

# Material Hardship, Parenting Stress, and Family and Neighborhood Buffers for Children With and Without Special Health Care Needs

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Sarah and Sienna





# Children with Special Health Care Needs

- Children with special health care needs (CSHCN) are defined as children who:
  - Have a chronic physical, developmental, behavioral, or emotional condition
  - Require health services beyond what is typically required
- Approximately 19% of US children have special health care needs
- Families of CSHCN face increased financial burdens

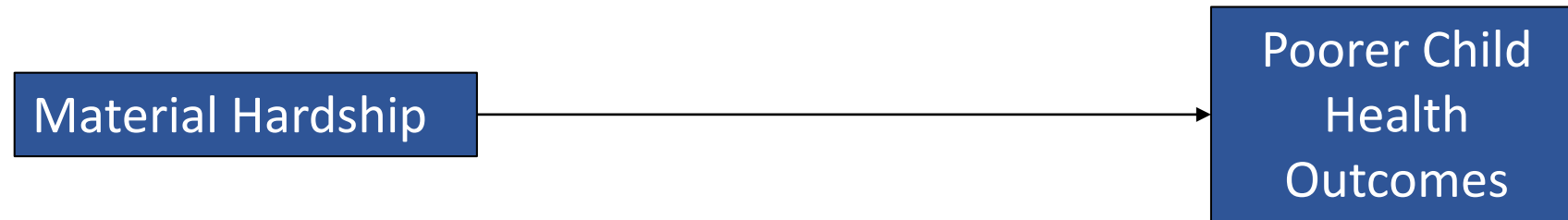


# Material Hardship

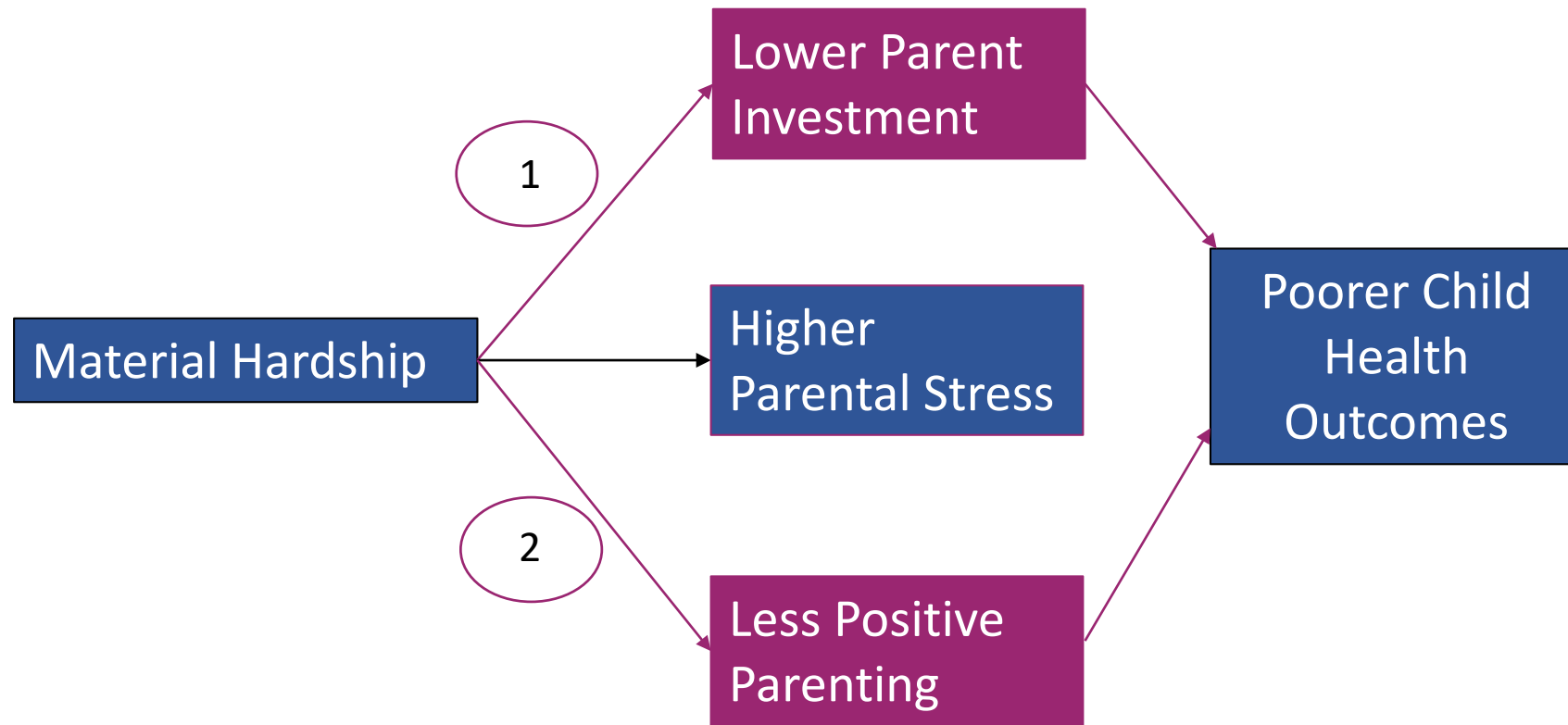
“The lived experience of poverty”

