Racial Disparities in Fatal Police Shootings

DMDW Lab Seminar

Batch A

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Overview

The main goal of this project is to understand more about people who were killed by the police in the United States during the year 2015-2020. We want to figure out how and why these incidents happened. The United States has higher rates of police-involved deaths compared to similar Western countries, and we want to explore if there's a specific focus on factors like race and ethnicity in these cases.

Understanding the problem

Item 1

Unjust police shootings have sparked national outrage in the United States and have started international social movements, such as Black Lives Matter that protest against incidents of racially motivated police violence

Item 2

We also aim to look specifically at California which is the State that has the most police shootings and to see if there are any racial disparities in its victims.

Item 3

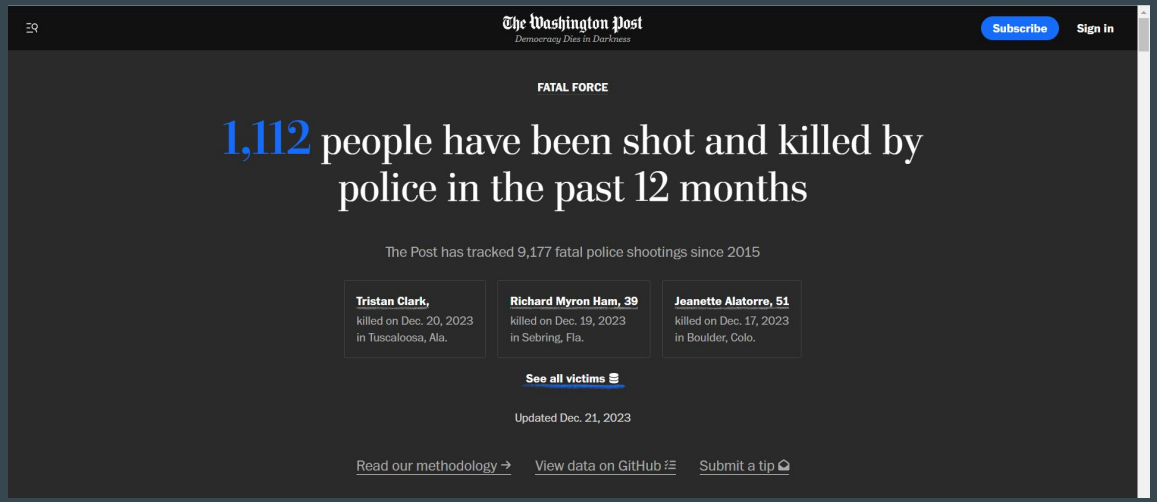
Our goal is to perform an in-depth analysis on factors. With this research, we hope to learn the specific variables that contribute to racially biased fatalities and explore potential solutions to prevent them from occurring.

Project objective:

Understanding why police-involved deaths happen is crucial for improving law enforcement practices and ensuring the safety of communities.

Understanding the Data

Our data is an up to date log of police killings in the United States from the Washington Post for the past five years. It contains general notes about the event and even information about the victim, police and station. The information comes from several different news sources, social media posts and police reports. [Official WashingtonPost Data on Github]



