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Exploring Fatal Police Shootings in the US

Police brutality is a hot topic in The United States of America that has been on the rise since the early 2010s. In recent years, such as the summer of 2020, protests and riots happened nationwide due to the lack of accountability that is being held on these murders. I chose these data sets specifically because of the events that occurred during the pandemic, which sparked a new wave of activism. In addition, the data shines light on the truth that the U.S government tries to hide. For example, in cases such as George Floyd's, if there were no video evidence and nation-wide protests, this case would have been swept under the rug like others before him. Because of situations similar to Floyd's, data is constantly being collected based on police killings. The collection of this type of data started in 2015, meaning there could be millions of unreported cases prior to this date.

Thanks to The Washington Post, every fatal shooting since the 1st of January 2015 has been documented and compiled into the data sets that I will be reporting on. This data represents all the individuals who were victims of police shootings between the years of 2015 to 2017. Also, the data sets give potential factors that may have contributed to the deaths of these people. The data sets contain the following types of variables: datetime, numerical, categorical (character or string), and logical (boolean). These variables give insight on the poverty rates, the graduation rates, median income rates, their race, the location, if they were armed, and more.

To properly understand the data sets that I will be reporting on, it is important to know that these visualizations will represent the casualties in the state of California because that is where most of the shootings occurred during 2015 to 2017. In addition, I will be reporting on the state of California since they have one of the most diverse populations in The United States of America. However, my visualizations will only represent the top five cities in California with the most shootings.

While looking at this data, I found it interesting that poverty rates, median household incomes, and high school completion rates were potential factors on why someone may have been killed. As I continued to look through the data, I thought, is there a correlation between poverty rates and the number of cases in which police shootings occur? This singular question opened a door for six more questions that I plan to answer with my visualizations of the data. The six questions that I will answer with my visualizations of the data are: “What are the percentages of races that make up the top five cities?”, “Is there a correlation between poverty rates and high school completion rates?”, “What is the median age of each victim by race in the top five cities?”, “What is the median household income in the top five cities?”, “Do the cities with the most police shootings have higher poverty rates?”, and “Out of all the races, which ones appeared the most among the victims?”. With these questions in mind, I am most intrigued about whether cities with lower poverty rates or higher poverty rates produce more police shootings, and want to I explore this. Now that I have introduced my main question for the data set, “Is there a correlation between poverty rates and the number of cases in which police shootings occur?”, I hypothesize that there are more cases of police shootings in cities with higher poverty rates. The reason why I decided to use poverty rates is because, as someone who lives in a city

with a high poverty rate, poverty rates and violence usually go hand in hand. With these key factors in mind, I will be making six figures to either prove or disprove my hypothesis.

