

Perceived Discrimination and Biomarkers in Low-Income Youth

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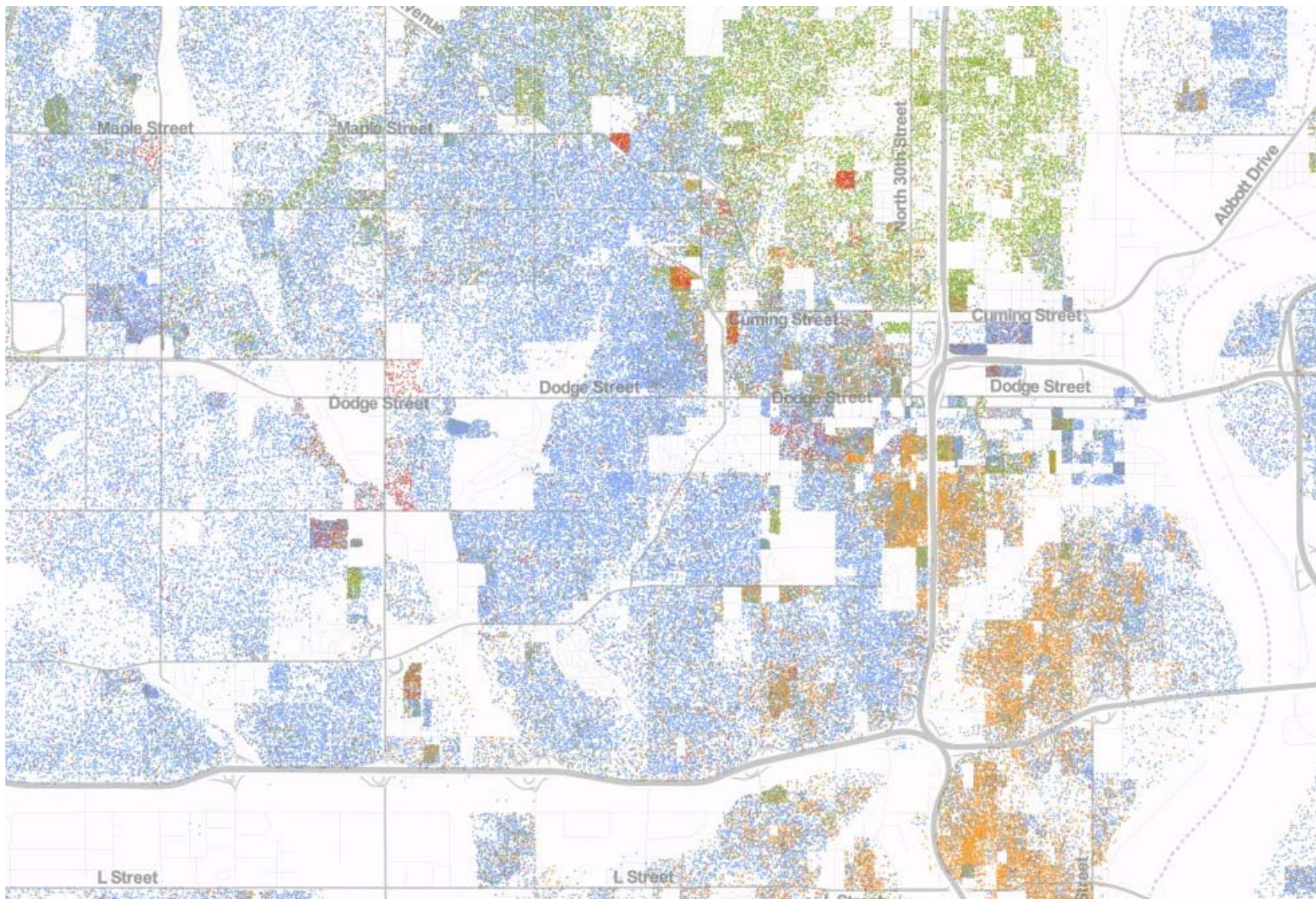
Omaha Urban Research on Health Study **OUR**Health Study

The Intergeneration Transmission of Health Disparities

Funded by- National Institute of Child Health and Human
Development and UNL Office of Research and Economic
Development Minority Health Disparities Award