- Defined as difficulty meeting basic needs
  - includes food, shelter, utilities, health care
- Common in families experiencing poverty
- Associated with adverse child health outcomes

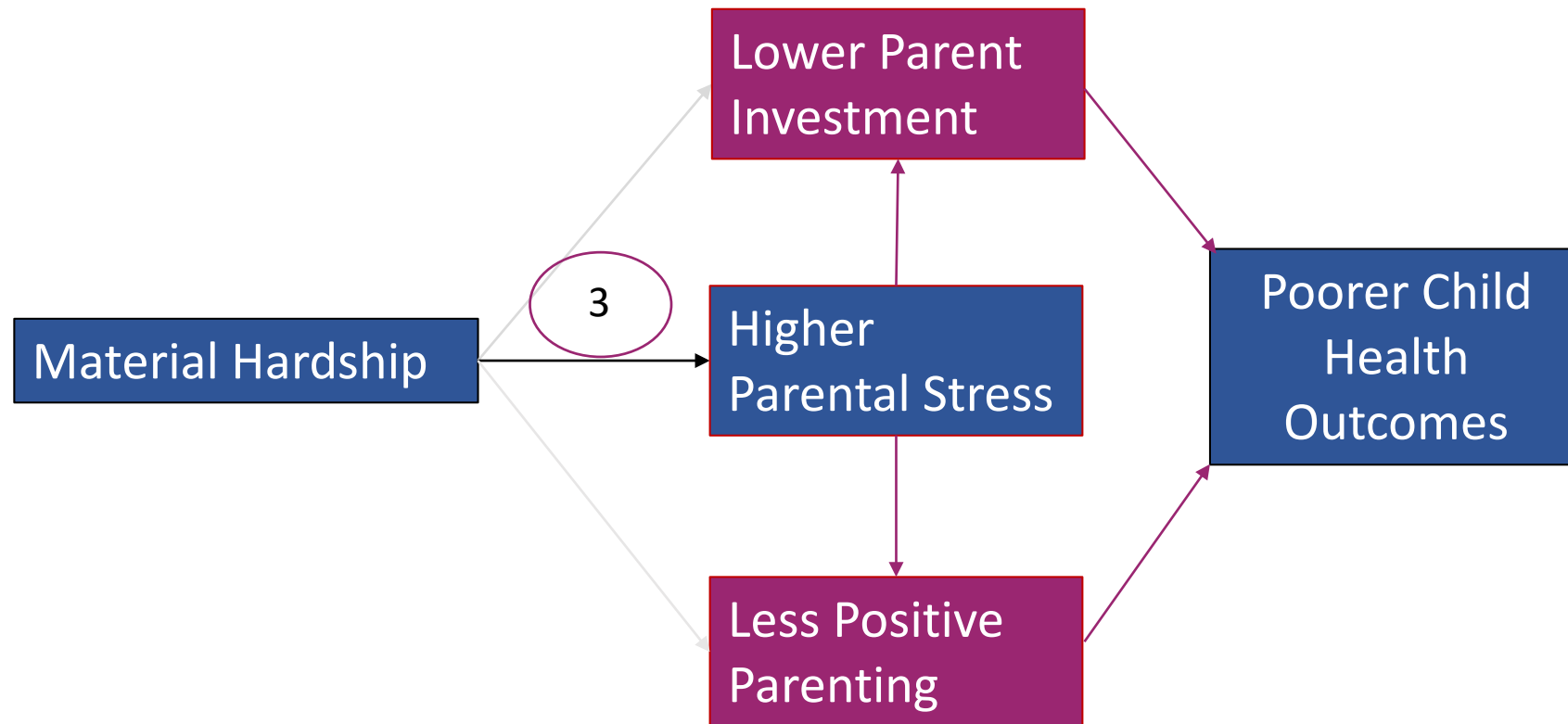
# How can material hardships lead to poorer outcomes?