Understanding the Data

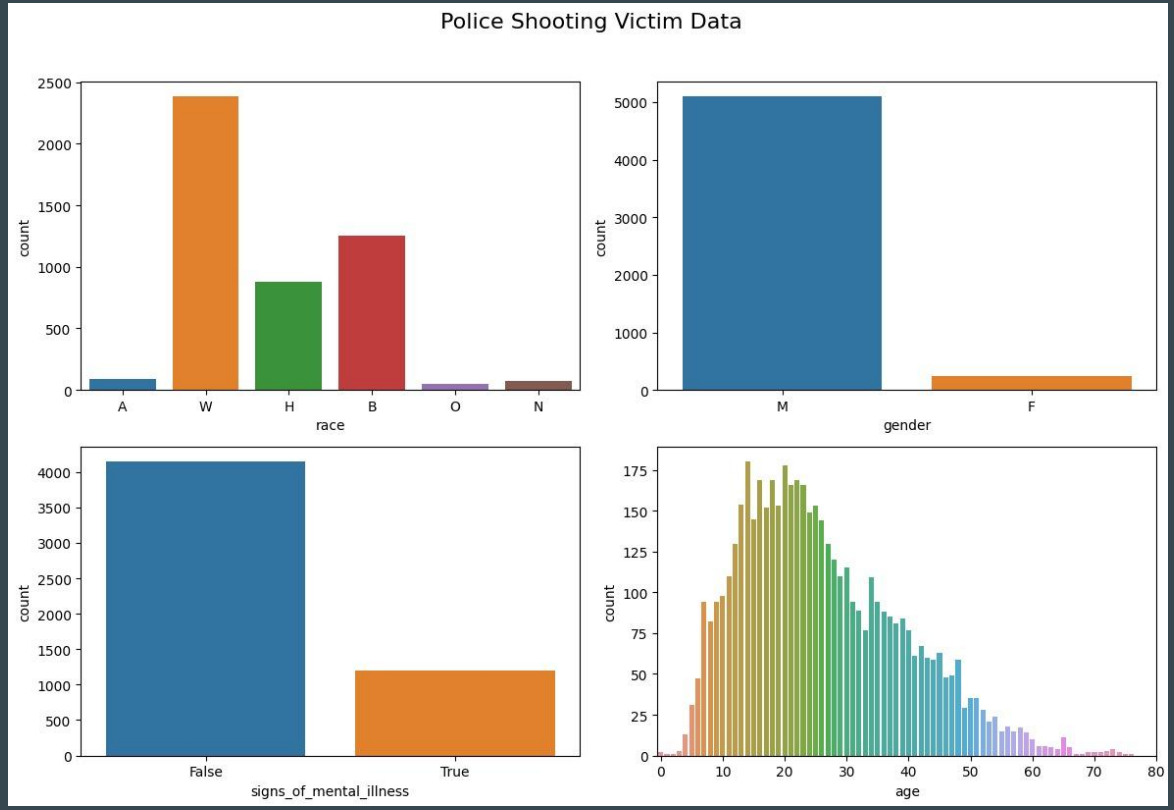
id	name	date	manner_c	armed	age	gender	race	city	state	signs_of_r	threat_lev	flee	body_cam
3	Tim Elliot	########	shot	gun	53	M	A	Shelton	WA	TRUE	attack	Not fleein	FALSE
4	Lewis Lee	########	shot	gun	47	M	W	Aloha	OR	FALSE	attack	Not fleein	FALSE
5	John Paul	########	shot and T	unarmed	23	M	H	Wichita	KS	FALSE	other	Not fleein	FALSE
8	Matthew I	########	shot	toy weapc	32	M	W	San Franci	CA	TRUE	attack	Not fleein	FALSE
9	Michael R	########	shot	nail gun	39	M	H	Evans	CO	FALSE	attack	Not fleein	FALSE
11	Kenneth J	########	shot	gun	18	M	W	Guthrie	OK	FALSE	attack	Not fleein	FALSE
13	Kenneth A	########	shot	gun	22	M	H	Chandler	AZ	FALSE	attack	Car	FALSE
15	Brock Nicl	########	shot	gun	35	M	W	Assaria	KS	FALSE	attack	Not fleein	FALSE
16	Autumn Sl	########	shot	unarmed	34	F	W	Burlington	IA	FALSE	other	Not fleein	TRUE
17	Leslie Sap	########	shot	toy weapc	47	M	B	Knoxville	PA	FALSE	attack	Not fleein	FALSE
19	Patrick We	########	shot and T	knife	25	M	W	Stockton	CA	FALSE	attack	Not fleein	FALSE
21	Ron Sneec	########	shot	gun	31	M	B	Freeport	TX	FALSE	attack	Not fleein	FALSE
22	Hashim Hi	########	shot	knife	41	M	B	Columbus	OH	TRUE	other	Not fleein	FALSE
25	Nicholas R	########	shot	gun	30	M	W	Des Moine	IA	FALSE	attack	Car	FALSE
27	Omarr Juli	########	shot	gun	37	M	B	New Orlea	LA	FALSE	attack	Foot	TRUE
29	Loren Sim	########	shot	vehicle	28	M	W	Huntley	MT	FALSE	undeterm	Not fleein	FALSE
32	James Duc	########	shot	shovel	42	M	W	Salt Lake C	UT	FALSE	attack	Not fleein	TRUE
36	Artago Da	########	shot	unarmed	36	M	B	Strong	AR	FALSE	attack	Not fleein	FALSE