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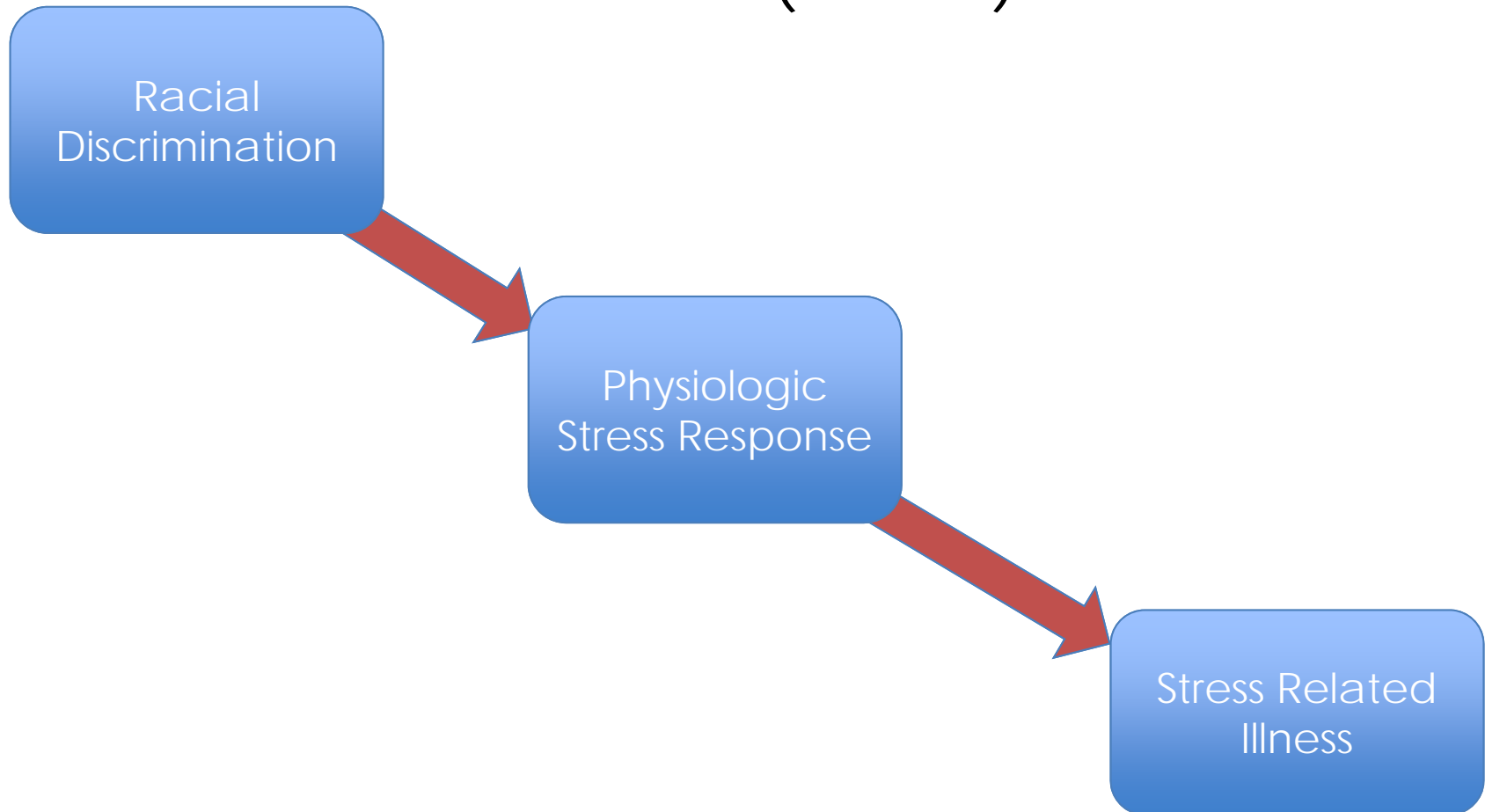
Omaha, NE



Study purpose:

- 1) To explore how stress is related to health outcomes in mothers and children.
- 2) Assess whether there are differences in stress across black and white mothers and their children.*
- 3) Provide services to disadvantaged community members.

