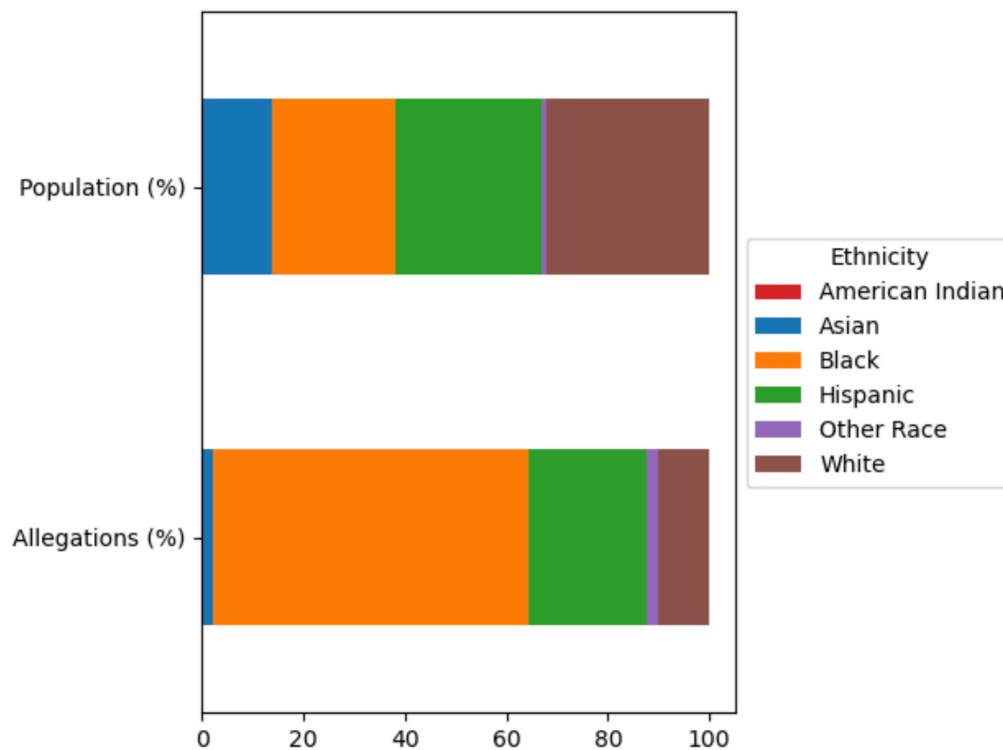
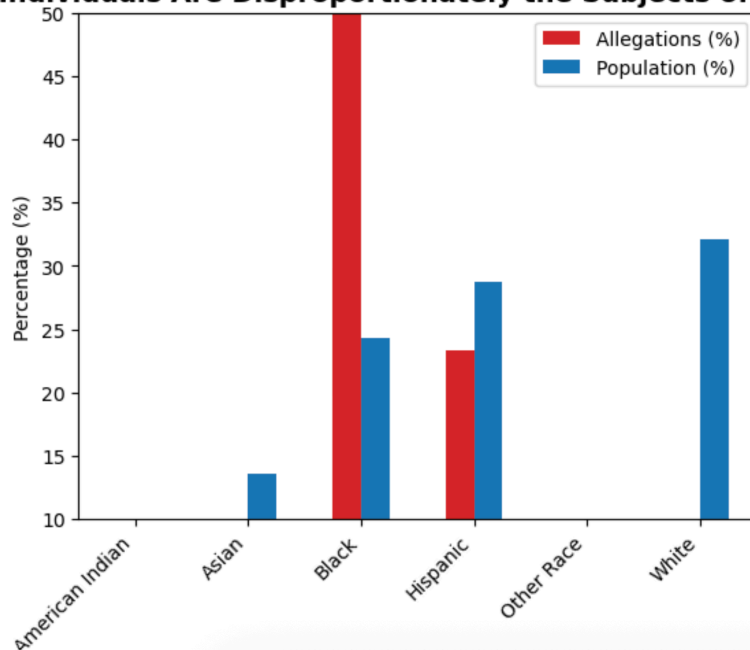


