

# Environmental stressors are associated with acute cortisol and emotional stress responses in youth with chronic medical conditions (CMC).

## Affective, Physiological, and Environmental Stress Among Adolescents with Chronic Medical Conditions

### INTRO

Youth with CMC may be at-risk for **increased stressors** that influence HPA axis sensitivity and ANS responses. Physiological responses to acute stress are associated with **negative affect responses**. Environmental stressors may **exacerbate stress effects**.

Aim: Investigate **influence of environmental stressors** on affective and physiological responses among youth with and without CMC

### METHODS

**N = 141** (73 CMC, 68 matched by age and gender); *Mage* = 14.4 years

- Data collection at two time points (six months apart)

**Affective Stress:** Profile of Mood States (POMS)

**Physiological Stress:** Salivary cortisol

**Environmental Stress:** Neighborhood severity via Life Stress

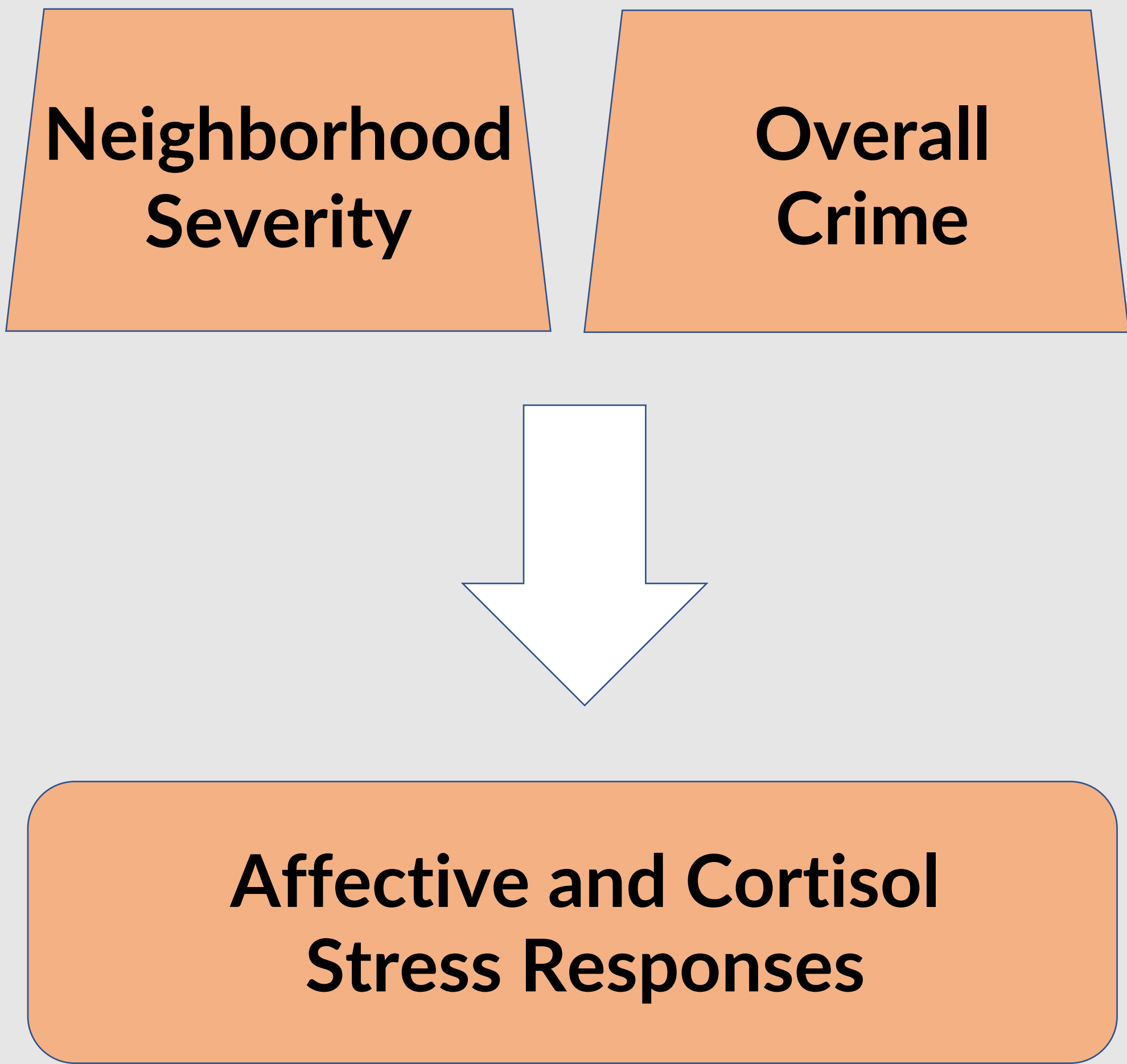
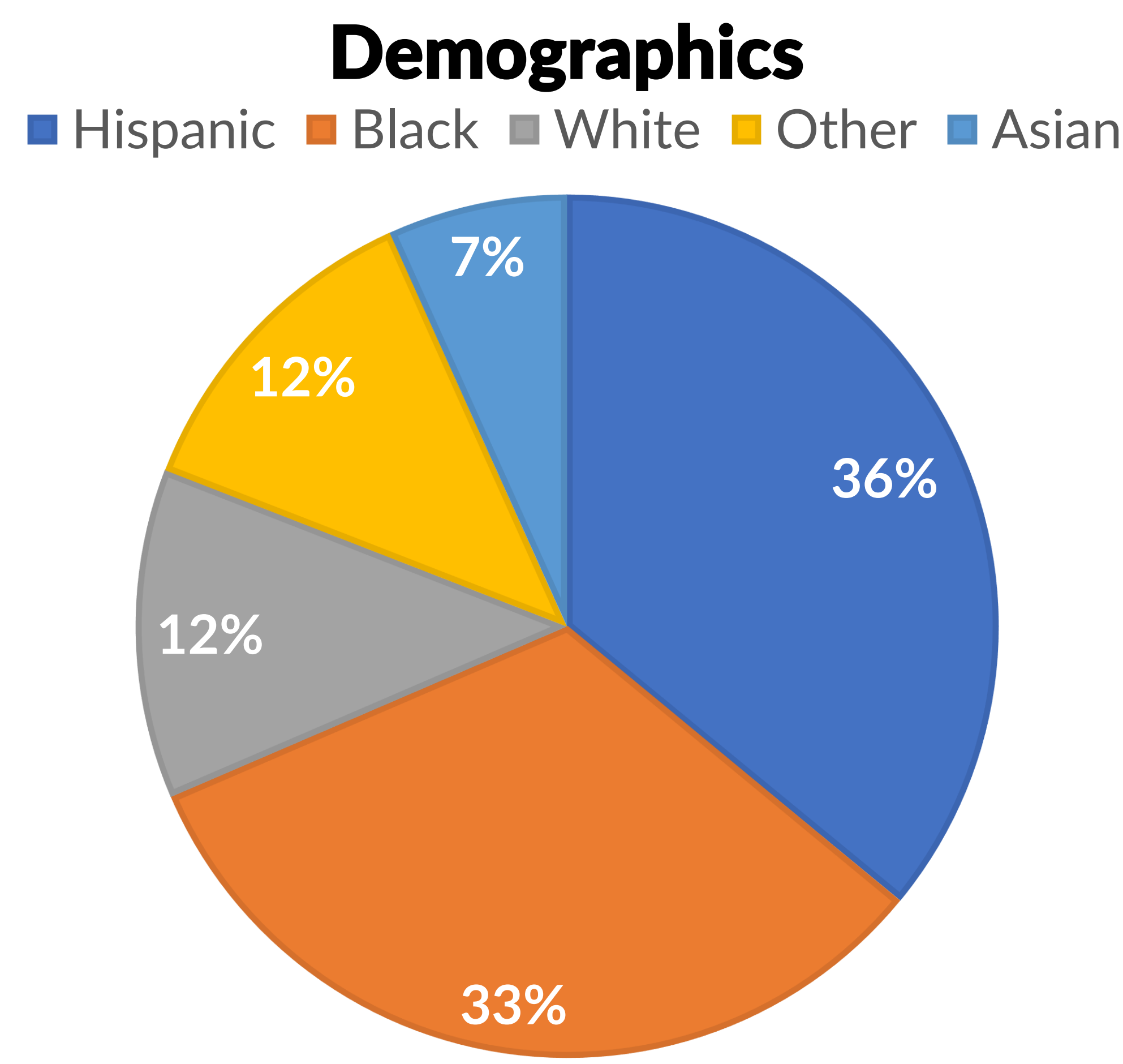
Interview (Rudolph & Hammen, 1999) & census tract crime data

