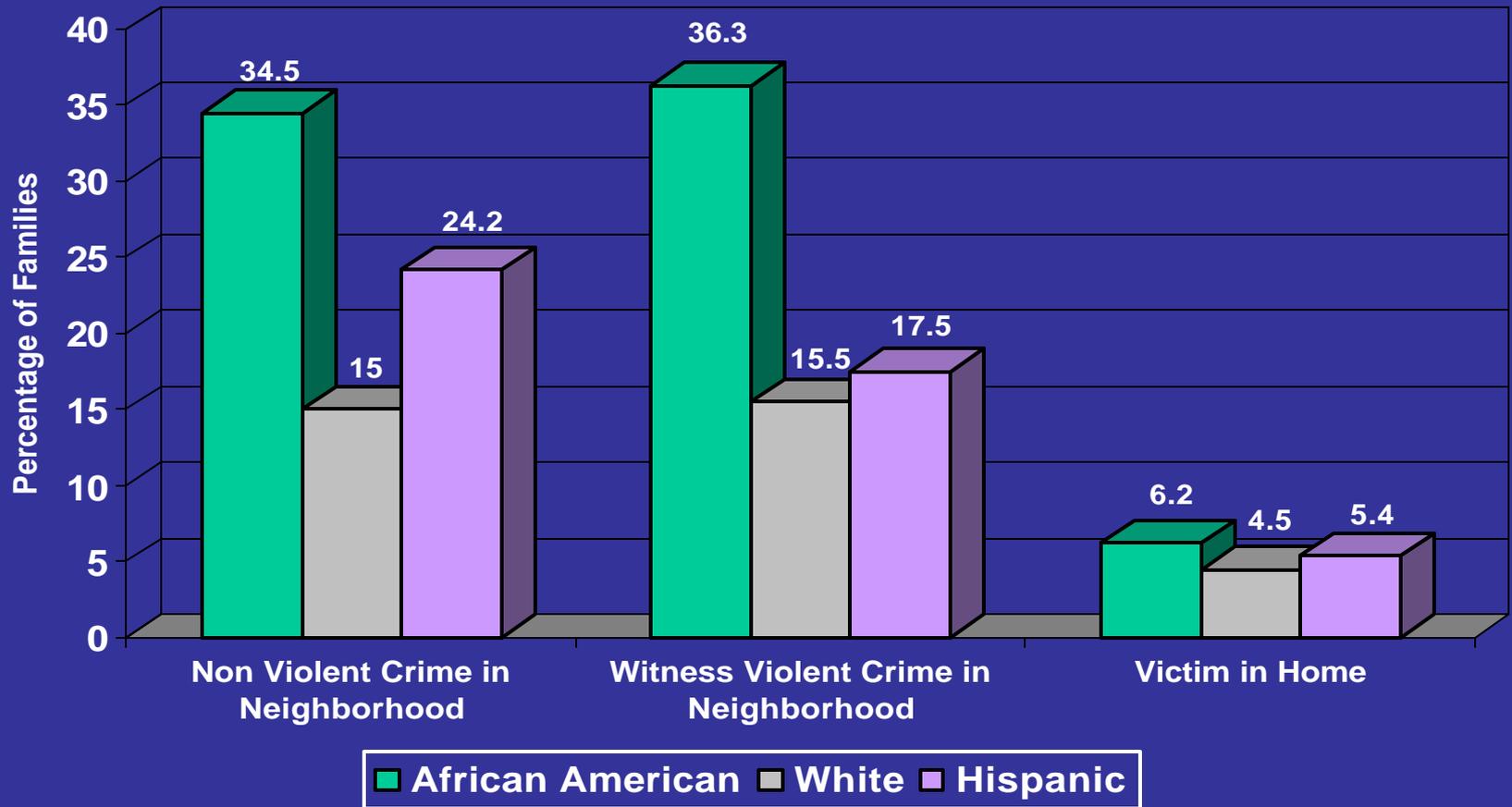


Exposure to Violence

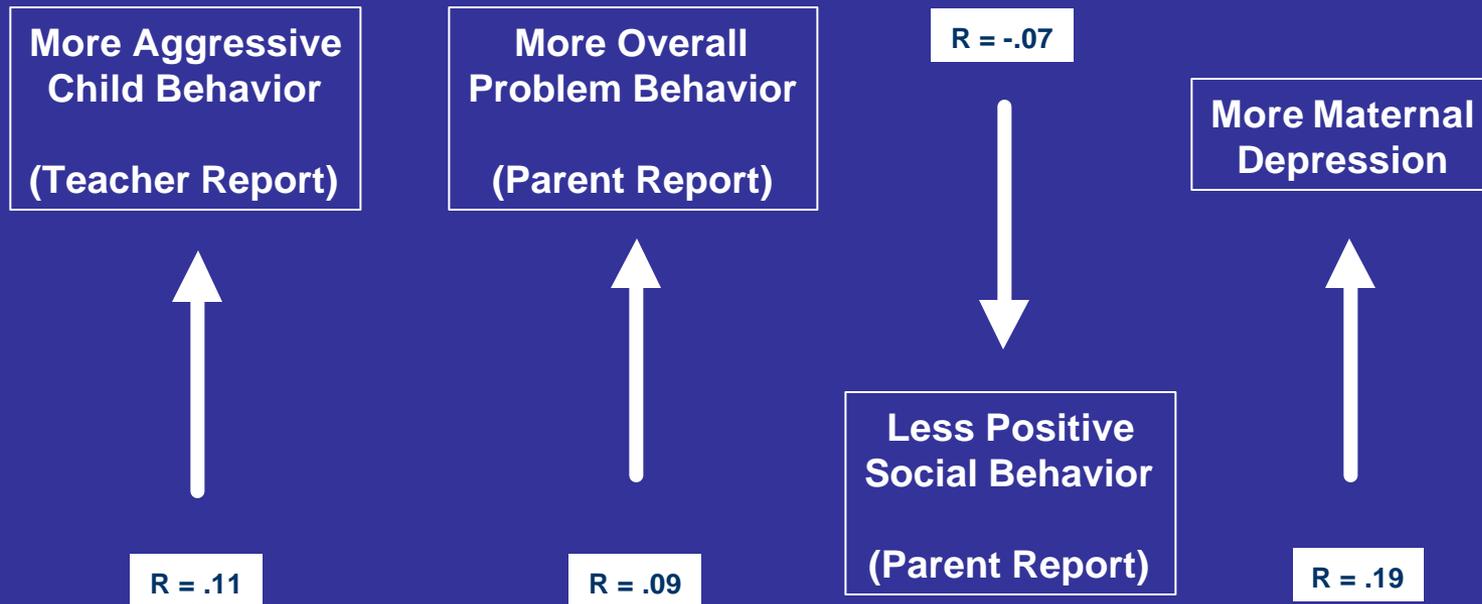
Many Head Start Families Experience Violence First Hand



Exposure to Violence Varied Across Ethnic Groups



Exposure to Violence Was Significantly Associated with Child Behavior and Family Outcomes



Adjusted Odds Ratios and 95% Confidence Intervals for Exposure to Violence

| <u>Predictor Variable</u> | <u>Adjusted OR</u> | <u>95% CI</u> |
|------------------------------|--------------------|---------------|
| Domestic Violence | 2.68 | (2.09-3.44) |
| Alcohol Use | 1.46 | (1.12-1.65) |
| Criminal Justice Involvement | 1.73 | (1.21-1.75) |
| Single Parent | 1.43 | (1.18-1.74) |



Domestic Violence

13% of the Families Screened Positive for Domestic Violence. Among these families:

- Parents were more depressed**
- Children were reported by parents to be more aggressive, hyperactive, withdrawn, and have more overall problem behavior**
- Children were reported by teachers to be more more withdrawn and have more overall problem behavior**



Adjusted Odds Ratios and 95% Confidence Intervals for Domestic Violence

| <u>Predictor Variable</u> | <u>Adjusted OR</u> | <u>95% CI</u> |
|------------------------------|--------------------|---------------|
| Alcohol Use | 1.50 | (1.18-1.91) |
| Criminal Justice Involvement | 3.47 | (2.68-4.50) |
| Single Parent | 2.61 | (1.97-3.46) |

