Results

*SEM modeling*

The Structural Equation Model (SEM) for this research is a combination of Confirmatory Factor Analysis and multiple logistic regression. The model is based on the school to prison pipeline and is shown in Figure x. There are three major timepoints in the pipeline: elementary/middle school, high school, and adulthood. The outcomes at the elementary/middle school, high school timepoints are latent variables and the outcome measured at adulthood is an observed indicator variable for adult incarceration. Five other latent constructs were created to be used as exogenous variables: for three different types of trauma (family, poverty, and crime) and juvenile delinquency and adult crime. Additional observed variables include age in 2015, gender, SES, dual parent home, race/ethnicity, citizenship, urban/rural, highest grade completed and juvenile incarceration. Three simultaneous regression models are incorporated in the SEM model, one for each of the endogenous timepoints.

The SEM results, showing only significant relationships is shown in Figure X. DESCRIBE SEM DIAGRAM Table X

*Logistic regressions for gender and race/ethnicity*

To determine differences in the pipeline based on gender and race/ethnicity, separate SEM models were attempted but were unable to converge. Given that the high school endpoint had no significant predictors and to continue to explore the differences among gender and race/ethnicity, whether or not the participant was incarcerated as an adult was regressed on each observed variable in the SEM model for each of six combinations of gender and race/ethnicity. The other category for race/ethnicity was omitted due to smaller sample sizes. The results are in Table X.

*The role of trauma on adult incarceration*

For variables associated with crime related traumas, the odds for a female Hispanics to be incarcerated as an adult are 28.9 (95% CI: 2.0, 349.5) times higher when gunshot12to18 than not. The odds for non-Hispanic white males are 2.5 (1.3, 4.7) and 1.8 (1, 3.3) times higher to be incarcerated as an adult if they were jail or victim respectively. For non-Hispanic Black males, the odds of being incarcerated as an adult were 2.4 (1.3, 4.3) times higher if jail than not. For Hispanic males, the odds of being incarcerated as an adult were 3.8 (1.8, 8.4) times higher if jail than not.

*The role of juvenile delinquency on adult incarceration*

For white females, the odds of being incarcerated as an adult are 2.5 (1.3, 4.6) times higher if juvenileattack and 3.5 (1.5, 7.4) times lower if juvenileselldrugs, respectively. For white males, the odds of being incarcerated as an adult are 1.8 (1.2, 2.8) times higher if juvenilestealmore than not. For black males, the odds of being incarcerated as an adult are 1.5 (1.0, 2.4) times higher if juveniledestroyproperty than not. For Hispanic males, the odds of being incarcerated as an adult are 2.5 (1.4, 4.6) times higher if juvenileotherproperty than not.

*The role of adult crime on adult incarceration*

For white females, the odds of being incarcerated as an adult are 5.7 (2.3, 14.1) times higher if adultstealmore than not, 2.2 (1.1, 4.2) times higher if adultattack than not, and 4.2 (2.1, 8.2) times higher if adultselldrugs than not. For Black females, the odds of being incarcerated as an adult are 5.4 (1.9, 15.3) times higher if adultattack than not. For white males, the odds of being incarcerated as an adult are 2.2 (1.5, 3.4) times higher if adultselldrugs than not. For Black males, the odds of being incarcerated as an adult are 2.3 (1.3, 3.8) times higher if adultselldrugs than not. For Hispanic males, the odds of being incarcerated as an adult are 2.6 (1.2, 5.8) and 3 (1.6, 5.9) times higher if adultstealmore and adultselldrugs than not, respectively.

*The role of school suspensions and dropouts on adult incarceration*

For white females, the odds of being incarcerated as an adult are 2 (1.1, 3.5) and 3 (1.2, 5.8) times higher if elementarysuspend and highdropout than not, respectively. For black females, the odds of being incarcerated as an adult are 8.4 (1.2, 60.9) and 3.4 (1.0, 11.1) times higher if elementmiddledropout and highdropout than not, respectively. For Hispanic females, the odds of being incarcerated as an adult are 1.0 (1.0, 1.1) times higher if middlesuspend than not. For white males, the odds of being incarcerated as an adult are 2.4 (1.0, 5.4) times higher if highdropout than not. For black males, the odds of being incarcerated as an adult are 3.1 (1.3, 7.2) times higher if highdropout than not. For Hispanic males, the odds of being incarcerated as an adult are 4.3 (1.5, 11.7) if highdropout than not.

*The role of juvenile incarceration on adult incarceration*

For black males, the odds of being incarcerated as an adult are 21.4 times higher if juvenileincarceration than not. For Hispanic males, the odds of being incarcerated as an adult are 7.5 times higher if juvenileincarceration than not.

*The role of other demographics on adult incarceration*

The odds of being incarcerated as an adult are 3.1 (2.5, 3.9) times higher if male than female, 1.4 (1.1, 1.7) times lower if the participant grew up with both bio parents than not, 1.6 (1.3, 2.0) times lower if SES than not, and 1.4 (1.0, 2.0) times higher if you are not a US citizen. For Hispanic females, the odds of being incarcerated as an adult are 1.2 times lower for every year beyond 2015 they are in age. For white males, the odds of being incarcerated as an adult are 1.6 (0.5, 10.2) times higher if not a U.S. citizen and 1.4 (1.0, 1.9) times lower if they live in a rural area as opposed to an urban area. For black males, the odds of being incarcerated as an adult are 1.03 (0.4, 2.9) times higher if a not a US citizen compared to US citizens. For Hispanic males, the odds of being incarcerated as an adult are 1.09 (0.7, 1.8) times higher if not a U.S. citizen compared to U.S. citizens.