DSC 106 Project 2

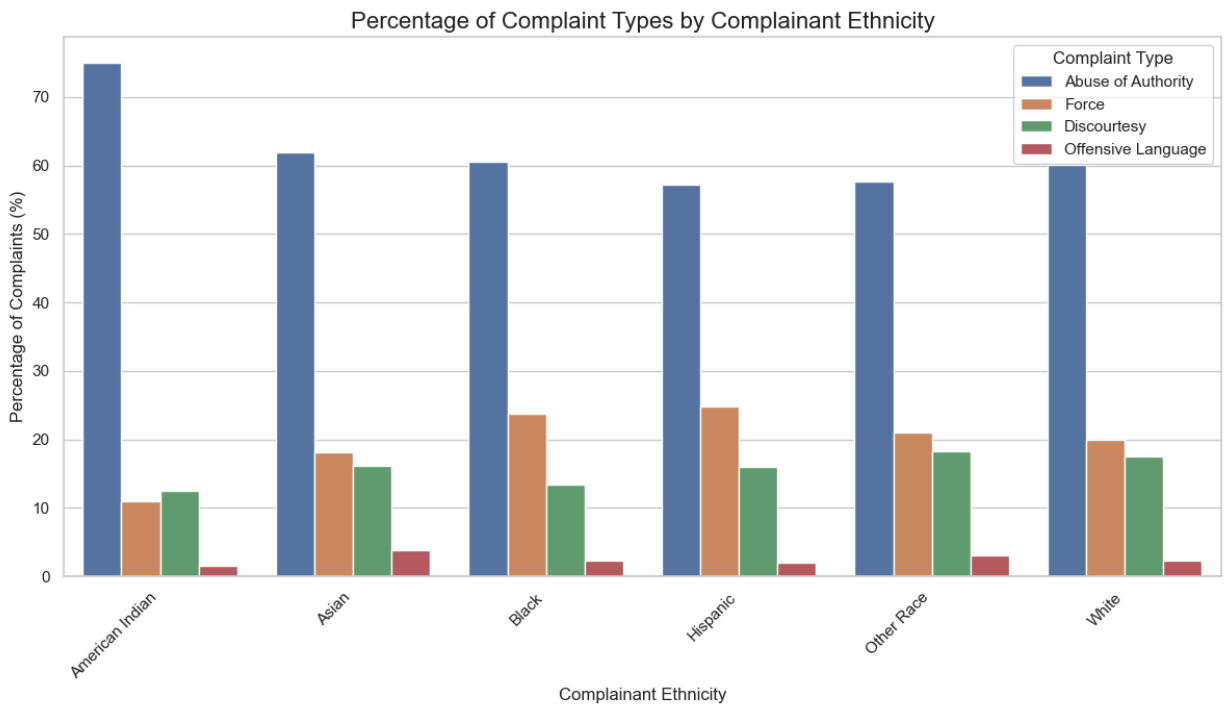
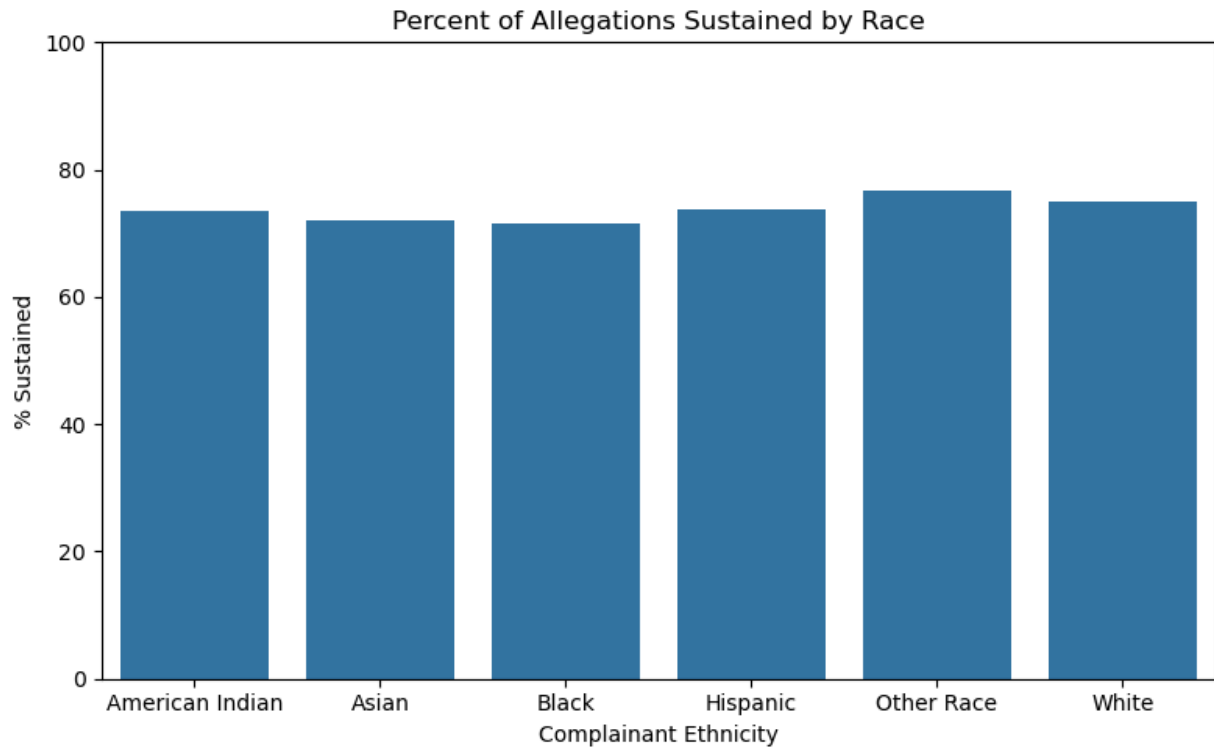
Proposal: Black individuals are disproportionately the subjects of police misconduct allegations compared to their representation in the general population.

