CHECKPOINT 2

Data Exploration

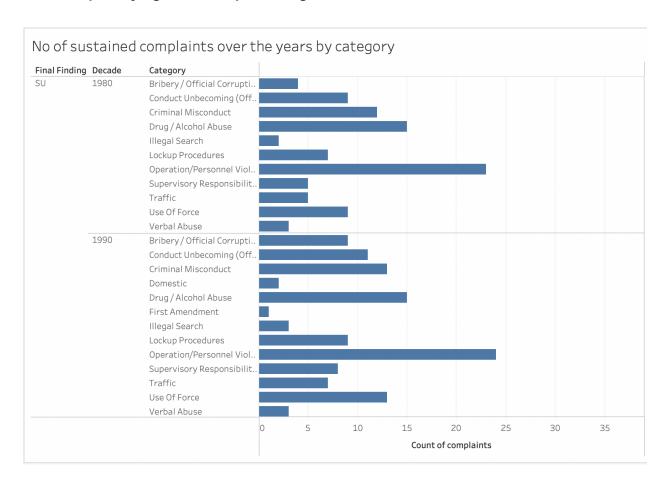
The Royal Zombies
Shivangi Sharma,
Shraddha Bangad,
Shalin Parikh

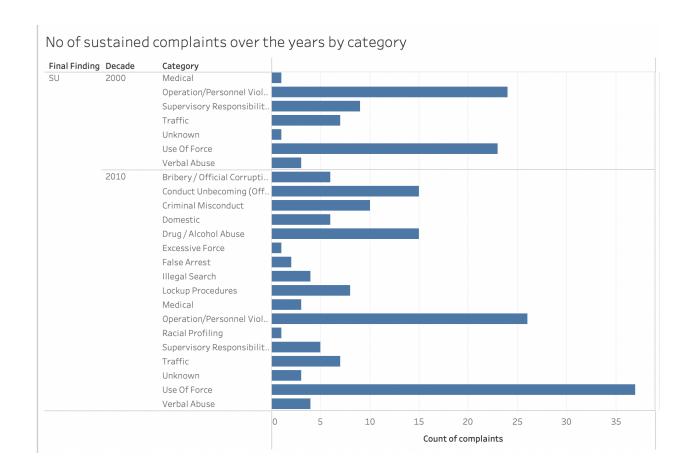
Horizontal Bar- Trend of sustained complaints by category over the decades -

This is a **stacked bar graph** where the X-axis represents the count of sustained complaints and Y-axis represents the categories of sustained complaints over the decades.

From this graph we observe that the number of sustained complaints for the category "Operation/Personnel violations" are maximum in every decade starting from 1980 except for the recent decade i.e. 2010 to 2020.

In the recent decade, complaints of "Operation/personnel violations" are in the same range as usual but the sustainment for the complaint category "Use of force" has increased noticeably. This correlates with the sentiment that the general public has been portraying about the police in general over the last decade.

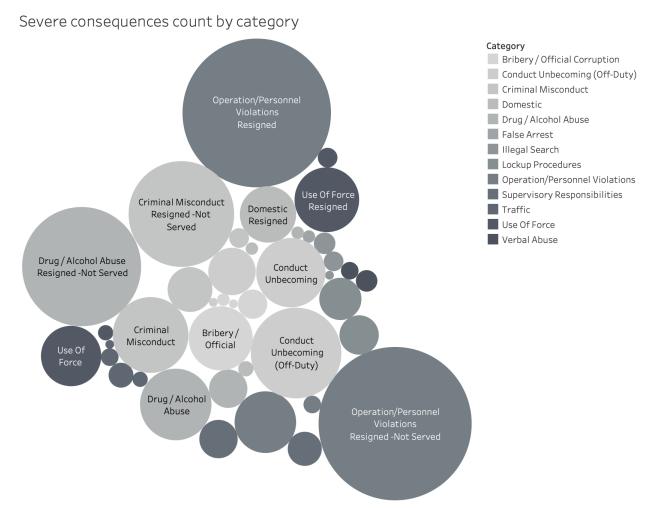




2. Packed Bubbles- Severe consequences count by category-

We define the following consequences to be severe - 'Resigned', 'Administrative termination', 'Resigned - not served', 'Suspended indefinitely'. Each bubble represents a category and the consequence associated with it. The bigger the dimensions of the bubble, the higher the number of severe consequences of that category.

From this visual, we can interpret that 'Operation/Personnel Violations', 'Drug/Alcohol abuse' and 'Criminal Misconduct' are the categories given the highest number of severe punishments.

