



Associations between different measures of neighborhood safety and childhood internalizing and externalizing behaviors

Logan Beyer, MD/PhD Student

Harvard Medical School & TH Chan School of Public Health

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Neighborhood safety **matters**

But how do we define it?



Objective vs.
Perceived



Family vs.
Community-
Level Measures

Study Aims:

01

To describe the association between neighborhood safety, measured in four different ways, and child internalizing and externalizing behaviors.

02

Exploratory, iterative model-building to investigate interactions between child experiences and other measures of safety.

Generation R
Cohort

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graph LR; A[Generation R Cohort] --> B[Key Exposures]; A --> C[Key Outcomes]; A --> D[Covariates]; B --> E[Mixed Effects Linear Models]; C --> E; D --> E;
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Key Exposures

- Child/family report of neighborhood experiences
- Parent perceived neighborhood safety
- Wijkprofiel objective neighborhood safety
- Wijkprofiel subjective neighborhood safety

Key Outcomes

- Internalizing behaviors (CBCL)
- Externalizing behaviors (CBCL)

Covariates

- Demographic Survey: ethnicity, household income, highest caregiver education

Mixed Effects
Linear Models

01

Associations between neighborhood safety and behavior

	Family Reports Unsafe Experiences	Family Perception Unsafe	Community Objectively Unsafe	Community Perception Unsafe
	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)
Internalizing Behaviors				
Bivariate	3.4 (2.72, 4.08)	2.07 (0.72, 3.42)	2.29 (0.72, 3.86)	1.49 (0.29, 2.69)
Adjusted	3.33 (2.65, 4.01)	1.97 (0.62, 3.32)	1.93 (0.39, 3.47)	1.1 (-0.08, 2.28)
Externalizing Behaviors				
Bivariate	2.86 (2.21, 3.51)	1.15 (-0.04, 2.35)	0.96 (-0.53, 2.45)	0.87 (-0.25, 1.98)
Adjusted	2.77 (2.12, 3.42)	1.02 (-0.18, 2.21)	0.59 (-0.84, 2.02)	0.45 (-0.61, 1.51)

Note: Each model was run using mixed effects linear regression, with nesting by maternal ID and neighborhood. Adjusted models account for ethnicity, household income, caregiver education, and neighborhood socioeconomic status.

02

Interaction between individual experience and environment

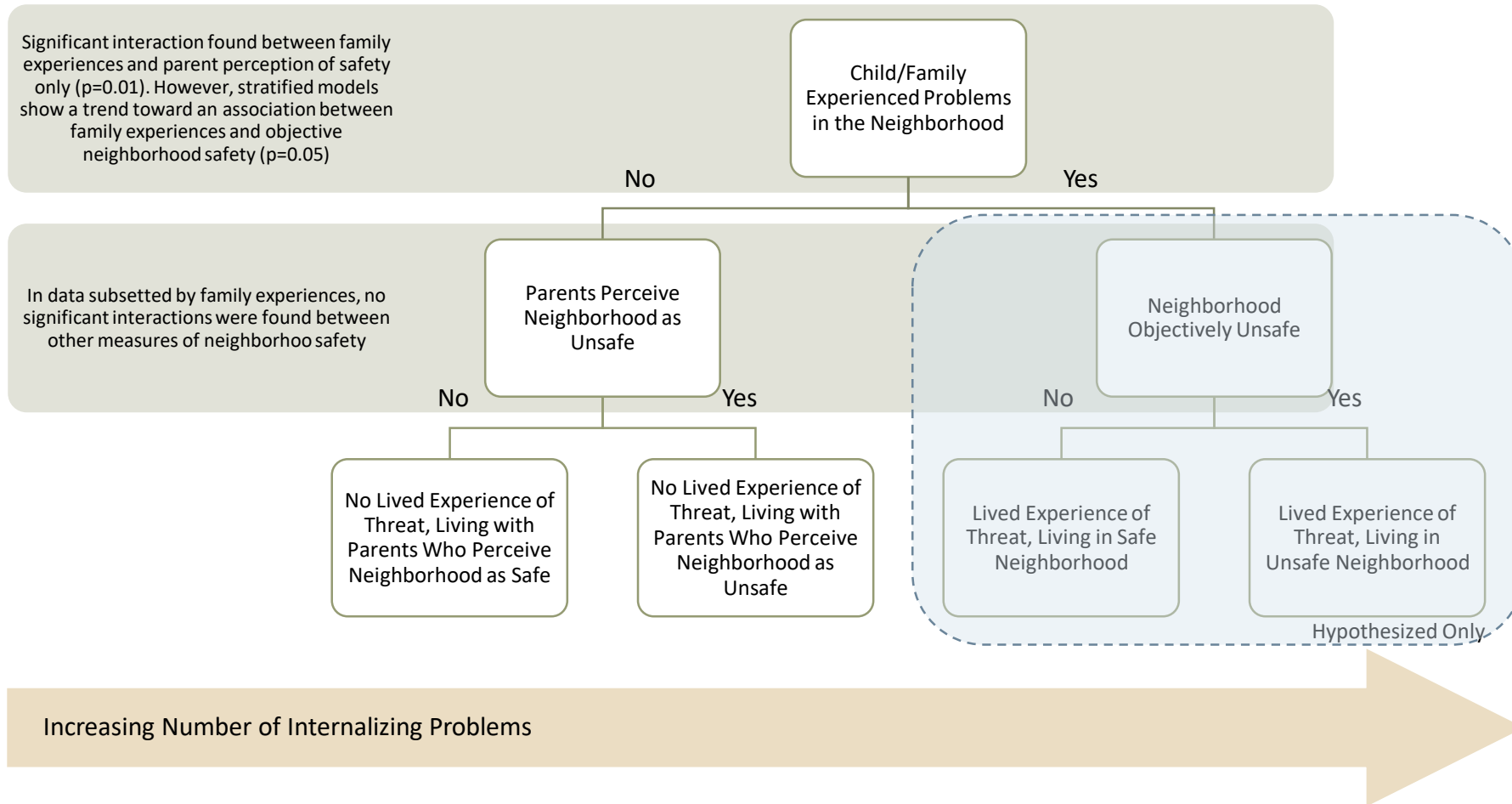
Interaction Terms:

Experience* Parent Perception = 0.030
 Experience* Community Objective = 0.339

	Family Perception Unsafe	Community Objectively Unsafe
	Beta (95% CI)	Beta (95% CI)
Internalizing Behaviors		
No Negative Experience	2.90 (1.07, 4.72)	1.23 (-0.71, 3.17)
Negative Experience	0.30 (-1.56, 2.17)	2.12 (0.00, 4.23)
Externalizing Behaviors		
No Negative Experience	0.69 (-0.80, 2.80)	-0.12 (-1.85, 1.61)
Negative Experience	0.82 (-1.12, 2.76)	0.66 (-1.41, 2.72)

Note: Each model was run using mixed effects linear regression, with nesting by maternal ID and neighborhood. Adjusted models account for ethnicity, household income, caregiver education, and neighborhood socioeconomic status.

Hypothesized Hierarchy of Neighborhood Safety Exposures Associated with Internalizing Behaviors



Final Thoughts

01

Exploratory, cross-sectional study →

Longitudinal work and replication in other populations needed

02

Begins to answer the question:

What matters about children's experiences of safety in their neighborhood?

03

Builds on a robust literature on child violence exposure, with implications for measurement and intervention

Thank you!