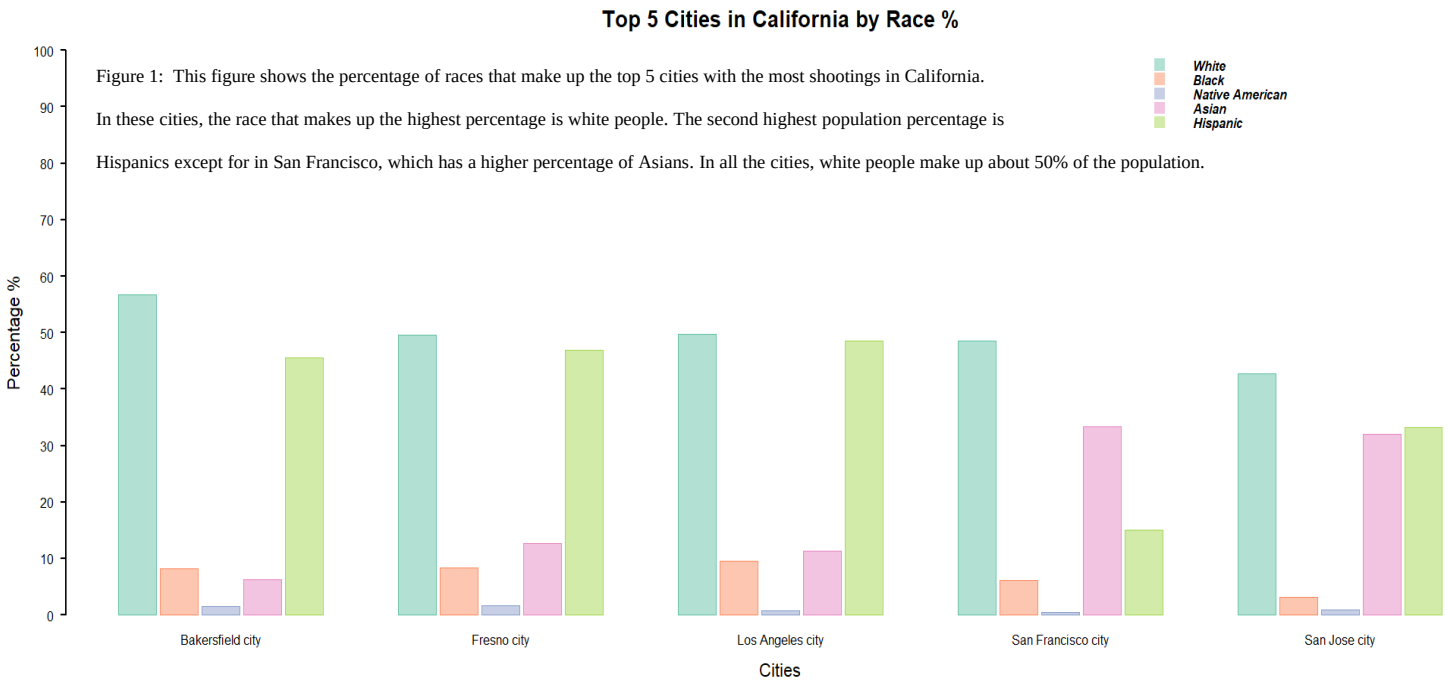

Figure 1: This figure shows the percentage of races that make up the top 5 cities with the most shootings in California. In these cities, the race that makes up the highest percentage is white people. The second highest population percentage is Hispanics except for in San Francisco, which has a higher percentage of Asians. In all the cities, white people make up about 50% of the population.

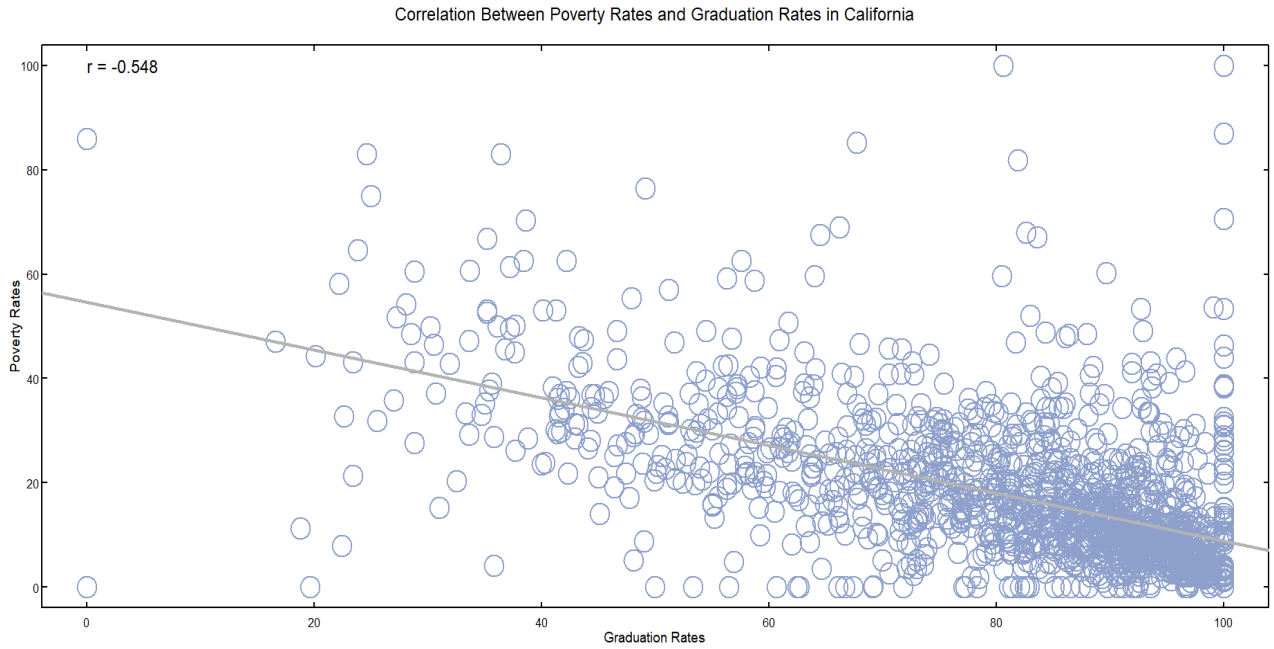

Figure 2: In this figure, I checked if poverty and graduation rates had a positive correlation. As depicted in the figure, there is a strong negative correlation between both variables. This figure helps weed-out the possibility of there being a connection between graduation rates and cities with the highest rates of poverty.