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# The Importance of Parental Stress







# Resilience

- Some at risk children have positive outcomes
- Resilience is defined as positive adaptation in the context of significant risk or adversity
- Factors at the family and neighborhood levels can promote resilient outcomes
- Potential to buffer effects of material hardship



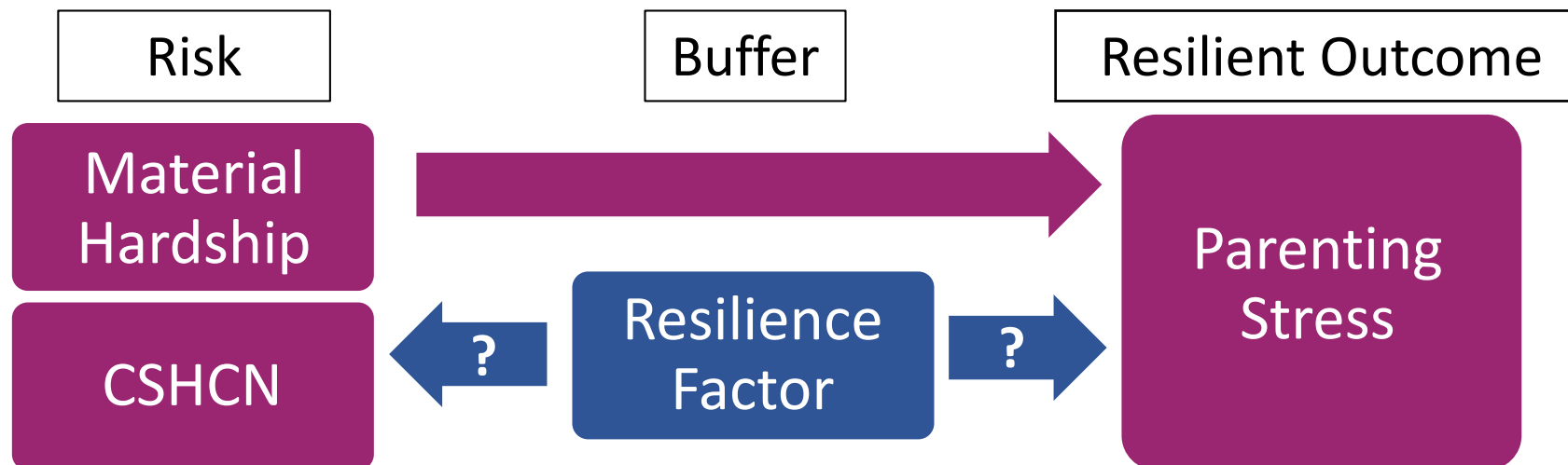
# Cumulative Risks for CSHCN and Families Increases Stress

- Families of CSHCN are more vulnerable to material hardship
- Extra stresses related to their child's underlying conditions
- Poorer health outcomes due to their underlying condition



# Factors Promoting Resilient Outcomes

- Very little is known about how family and neighborhood resilience factors affect parenting stress in the setting of these cumulative risks





# Objectives

- 1) To compare children with and without special health care needs with respect to material hardship, resilience factors and parenting stress
- 2) Separately, for children with and without special health care needs:
  - a) To measure associations between material hardships and parenting stress
  - b) To determine if resilience factors buffer the effects of material hardship on parenting stress



