RACIAL SHOOTINGS REPORT

INTRODUCTION

It has been found that in recent years there have been several police killings in the US. Many, considering the manner of the killings have linked it to "Racism". In light of this, data on police shootings during the years 2015 to 2020 have been gathered for analysis to ascertain the authenticity of this claim. The data contains basic information on the incidences like the name, age, gender, and race of the shot individuals. Also included is the shooting/killing information, like date of event, where it happened? How they were shot? Did they attack? Were they holding weapons? Did they show any mental illness? Was the policeman wearing a camera/was the incident recorded? Did the suspect flee? What type of weapon was used by the suspect?

DATA CLEANING

After the data was loaded onto Power BI Desktop, it had to go through a transformation phase by the help of the Power Query Editor. A very important and first step in analyzing a dataset is cleaning the data. Cleaning employed on this data included **capitalizing** each word of text under the **city**, **name** and **manner of death** columns, a new column "**age range**" was then added and replaced the previous column "**age**" so as to work with data one can easily visualize. The age ranges were created by the help of the **Conditional Columns** tab under the **Add Column** tab of the **General** group of the Power Query Editor. Final cleaning done was on the "**gender**" column. Employing the **replace** tab under the **Home** tab of the **Transform** group, "**M** and **F**" were replaced with **Male** and **Female** respectively. These alterations were then loaded and applied to Power BI Desktop to begin report creation, visualization and analysis.

REPORT CREATION, QUESTIONS, VISUALIZATION AND ANALYSIS

As the subject matter is Racial Shootings in the US, the report heading read **Racial Shootings Report**. In order to begin visualization and analysis, certain questions needed to be answered. These questions were grouped under the categories of Race, Gender, and City and State.

Questions (By Race}

1. How many people were shot?
2. How many of the shot individuals had mental illness (top 3)?

3. What was the manner of death of the individuals?
4. How many of the shootings were recorded by camera?

Questions (By Gender)

1. How many males and females were shot and what were their age ranges?
2. What category of weapons were used in the killings (top 5)?
3. What percentage of males to females had mental illnesses?
4. What percentage of males to females were shot?

Question (By City/State)

1. What Cities recorded the most shootings (top 5)?
2. What States recorded the least shootings (bottom 5)?

A final question was to find out which dates the shootings occurred.

Visualization and Analysis (Overview Page)

Cards from the visualization pane were employed to display values of the **Number of shootings (4895), Number of States (51)** and **Number of Cities (2287).** Slicers, also from the visualization pane, were used to display **dates, age range, gender, race, city** and **arms category.** The clustered bar chart was used to visualize the number of "Shootings by Race". This visual also appears on the Racial analysis page. It was found that a whopping 2,476 people shot were "Whites", 1,298 were "Blacks", 902 were "Hispanics" 93 were "Asians", 78 were "Natives" and 48 were "Others". If the complainants of "Racism" claims were Whites, Blacks or Hispanics, they have an argument.

On the overview page, there is again a visual on the date of the shootings (Shootings by Year). The most shootings were recorded in 2015 (965) and the least in 2020 (374).

A final visual was a pie chart displaying the percentage of Shootings by Gender. A staggering 95.46% of males were shot compared to 4.54% females shot.

Visualization and Analysis (Racial Analysis Page)

A stacked bar chart was used to visualize the Manner of Death by the Race (top 3). It was found that amongst the "Whites" killed, 95.32% were only shot and

4.68% were shot and tasered. The Blacks had 94.68% only shot with 5.32% shot and tasered. The Hispanics only shot represented 94.57% with 5.43% shot and tasered.

Another visual on the page is a 100% stacked column chart demonstrating the mental illness percentage (top 3) among the races. The whites had the most suspects mentally ill (28.8%), the Hispanics recorded 17.41% mentally ill and the Blacks recorded the least number of mentally ill suspects (14.18%).

A final visual on the page was a funnel chart illustrating the Number of Shootings Recorded by Camera. All shootings of Whites (100%) were recorded by camera, 52.42% of shooting of Blacks were recorded by camera, 36.43% of shooting of Hispanics were recorded.

Visualization and Analysis (by Gender)

A clustered column chart was used to visualize the number of Shootings by Age Range and Gender. The age range with the most number of males killed were individuals between the ages of **18** and **29** (1481 killed). The age range with the least number of males killed were individuals aged **70 and above** (57). The age range with the most number of females killed were individuals between the ages of **30** and **39** (69 killed). The age range with the least number of females killed were individuals aged **70 and above** (4).

A stacked bar chart was used to visualize the Category of Weapons used on suspects (top 3). It was found that guns were the most commonly used weapons for the killings. A whopping 2,667 males were gunned down. Females gunned down were 97.

Amongst the males killed, 1,034 representing 22.13% were mentally ill. Females killed who were mentally ill were 69 representing 31.08%. This was visualized by the help of a 100% stacked column chart.

Visualization and Analysis (by City and State)

To visualize the number of Shootings by City (top 5), the line and clustered column chart was employed. The top 5 cities with the most shootings were: Los Angeles (78), Phoenix (66), Houston (51), Las Vegas (41) and San Antonio (40).

The 5 States with the least number of shootings were: Rhode Island (4), Vermont (8), Delaware (10), North Dakota (11) and New Hampshire (12).

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