Exposure to Interpersonal Violence as a Predictor for Touch Sensory Thresholds in Black Americans

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BACKGROUND

- Childhood exposure to interpersonal violence (IPV) has been linked with physical and mental alterations, which may lead to adverse outcomes later in life.¹
- Childhood traumatic experiences can be predictive of difficulty with emotional and sensory processing.²
- The disproportional effects of early adversity in black youth are understudied when addressing outcomes of violence exposure.³
- This study aimed to look at how interpersonal violence exposure in youth may be associated with touch sensitivity later in life in a population of Black Americans.

METHODS

- Participants: n=90 Black American participants were recruited through a longitudinal birth cohort study that looked at how childhood experiences influence health and development.
- IPV was scored using the Exposure to Violence Inventory (ETV)⁴ during the age 18 visit, and the **Von Frey test** was collected at the adulthood visit (ages 32-34 years). Posttraumatic stress disorder (PTSD) symptoms were assessed using PCL-5⁵ in adulthood.
- The Von Frey test uses a series of filaments with • standardized densities to obtain objective data detecting sensory thresholds.



Figure 1: Touch-Test[®] Von Frey Filaments shown sequentially, displaying increasing densities. Filament applied to the area of skin on the back of the hand between the thumb and forefinger.

Participants were categorized as "No Childhood IPV" (n=24, 16 • female) and "Childhood IPV" (n=66, 37 female). An ANOVA was performed with IPV group and Von Frey trials as independent variables and sensory threshold as the dependent variable.

- no main effect of IPV group.
- IPV group and not in the No IPV group.
- symptom severity.