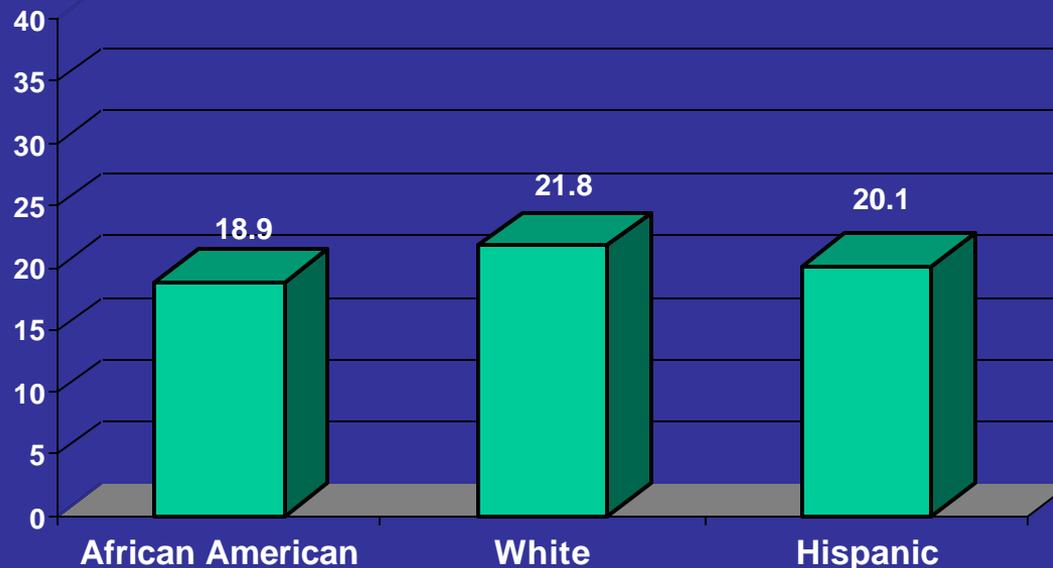


Involvement in the Criminal Justice System

19.2% of families had someone arrested or charged with crime.

16.7% reported someone had spent time in jail.

Involvement in crime did not vary by ethnicity.



Group differences found that families with members who had been arrested or charged with a crime . . .

- Had children reported by their parents to be more aggressive, more hyperactive, more withdrawn, and to have more overall problem behavior
- Had children reported by their teachers to be more aggressive and to have more overall problem behavior
- Had children who scored lower on assessed vocabulary



Adjusted Odds Ratios and 95% Confidence Intervals for Involvement with the Criminal Justice System

| <u>Predictor Variable</u> | <u>Adjusted OR</u> | <u>95% CI</u> |
|--------------------------------|--------------------|---------------|
| Maternal Depression | 1.97 | (1.57-2.47) |
| Single Parent | 2.64 | (2.06-3.39) |
| Domestic Violence | 3.47 | (2.68-4.50) |
| Child Witness to Violence | 3.23 | (2.04-5.12) |
| Child Witness to Domestic Viol | 3.60 | (2.63-2.90) |
| Child Victim of Violence | 3.06 | (1.35-6.97) |
| Child Victim of Domestic Viol | 3.14 | (1.57-6.30) |



Family Activities were Related to Positive Child Outcomes

The relationship of frequency of weekly and monthly activities with child behavioral and cognitive outcomes was assessed using partial correlations. These analyses controlled for:

- Parent income
- Parent education
- Parent employment
- Child age
- Child gender
- Child ethnicity
- How often the child was read to during the previous week



The frequency of both weekly and monthly activities was positively correlated with:

- Parent-reported positive social behaviors**
- Parent-reported emergent literacy**
- Parents' internal locus of control**
- Use of an authoritative parenting style**



The frequency of both weekly and monthly activities was negatively correlated with:

- Parent-reported aggressive behaviors**

Weekly activities were negatively correlated with:

- Parent-reported hyperactive behavior**
- Parent-reported overall problem behavior**

Monthly activities were negatively correlated with:

- Teacher-reported hyperactive behavior**
- Teacher-reported overall problem behavior**



Head Start's Protective Role for Families and Children

Three summary scores were created measuring:

- Parent involvement at Head Start
- Parent experience at Head Start
- Parent satisfaction with Head Start

A series of linear regression models tested for moderation of the negative outcomes associated with risk factors, while controlling for parent education, income, and employment; child gender, age, ethnicity; and parent level of activity.



Significant Moderators of Negative Outcomes Associated with Risk Factors

Significant ($p \leq .05$) Interaction Terms
Independent Variable x Moderator

Depression x Head Start Satisfaction
Depression x Head Start Involvement
Depression x Head Start Experience
Depression x Head Start Experience

Violence x Head Start Involvement
Violence x Head Start Experience

Outcome Variable

Withdrawn Behavior --PR
Book Knowledge
Early Math
Creativity – TR

Hyperactive Behavior – PR
Emergent Literacy – PR
Social Awareness
Color Naming
One-to-One Counting



Significant ($p \leq .05$) Interaction Terms
Independent Variable x Moderator

Domestic Viol x Head Start Experience
Domestic Viol x Head Start Satisfaction
Domestic Viol x Head Start Experience
Domestic Viol x Head Start Experience

Crime x Head Start Experience
Crime x Head Start Experience
Crime x Head Start Involvement

Outcome Variable

Social Skills – PR
Total Problem Behavior –PR
Aggressive Behavior – PR
Withdrawn Behavior – PR
Hyperactive Behavior – PR
Total Problem Behavior – TR
Social Score – TR

Social Skills – PR
Withdrawn Behavior – PR
Vocabulary



Summary

- ❑ **Difficult challenges or risks that families face are often associated with negative behavioral and cognitive outcomes for their children**
- ❑ **These challenges are important considerations in understanding how best to prepare children for school**
- ❑ **Head Start may play a role in protecting children and families from the consequences of these risk factors**
- ❑ **Findings support the theory that children's school readiness is enhanced when programs work with families as well as with children**

