

The Intergenerational Impact of Anticipated Racism on Early Childhood Stress Response

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WHAT IS THE PROBLEM?

- Experiences of hyper policing can manifest in collective drama that is associated with both poor health outcomes and intergenerational stress.
- The impact of maternal stress on their child's regulatory stress systems and their intersection with experiences of stress if particularly important for Black mothers.

Over the first 18 months of life we examined whether the trajectory of a telomere length (TL) for boys and girls born to Black mothers in a southern U.S. city related to community policing and socioeconomic factors.

WHAT WE DID

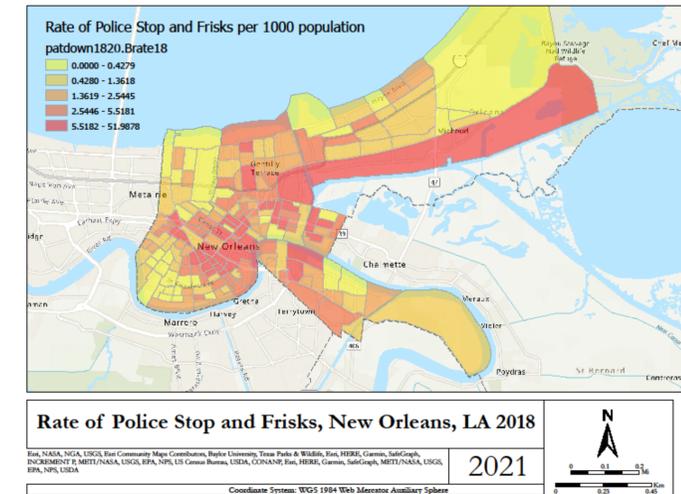
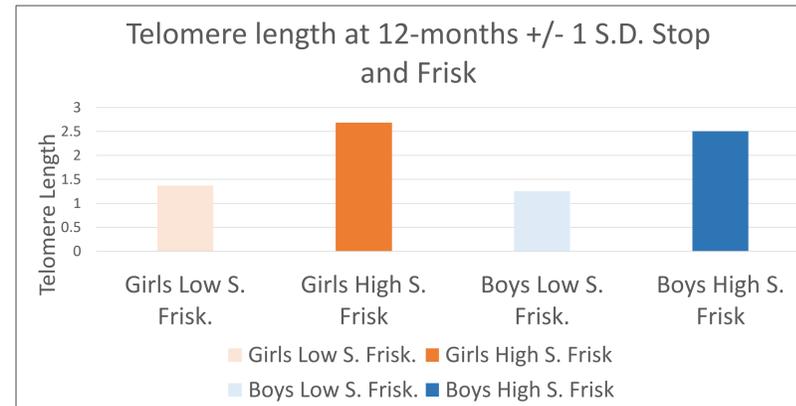
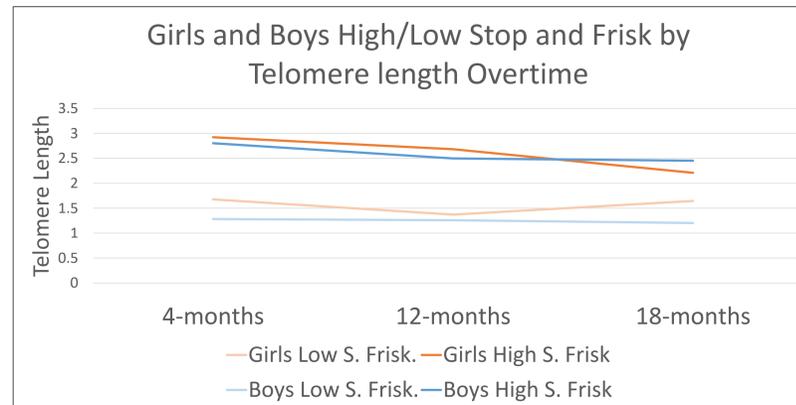
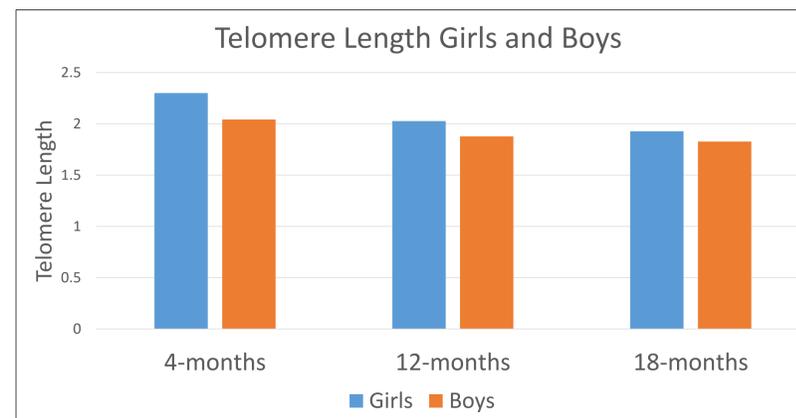
- ✓ **Collected** 67 maternal-infant dyads over 201 longitudinal observations were included in the analysis, including 90 boys (44.8%) and 111 girls (55.2%).
- ✓ **Measured** TL was assessed at 4-, 12-, and 18-months through MMqPCR with DNA extracted from buccal swabs. TL at birth was measured with DNA extracted from newborn bloodspots.

Demographics and Covariates Demographics and covariates were obtained via maternal report prior to infant birth and at subsequent survey waves

Community Data Community-level data was obtained from objective sources geolinked to maternal residence at the time of the survey, including the rate of police stop-and-frisk encounters.

Repeated Measures generalized estimating equation (GEE) models were utilized to examine sex differences in TL over time and the potential impact of living in a neighborhood with high rates of police encounters.

WHAT WE FOUND



There was a significant interaction by neighborhood stop-and-frisk rate, with a significant decline in TL among male versus female infants born in neighborhoods with a higher rate of stop-and-frisks ($B = -0.40$, 95% CI = -0.73 , -0.07 ; $Z = -2.37$, $p < 0.01$) compared to male versus female infants in neighborhoods with lower rates of police encounters ($B = -0.02$, 95% CI = -0.31 , 0.28 ; $Z = -0.10$, $p = 0.92$).

WHAT IT MEANS

There is a need to consider the role of structural racism, specifically hyperpolicing, in the production of maternal stress that may impact children's biologic stress development and particularly for male children.