Driving while Black or Brown:
Exploring institutional racism through data

Background

Have you ever heard the term “institutional racism?” (synonyms include “systemic racism” and “structural racism”). Try to define the term before you go on.

Institutional Racism is defined by The University of North Carolina’s FPG Child Development Institute (7,8) as “distinguished from the explicit attitudes or racial bias of individuals by the existence of systematic policies or laws and practices that provide differential access to goods, services and opportunities of society by race. Institutional racism results in data showing racial gaps across every system. For children and families it affects where they live, the quality of the education they receive, their income, types of food they have access to, their exposure to pollutants, whether they have access to clean air, clean water or adequate medical treatment, and the types of interactions they have with the criminal justice system.”

NAACP president Derick Johnson defines **systemic racism** (9) more succinctly as "systems and structures that have procedures or processes that disadvantage African Americans."

Another highly relevant term to understanding this dataset is **racial profiling**, described by the American Civil Liberties Union as “the discriminatory practice by law enforcement officials of targeting individuals for suspicion of crime based on the individual's race, ethnicity, religion or national origin. Criminal profiling, generally, as practiced by police, is the reliance on a group of characteristics they believe to be associated with crime. Examples of racial profiling are the use of race to determine which drivers to stop for minor traffic violations (commonly referred to as "driving while black or brown"), or the use of race to determine which pedestrians to search for illegal contraband.” (10)

Note that the terms above generally focus on how systems, structures, policies and laws cause racist outcomes, as opposed to how individuals exhibit racist attitudes.

Dataset

This dataset was collected as a result of a law passed in Missouri out of concerns about racial profiling.

According to the office of the Missouri Attorney General, “Concerns by the citizens of Missouri and the Missouri legislature regarding allegations of bias in traffic enforcement prompted the passage of **Section 590.650, RSMo**. SB 1053 created Section 590.650, RSMo. which became effective August 28, 2000. This statute created the Vehicle Stops Report and required that the Attorney General’s Office collect and report on traffic stops conducted by law enforcement officers across the state of Missouri.” (11)

So what do years of data (2000-2018) collected as a result of this statute tell us about the extent to which Missouri traffic enforcement has demonstrated racial bias in terms of deciding which drivers to stop, search, and arrest? Let’s dig into the data to find out.

Variables

Year - The year the data were collected. Ranges from 2000 to 2018.

Race - Categorical variable collected with possible values of White, Black, Hispanic, Asian, American Indian, or Other.

Population - The total population of individuals identified by a particular race within Missouri. Note that this population data was not updated each year, but rather was based on census data for most years. The population data is not updated to reflect any changes in population beyond the 2010 census.

Statewide Population (%) - The percentage of the total population for a given racial group based on the latest census data used

Stops - The number of traffic stops made by police

Disparity Index - This summary metric relates each racial/ethnic group’s proportion of total traffic stops to its proportion of the driving-age (16+) population. It is calculated as (% of total traffic stops/ % of Missouri’s driving age population) A value of 1 indicates that a group’s proportion of vehicle stops equals its population proportion: it is neither "under-represented" nor "over-represented." Values above 1 indicate over-representation, and those below 1 indicate under-representation in traffic stops.

Searches - The number of searches conducted by police during traffic stops

Search Rate (%) - The number of searches divided by the number of stops (x 100). Searches include both searches of drivers and searches of the vehicle and property within.

Arrests -The number of arrests made as a result of a traffic stop

Arrest Rate (%) - The percentage of traffic stops that resulted in an arrest for any reason

Contraband Hit Rate (%) - The percentage of searches in which contraband is found

Activity

1) Make a graph to compare the Search Rate (%) among the different groups represented in the dataset. If you are viewing the data table, first click the yellow **Make a Graph** button. You then add variables to the graph by clicking on the **Show** buttons located beneath the variable names listed towards the top of the screen. Show Search Rate (%) on the Y-axis and Race on the X-axis. **The red X and Y buttons to the right of the graph** display what you are currently showing on the plot. Click or unclick these buttons to make changes. Each data point represents data collected for a single year. Check the box that reads **Descriptive stats** to add representations of the mean Search Rate (%) for each racial group. Include a screenshot of your graph here:

2) How do the search rates for different races compare?

3) Which races are searched at the highest and lowest rates?

4) Make a new graph showing Contraband Hit Rate (%) on the Y-axis, but keep Race on the X-axis. Include a screenshot of your graph here:

5) The contraband hit rate represents the percentage of stops in which contraband (illegal materials) was found. How do the contraband hit rates for the different races compare?

6) Some may claim that it was reasonable for Missouri law enforcement to engage in racial profiling because certain races were more likely to be in possession of contraband. Do these data support or refute that claim?

7) Make a new type of graph showing Year on the X-axis, Search Rate (%) on the Y-axis, and **add Race as your Z variable**. When you see the check box called **Connect dots** appear to the right of the graph (just above the red X, Y, and Z), click it to make a line graph that shows change over time for each race in the dataset. Include a screenshot of your graph here:

8) How have the search rates changed over time? Do you notice similar or different trends between races?

9) To what extent does this data indicate that racial profiling in Missouri traffic stops changed between 2000 and 2018?

10) Now change the graph you made to answer the next two questions (11 & 12) so that the Disparity Index is now shown on the Y-axis instead of the Search Rate (%). Include a screenshot of your graph here:

11) How do the different races compare in terms of the Disparity Index, and how have those disparities changed over time?

12) Based on this information, as well as what you have learned from the previous graphs, what conclusions can you draw about the degree

to which institutional racism was evident in Missouri traffic enforcement between 2000 and 2018?

13) Now that you have analyzed these data, does it affect your initial impression of the introductory video(s)? Why or why not?

14) Racial disparities in society affect all people in our society. What connections can you make between these data and your own lived experiences? Does making these connections make you uncomfortable? Why or why not?