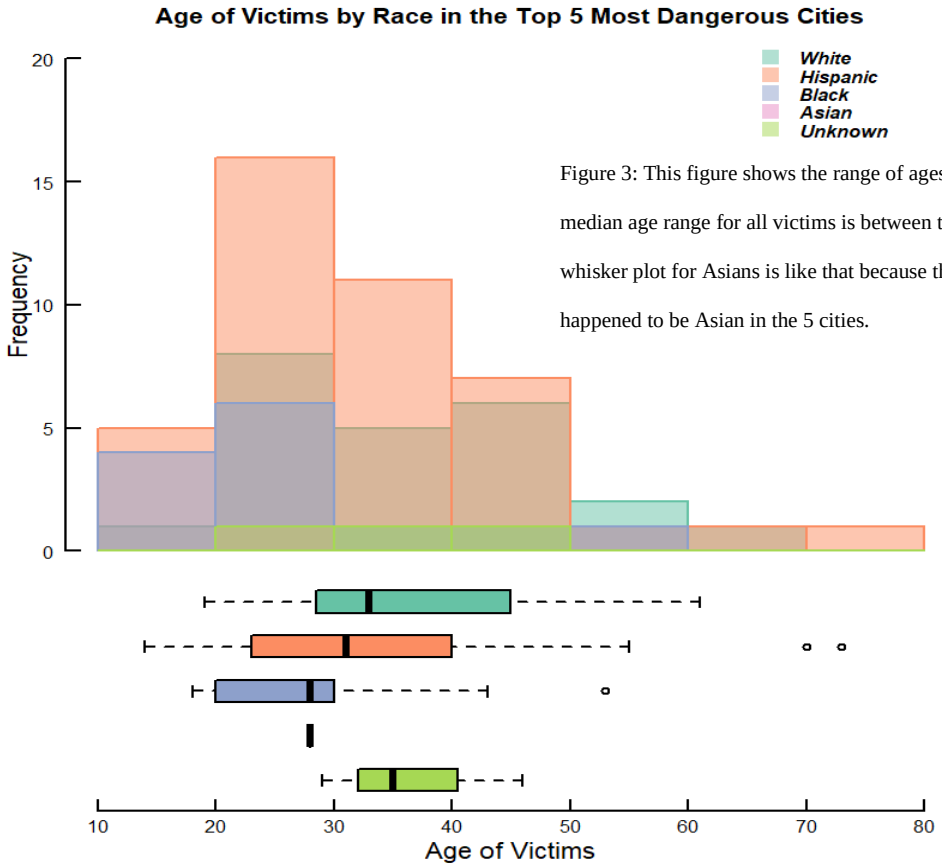

Figure 3: This figure shows the range of ages for the victims by race. The median age range for all victims is between the late 20s to early mid-30s. The whisker plot for Asians is like that because there was only 1 victim who happened to be Asian in the 5 cities.