Biopsychosocial Model of Racism as a Stressor (BMRS)



Clark et al. 1999

Discrimination & Health

- Cardiovascular function
- Abdominal Obesity and Weight gain
- Insulin Resistance
- Preterm and Low-Birth Weight Births
- Self Rated Health
- Depressive Symptoms

Sample

57 Mother/Child Dyads

Mothers:

- Low income
- Education
 - 18% -- <H.S.
 - 51% -- some college
 - 31% -- college or advanced degree

Sample

57 Mother/Child Dyads

Children:

- Mean age- 13.5 years
- 86% African American
- 78% female children
- 61% diagnosed adolescent chronic health conditions

Biomarker Collection

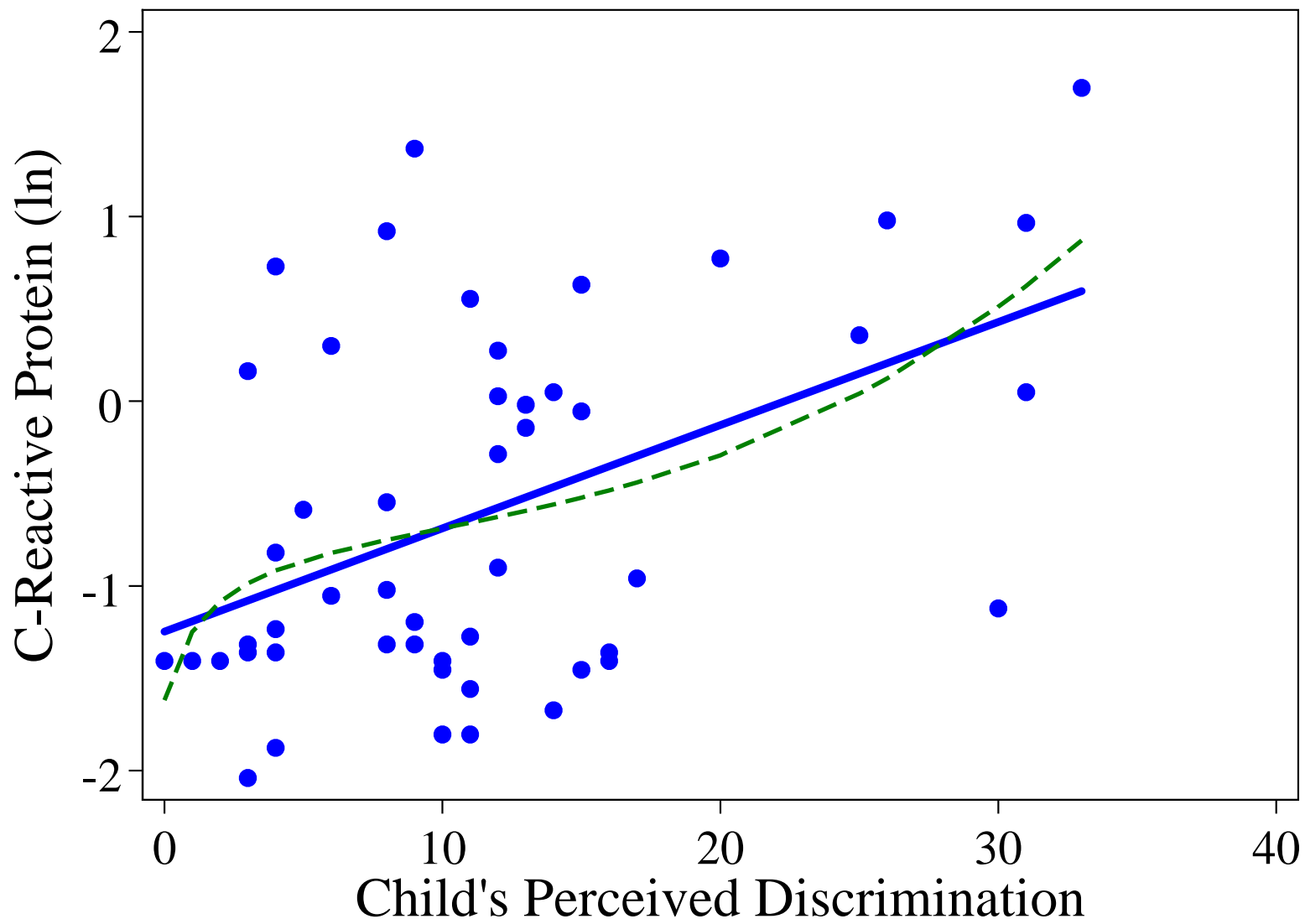
- C-Reactive Protein (CRP)
- Epstein Barr Virus Antibodies (EBV)
- Hemoglobin a1c
- Cortisol (Saliva)
- Ambulatory Blood Pressure
- Height
- Weight
- Waist Circumference