For Proposition:

Black Individuals Are Disproportionately the Subjects of Allegations



Against Proposition:



For Proposition:

1st Plot

- First, we cleaned the data containing only the columns: 'complaint_id', 'complainant_ethnicity', 'complainant_gender', 'fado_type', 'allegation', 'precinct', 'board_disposition'
- Used the 'complainant_ethnicity' column to gather the proportions of each ethnicity recorded in the dataset
- Gathered the population proportions from the NYC Census in 2020
- After cleaning the dataset, races with low or missing data were excluded to sharpen the contrast between different ethnicities
- Created side-by-side bar charts comparing Allegations (%) vs Population (%) by race - leaning towards this graph
 - Viewers can quickly see which groups are over- or underrepresented, supporting the claim of racial disparity
 - There is clear evidence about which groups are being targeted

2nd Plot

- 1st decision was using a 100% stacked horizontal bar chart. I think this gets a score of +1 because the format of it clearly compares proportions while maintaining the same visual scale for population and allegations. It allows viewers to immediately see which group's share of allegations exceeds their population share, by how they're laid out against each other.
- 2nd decision was the consistent color grading we used across categories which gets a score of 0 because it's pretty neutral. Each race/ethnicity uses the same color in both bars, reinforcing the connection between population and allegation distributions and helps viewers detect disparities quickly without confusion.
- 3rd decision was how I ordered the categories: by placing black near the center, it minimizes edge bias and draws attention to the middle of the plot where the largest difference may stand out more and catch the viewers attention. I'd give this a score of 1.

Against Proposition:

1st plot

- We used the 'board_disposition' column to find which allegations were substantiated and stored this value in a new column, 'sustained'
- Next we grouped by 'complainant_ethnicity' to calculate the proportion of each race that were sustained
- We converted the proportion to percentage to make the graph more readable for a general audience

- We found that the percentage sustained is similar amongst all races and not skewed towards Black people

2nd plot

- 1st decision, we put groups on the same scale, making type profiles look comparable and downplaying overall volume differences which to some extent shows some overrepresentation. I considered raw counts, but those would highlight that some groups have many more total complaints. Specifically we did $\text{abuse}/\text{total} \times 100$ so each ethnicity sums to 100%. I would give this a -1 score because of how deceptive it is.
- 2nd decision, we shifted the point of focus from “who is overrepresented” to “what kind of complaints happened” which often looks similar across groups and undercuts the disproportionate narrative. This focuses on internal patterns, not the whole population. I’d also give this a score of -1.
- 3rd decision would be the side-by-side grouped bars. This style of bars make group differences look smaller/modest when the dominant category (abuse of authority) is high for everyone. I’d give this score a -1 to 0 because although it changes the way we view the data, it’s being applied to all groups.