# Study Design

- Cross-sectional study using data from the 2016 National Survey of Children's Health
  - Population-based telephone, mail-in and web-based survey
- Inclusion criteria:
  - Low income (<200% of the federal poverty level)
  - Completed assessments for main study variables



# Defining CSHCN

- CSHCN defined using the 5-item CSHCN screener from the National Center for Health Statistics
  - Addresses functional limitations and need for health care services
- To meet the definition
  - Must have lasted or be expected to last for at least 12 months
  - Must be due to a chronic condition



# Independent Variables

- Material Hardship
  - Since this child was born, how often has it been very hard to get by on your family's income – hard to cover basics like food or housing?
- Resilience:
  - Family problem solving
  - Neighborhood cohesion



# Family Problem Solving

**When your family faces problems, how often are you likely to...?**

- Talk together about what to do.
- Work together to solve our problems.
- Know we have strengths to draw on.
- Stay hopeful even in difficult times





# Neighborhood Cohesion

## Responses to the following statements about neighborhood conditions:

- People in this neighborhood help each other out
- We watch out for each other's children in this neighborhood
- When we encounter difficulties, we know where to go for help in our community





# Dependent Variable: Parenting Stress

- Parenting stress: 3 questions
  - During the past month, how often have you felt your child is much harder to care for than most children their age?
  - During the past month, how often have you felt they do things that really bother you a lot?
  - During the past month, how often have you felt angry with them?
- Dichotomized at recommended cut-point



# Statistical Analysis

- Logistic regression models to test for independent associations
  - 1) Special Health Care Needs status → Material Hardship, Resilience Factors and Parenting Stress
  - 2) Material Hardship and Resilience Factors → Parenting Stress
    - Separately for Children with and Without Special Health Care Needs
- Adjusted for child age, sex, ethnicity, insurance type; and parent age, education, employment status and marital status



# Statistical Analysis

- Moderation
  - Tested using interaction terms
- Mediation
  - Baron and Kenny's 4-step process for testing mediation hypotheses
  - Structural equation models to determine direct and indirect relationships between material hardships, buffers and parenting stress
- All analyses used survey weights established by the National Center for Health Statistics

# Results

# Baseline Characteristics

n=11543 Weighted n=28,465, 581	CSHCN	
Characteristic: n (%)	No (n=8545)	Yes (n=2998)
<b><u>Child:</u></b>		
Age in years (mean, SD )	8.6 (5.3)	10.5 (4.5 )
Sex (male)	4198 (49.1)	1706 (56.9)
Insurance (public or mixed)	4697 (55.2)	2083 (69.5)
<b><u>Parent:</u></b>		
Age in years (mean, SD)	39.8 (11.1 )	42.3 (10.9)
Education (high school)	3403 (39.8)	1182 (39.4)
Employed	7221 (84.5)	1816 (60)
Married	5976 (69.9)	1764 (58.8)

# Comparing Children With and Without Special Health Care Needs

	CSHCN	
	AOR	95% CI
Material Hardship	1.61	1.35, 1.94
<b>Resilience Factors:</b>		
High Family Problem Solving	0.76	0.63, 0.92
High Neighborhood Cohesion	0.73	0.61, 0.87
<b>High Parenting Stress</b>	5.25	3.94, 7.01

Adjusted for child age, sex, ethnicity, insurance type; and parent age, education, employment status and marital status

- CSHCN have higher risk and lower buffers compared with N-CSHCN

# Material Hardship and Parenting Stress

- For children **with and without** special health care needs, material hardship was associated with high parenting stress

	Parenting Stress (AOR, 95% CI)	
	CSHCN	
	No	Yes
Material Hardship:	2.21 (1.43, 3.41)	1.70 (1.17, 2.46)



# Family and Neighborhood Buffers and Parenting Stress

- For children without special health care needs, both buffers were associated with lower parenting stress

	Parenting Stress (AOR, 95% CI)	
	CSHCN	
	No	Yes
Resilience Factors:		
Family Problem Solving	0.24 (0.16, 0.37)	0.32 (0.22, 0.45)
Neighborhood Cohesion	0.42 (0.27, 0.67)	0.77 (0.53, 1.11)