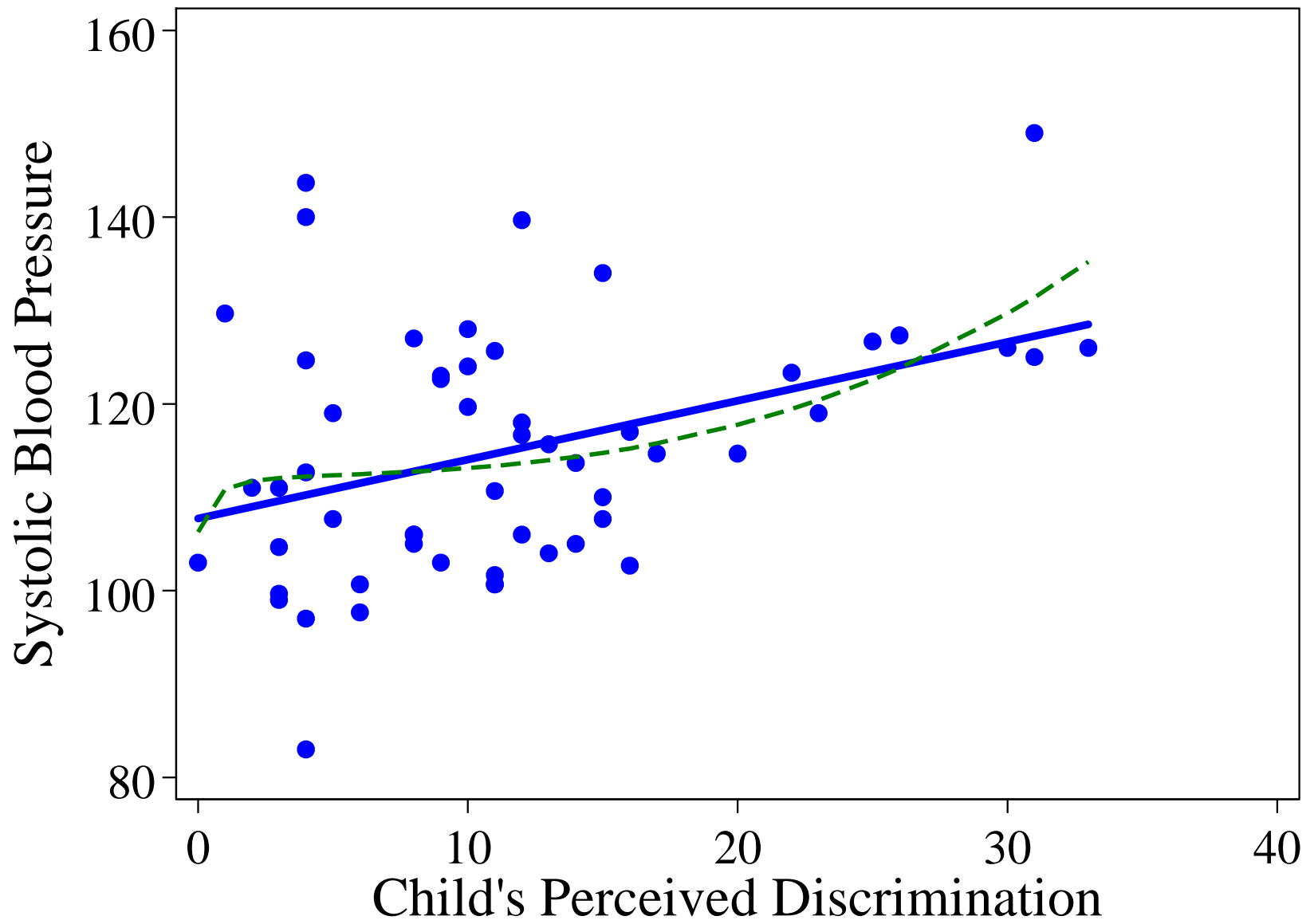
Everyday Discrimination Scale

In your day to day life have you been...