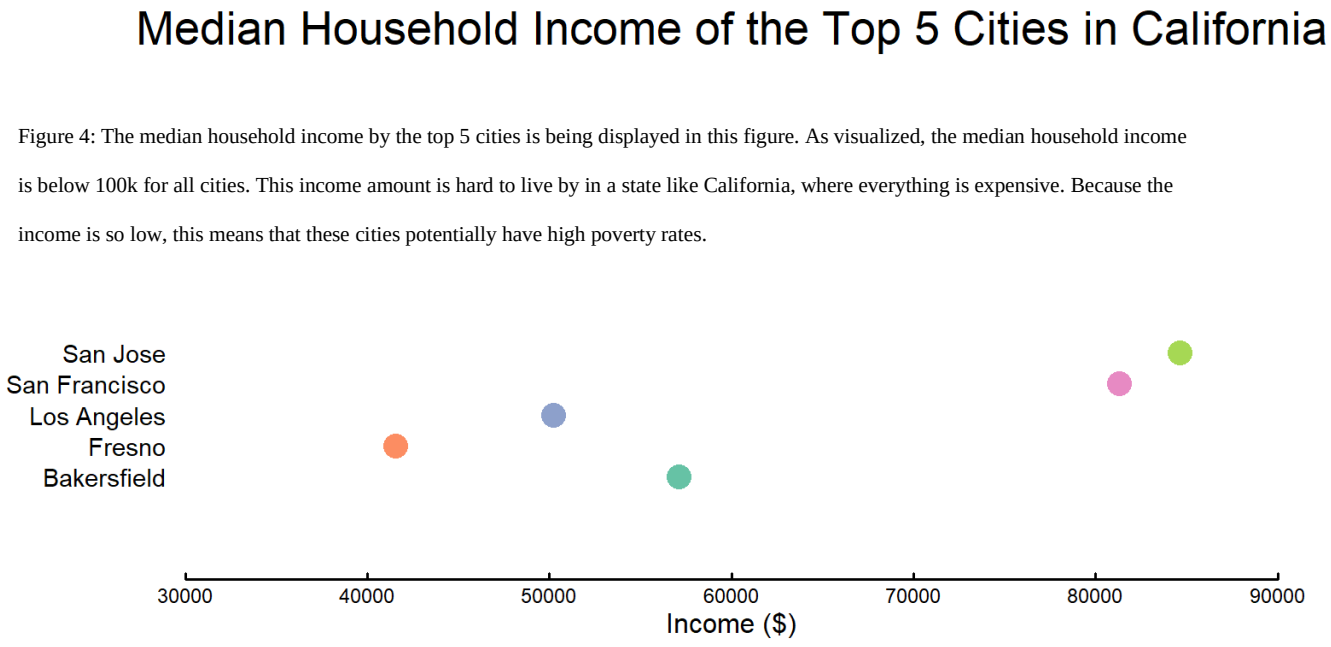

Figure 4: The median household income by the top 5 cities is being displayed in this figure. As visualized, the median household income is below 100k for all cities. This income amount is hard to live by in a state like California, where everything is expensive. Because the income is so low, this means that these cities potentially have high poverty rates.