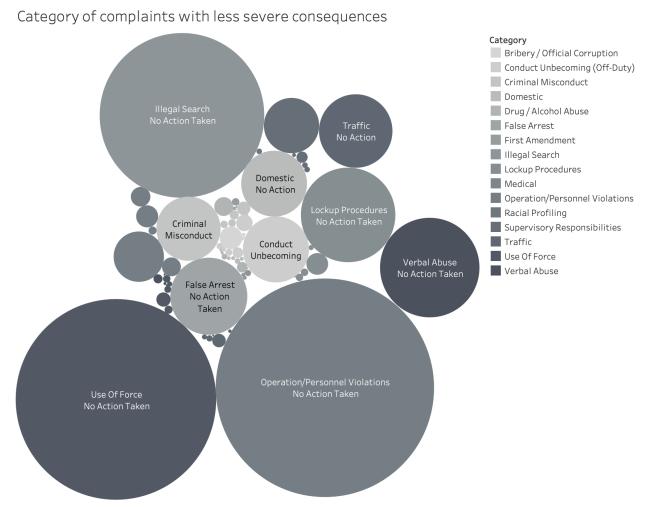


Category and Final Outcome. Color shows details about Category. Size shows count of Final Outcome. The marks are labeled by Category and Final Outcome. The view is filtered on Final Outcome, which keeps Administrative Termination, Resigned, Resigned -Not Served and Suspended Indefinitely.

3. Packed Bubbles- Least severe consequences count by category-

We define the following consequences to be the least severe - 'No action taken', 'Penalty not served', 'Reprimand', 'Separated other case', 'Separation', 'Sustained-no penalty' or 'Violation noted'. Each bubble represents a category and the consequence associated with it. The bigger the dimensions of the bubble, the higher the number of least severe consequences of that category.

From this visual, we can interpret that 'Operation/Personnel Violations', 'Use of force' and 'Illegal search' are the categories given the highest number of severe punishments.



Category and Final Outcome. Color shows details about Category. Size shows count of Final Outcome. The marks are labeled by Category and Final Outcome. The view is filtered on Final Outcome, which keeps 7 of 63 members.

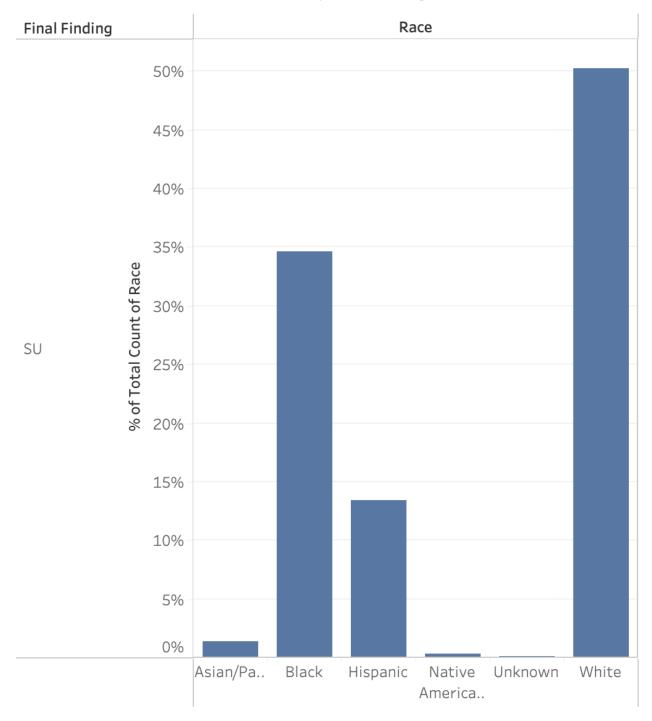
4. Bar graph - Sustained complaints Count by race-

This graph represents the number of sustained complaints by each race, the X- axis represents different races and the Y axis represents the number of sustained

complaints.

Through this graph we observe that out of all the complaints sustained, **complaints** sustained against white police officers are greater than black, hispanic, etc.

Division of sustained complaints by race



% of Total Count of Race for each Race broken down by Final Finding. The view is filtered on Final Finding, which keeps SU.

Summary -

The above visual analysis gave us a lot of insight into the working of the Chicago police department. The most interesting outcome according to us was that complaints against White police officers were most likely to be sustained than their other counterparts. Their sustainment rate was over 50%, with Black police officers coming second with a sustainment rate of over 35%. This somewhat contradicts the notion that White police officers do not get reprimanded for their actions.

Another interesting insight was that the sustainment rate for the allegation category 'Use of force' has gone up significantly in the past decade. This can easily be correlated with the articles about the Chicago police department that we have read in class. The fact that the number of complaints in this category has also increased in the last decade goes on to show why citizens have started losing faith in the Police department.

Despite this, visual 3 shows us that there are still a large number of complaints in this category ('**Use of force**') that are taken lightly, and police officers are not reprimanded as severely as they should be for the same. '**Illegal search**' is another allegation category that has popped up in the last decade, which police officers still go mostly unpunished for.