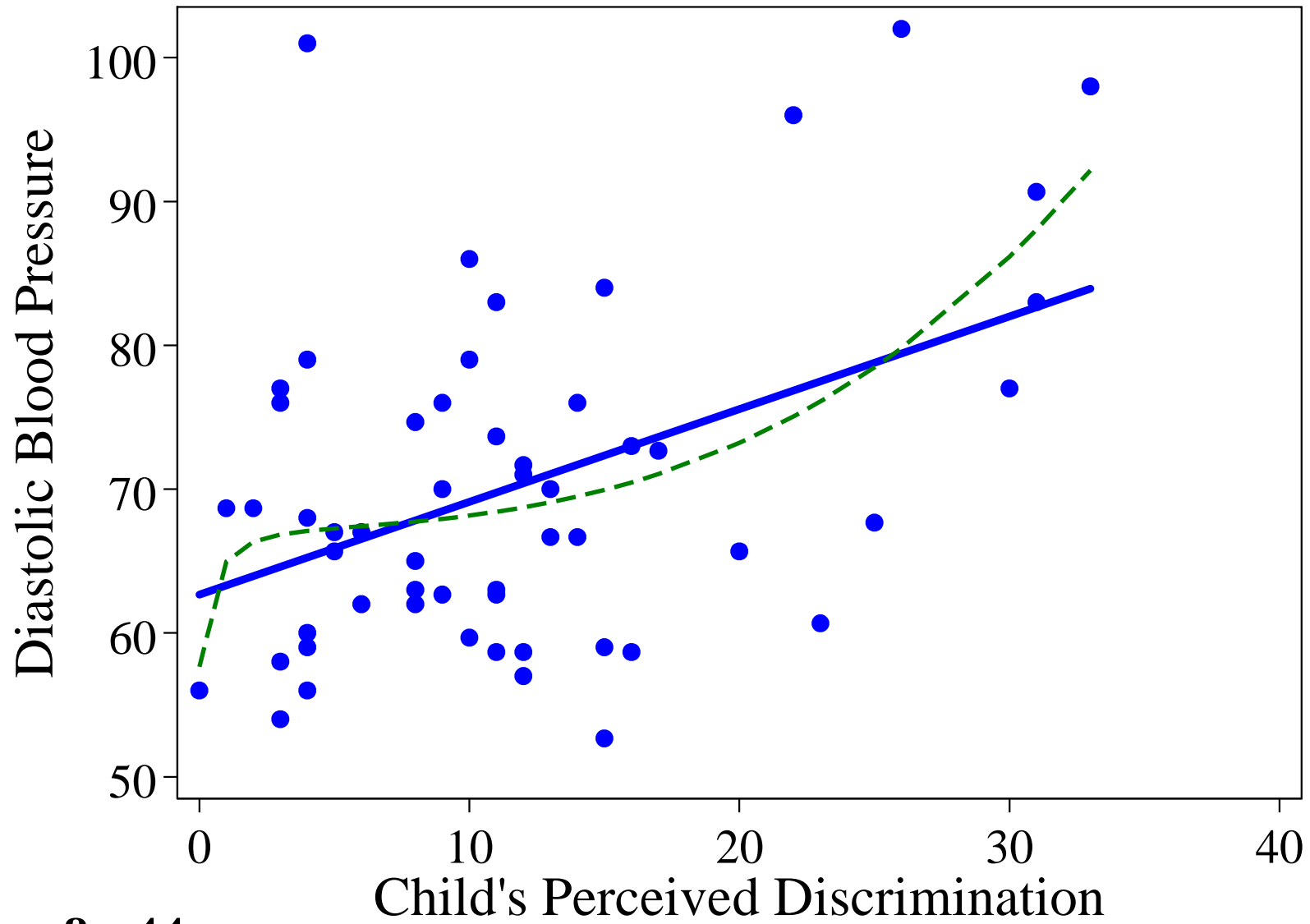
- Called you names or insulted you
- Harassed by the police
- Followed you around in stores
- Teachers act like they're afraid of you
- Teachers treat you with less respect than other students