# Family and Neighborhood Buffers and Parenting Stress

- For children with special health care needs, only family problem solving was associated with lower parenting stress

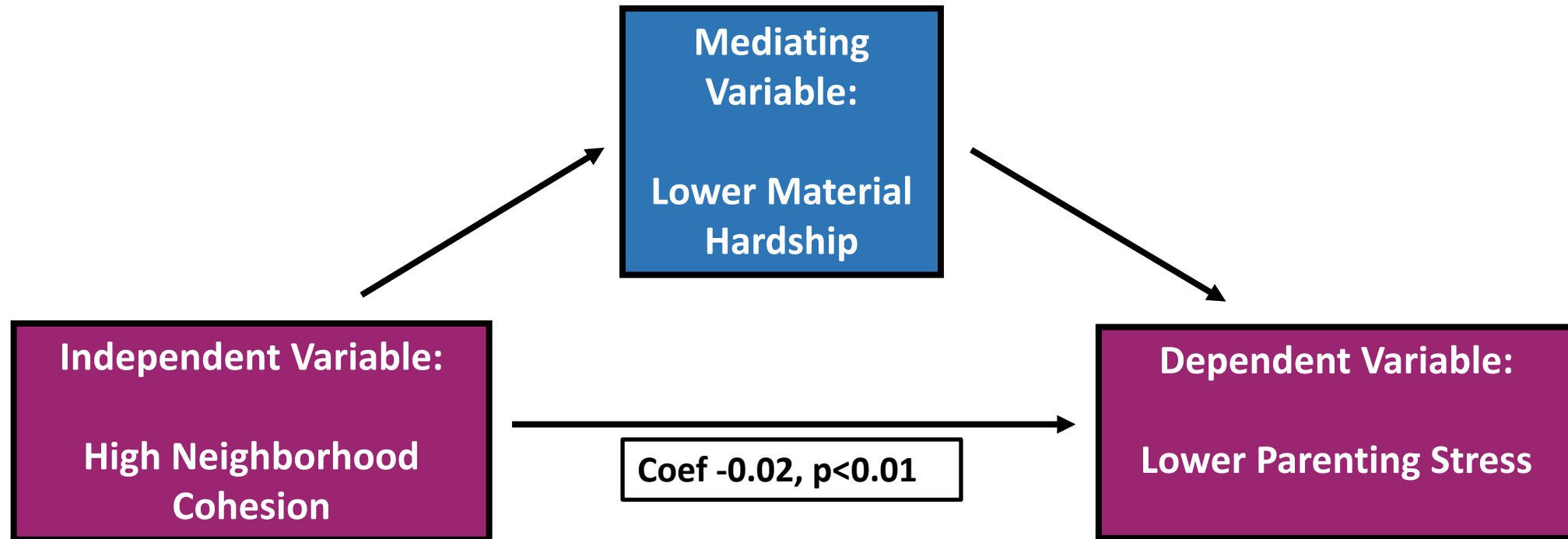
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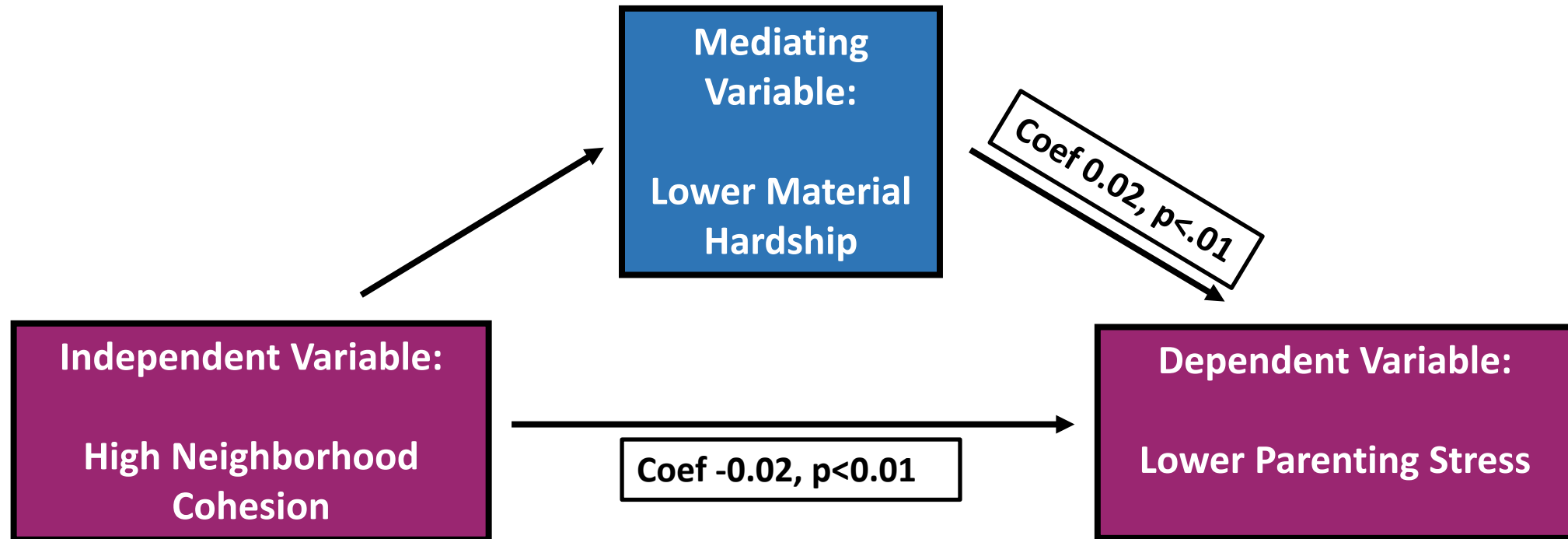
# Family and Neighborhood Factors Buffer Effects of Material Hardship on Parenting Stress