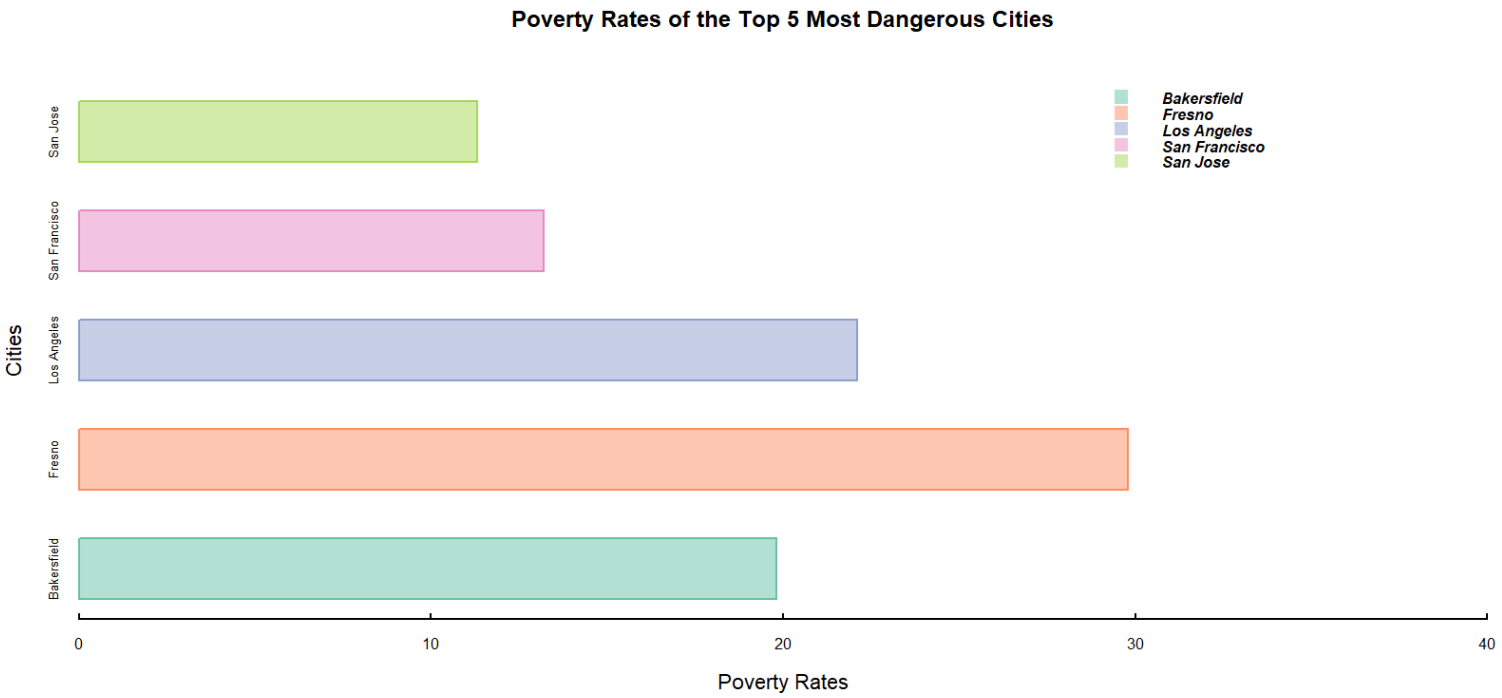

Figure 5: This figure shows the poverty rates by the cities with the most shootings. All the top 5 cities have high poverty rates, with Fresno being the highest at about 30%. Figure 4 provides evidence on why all these cities have such high poverty rates. The median household income plays a role in the poverty rates because the cost of living is expensive in California. This figure helps to prove my hypothesis.

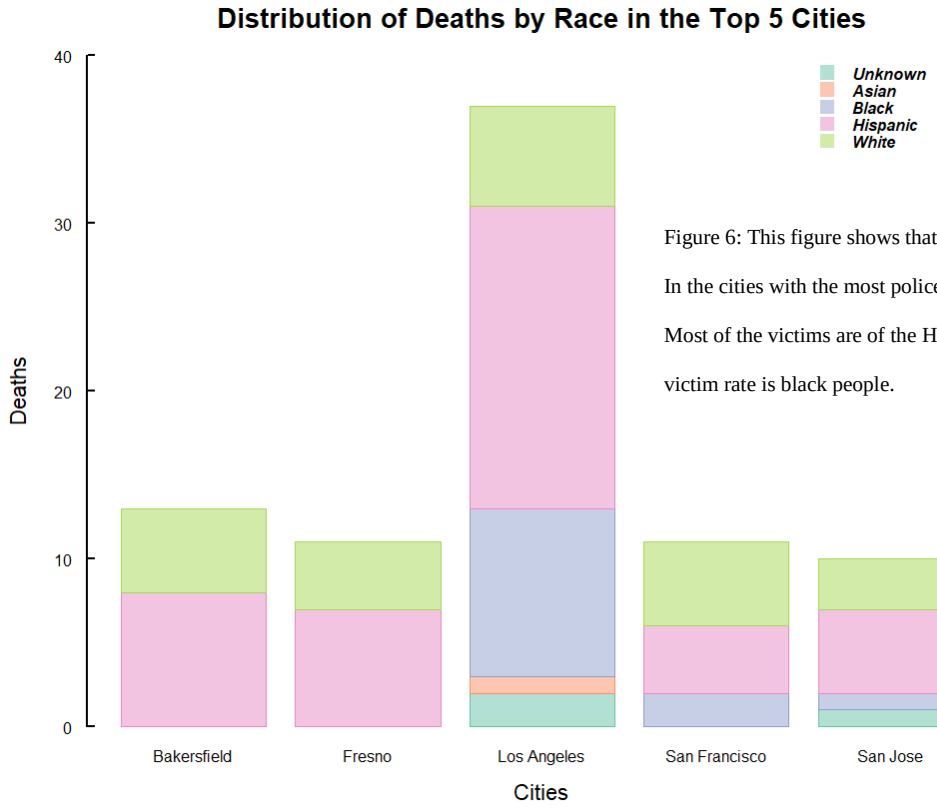

Figure 6: This figure shows that race also plays a role in police shootings. In the cities with the most police shootings, majority of the victims are POC. Most of the victims are of the Hispanic race. The race with the second highest victim rate is black people.

In conclusion, despite white people being most of the population in all five cities, majority of the victims are POC around the ages of 25-35. This means that race is a contributing factor to why some cities have higher police shootings. Also, the median household income for cities with the most police shootings is relatively low. Because the median incomes are so low for the high cost of living in California, this guarantees that these cites have high poverty rates. The lower the median income, the higher the poverty rate is as shown in the figures above. Since the cities with the most police shootings have high poverty rates, this proves that my hypothesis was correct. With these final conclusions, readers should know that a good amount of these police shootings were hate crimes. This conclusion can be made based on the races who occupy the cities by the races of the victims.