$\beta = .46$



$\beta = .39$



$\beta = .44$

Adjusted results* (n=56)

CRP	.35*	(.13)
Systolic BP	.29*	(.14)
Diastolic BP	.40*	(.16)

*Standardized Beta coefficients; adjusting for age, waist circumference, BMI, gender, race

Expanded to Lincoln

- Multi-Stage Pilot data collection in Lincoln

Stage 1

- Survey Mailer

- Focal care-giver
- All African American and Bi-Racial youth in Public School District (~n= 1600)
- Random sample of Caucasian (~n=1,000)

- Measures

- Perceived discrimination, skin tone, identity, health

Expanded to Lincoln

- Multi-Stage Pilot data collection in Lincoln

Stage 2

- In home visit (subsample)
 - Face-to-face interviews
 - Blood spot and saliva collection
 - Anthropometric measurement

Expanded to Lincoln

- Multi-Stage Pilot data collection in Lincoln

Stage 2

- Biomarkers-
 - CRP
 - EBV
 - Ha1c
 - Candidate genotyping
 - Telomere length (TL)
 - Blood pressure
 - Weight, height, waist circumference, trunk length

Expanded to Lincoln

- Multi-Stage Pilot data collection in Lincoln

Stage 3

Longitudinal data collection assessing race related stressors and markers of health in early adulthood.

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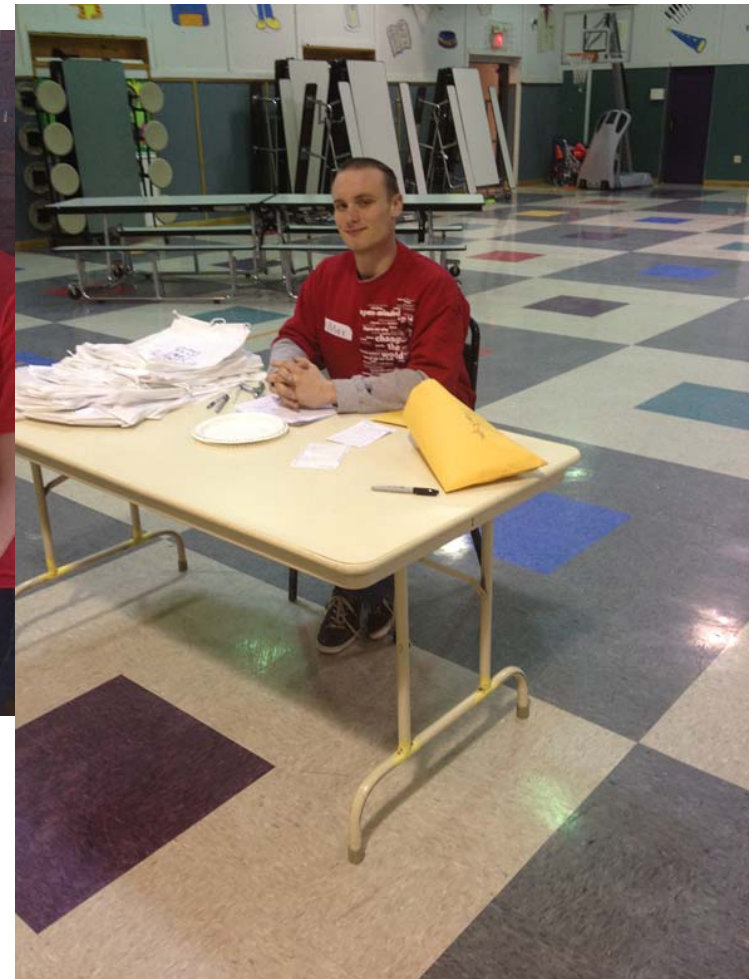


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Last, but most importantly...

THE STUDY PARTICIPANTS!!!