- Explored mechanisms of protective effects of resilience factors for children with and without special health care needs
- Effects of resilience factors were mediated by lower material hardship
- We found this effect **only** for children **without** special health care needs

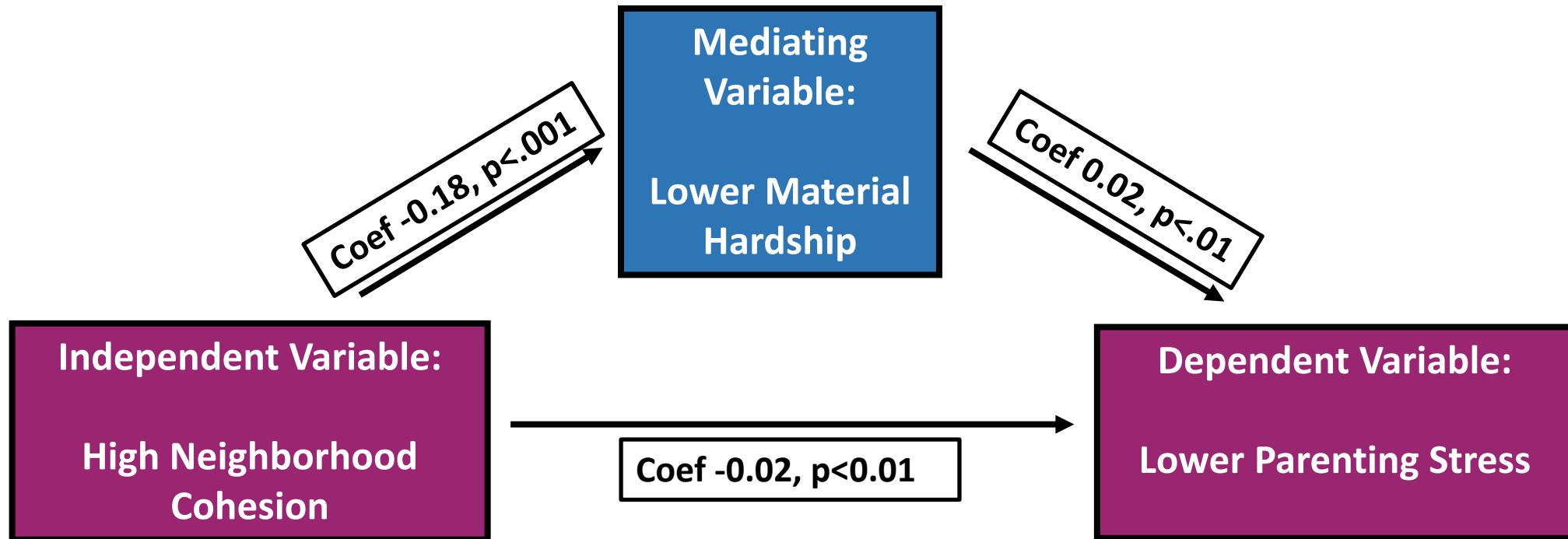
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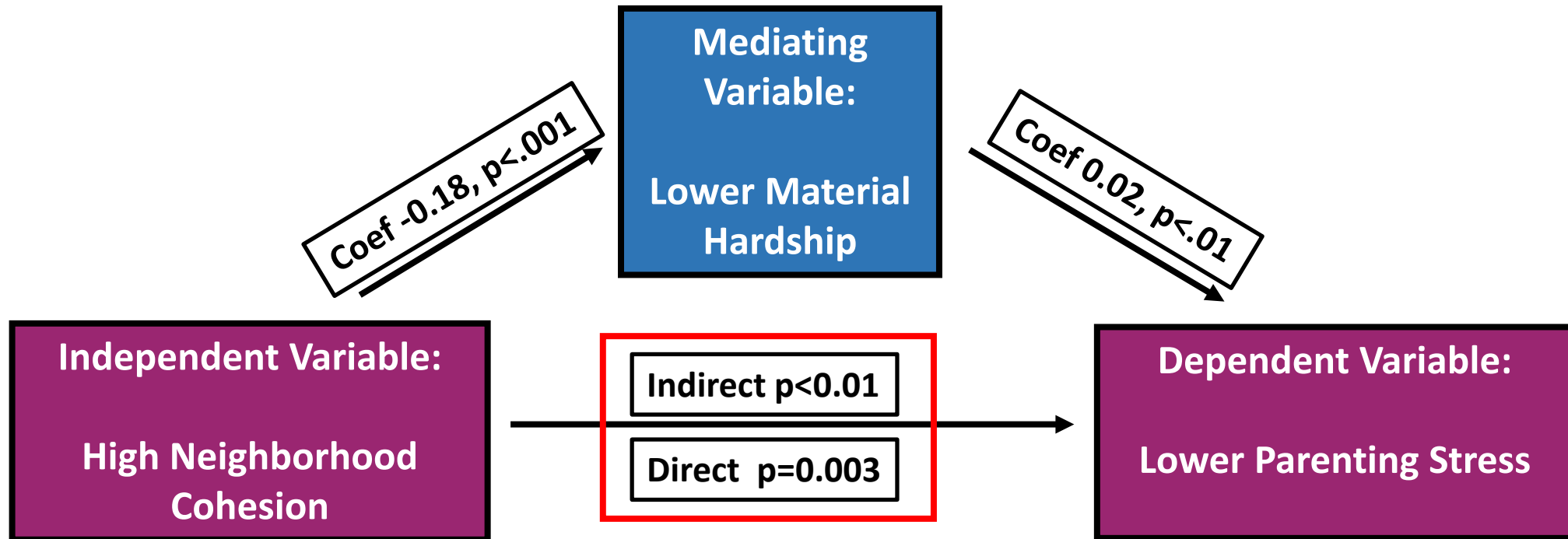
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20% of the total effect of neighborhood cohesion was through lower material hardship



# Conclusions

- CSHCN face cumulative risks, particularly in the setting of poverty
- Family and neighborhood resilience factors are associated with lower parenting stress primarily for parents of children **without** special health care needs
- One possible mechanisms of these resilience factors is through reducing material hardship





# Limitations

- Cross-sectional study design
  - Difficult to infer direction of relationships, and associations are likely multi-directional
- Self-reported measures may be subject to bias
- Constructs and relationships examined are complex
  - Likely other factors involved that have not been measured



# Implications

- Interventions to strengthen neighborhood cohesion may positively impact parenting stress in vulnerable low income families
- Parents of CSHCN face cumulative stresses that may be less responsive to family and neighborhood factors
- Future research should explore the mechanisms of these buffers and determine how the needs of families of CSHCN may differ in order to tailor interventions



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Questions?