███████████████████████████

Research Question

The primary interest is investigating whether students in the Middletown Public School District with disciplinary problems score significantly different from students without disciplinary problems on the Connecticut Mastery Test (CMT). We will also analyze any possible differences in the number of disciplinary problems between groups such as gender, ethnicity, and socioeconomic status (SES). If any significant differences are found, we will further explore differences between highly violent behaviors and all other behaviors.

Hypothesis

Our hypothesis for the primary question is children with higher incidence of behavioral problems will score significantly lower on the CMT than children with no such history. Possible confounding variables are any existing differences in CMT between gender, ethnicity, and SES groups.

Sample

The overall sample has not yet been determined due to ongoing data entry. As of now, our sample contains 182 elementary, middle, and high school students in the Middletown Public School District who have had citations for disciplinary problems on the bus. This group will be linked to a dataset 6525 students that contains more detailed disciplinary and academic information.

Variables

Below is a list of variables and their operational definitions.

Gender: nominal dichotomous, male, female
Ethnicity: categorical 5 groups, American Indian, Asian American, Black, Hispanic, White
SES: nominal dichotomous, free/reduced lunch eligible, free/reduced lunch ineligible
Disciplinary History: nominal dichotomous, whether student has behavioral citation or not
Severity of Disciplinary Problem: continuous, number of days sanctioned
Bus Discipline Problem: nominal dichotomous, whether student has behavioral citation on the bus or not
Test Performance: continuous, CMT
Highly Violent Behavior: nominal dichotomous, presence of a weapon during incident or not

████████████████████████████████

Statistical Tests

To test if there are differences between students with behavioral problems and students without behavioral problems, a one-way ANOVA will be run (IV= Disciplinary History, DV= Test Performance).

To test if the students of different gender, ethnicity, and SES score differently on the CMT, 2x4x2 factorial ANOVA will be run (IVs= Gender, Ethnicity, SES DV=Test Performance).

To test if students of different gender, ethnicity, and SES have different amounts of behavioral problems, chi square tests will be run (IVs= Gender, Ethnicity, SES, and all interactions of the previous 3 DV= Discipline History)

To test for possible confounding as mention in the hypothesis, regression analysis will be conducted.