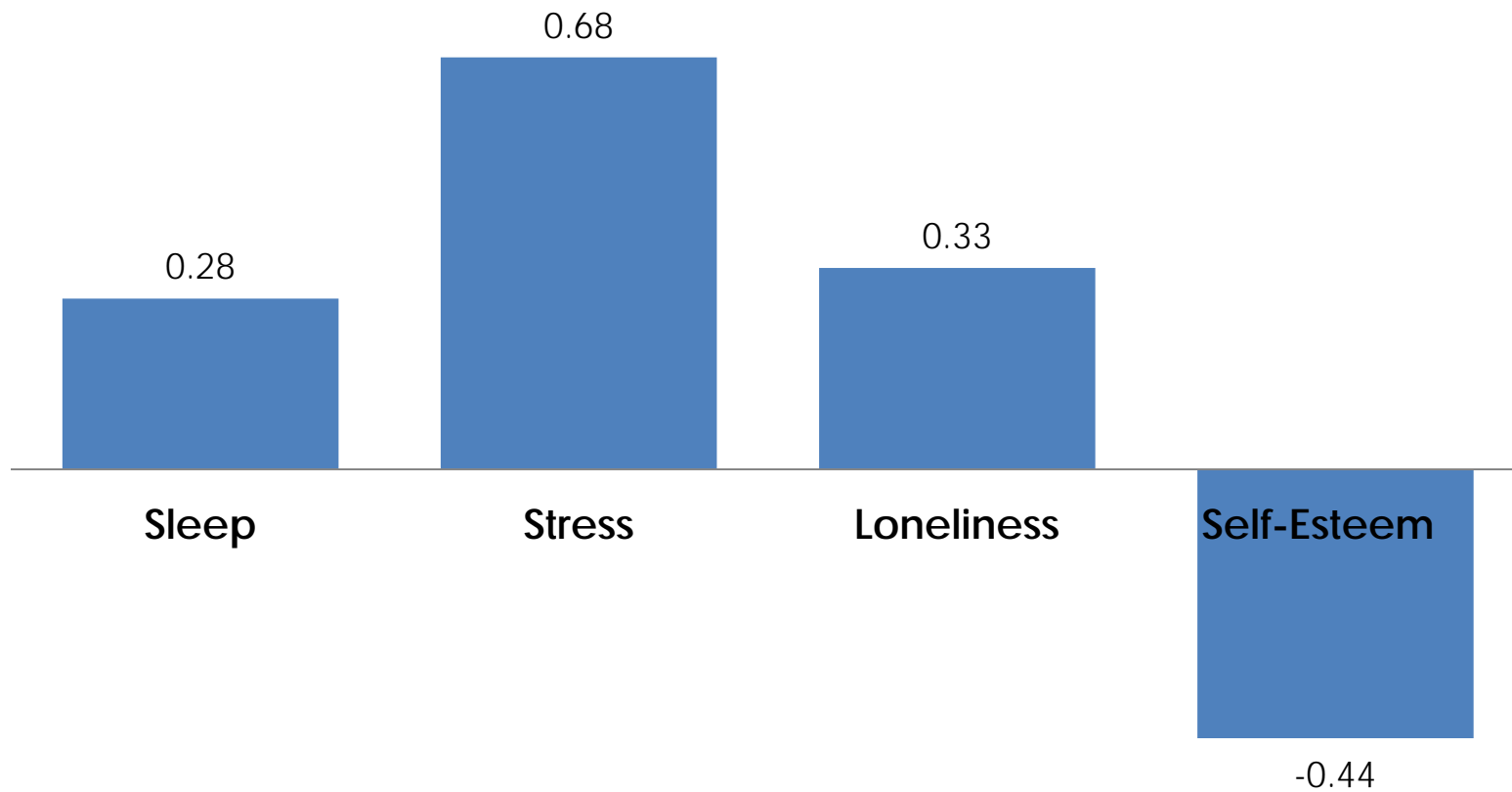
Thank you

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Mother's Everyday Discrimination (standardized)*



*All coefficients are significant at $p < .05$

Childhood Discrimination is also associated with...

- Self-rated health
- Somatic complaints
- Depressive symptoms
- Behavior problems
- Low social integration
- Self-Esteem