### RESULTS

Among youth with CMC:

- More neighborhood stress associated with **more anxiety AND less positive affect**
- Higher overall crime associated with **lower peak cortisol AND more negative affect change**

Associations between neighborhood stress and anxiety ( $z = -1.886, p = .03$ ) and between overall crime and peak cortisol ( $z = -1.846, p = .03$ ) **significantly differed** for youth with and without CMC



### Correlations, Youth with CMC

	1.	2.	3.	4.	5.
1.	-				
2.	-.392*	-			
3.	-.287	.793**	-		
4.	.424*	-.725**	-.664**	-	
5.	.156	.074	.030	.019	-
6.	-.286	.198	.358*	-.232	-.377**

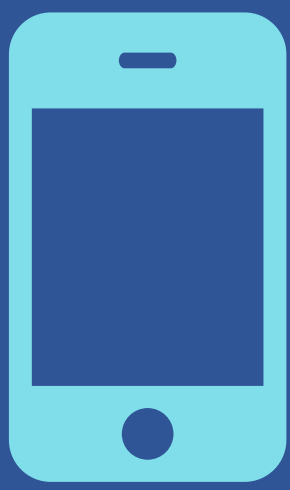
\*  $p < 0.05$  | \*\*  $p < 0.01$

1. Neighborhood severity
2. Anxiety change
3. Negative affect change
4. Positive affect change
5. Peak cortisol
6. Number of overall crimes

Brittany Ricart, BA, Nate Barnes, BA, Dana Mansfield, MA, Jocelyn Smith Carter, PhD



BRicart@depaul.edu  
@BrittanyRicart



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