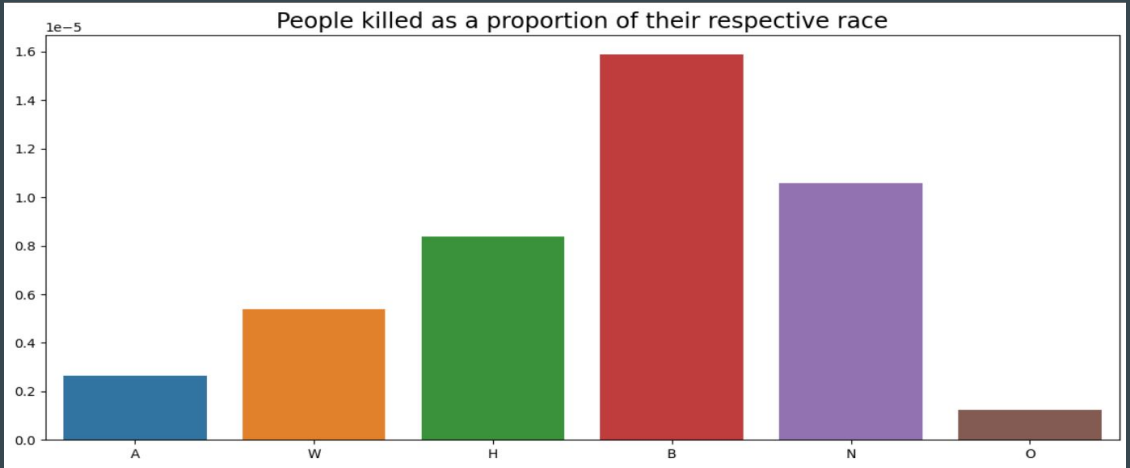
Proposed Works

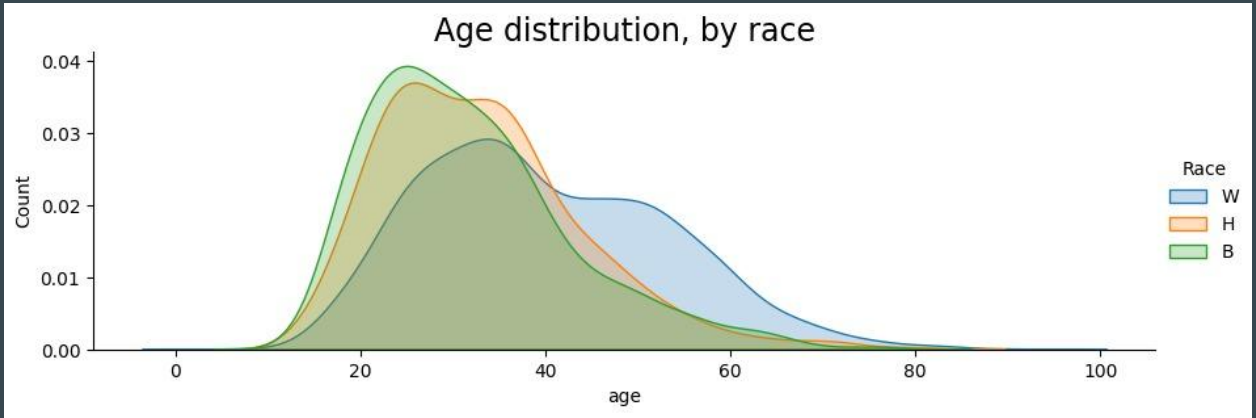
We have performed the exploratory data analysis and worked to create the following prospects

- Data modelling and analysis using python
- Understanding the data via dashboards in Tableau
- Creating awareness for stakeholders by creating a website
- Detailing a report with our relevant work

Trends we obtained




People killed as a proportion of their respective race
1e−5
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
A
W
H
B
N
O


Age distribution, by race
Count
0.04
0.03
0.02
0.01
0.00
0
20
40
60
80
100
age
Race
W
H
B

Trend Analysis

Findings

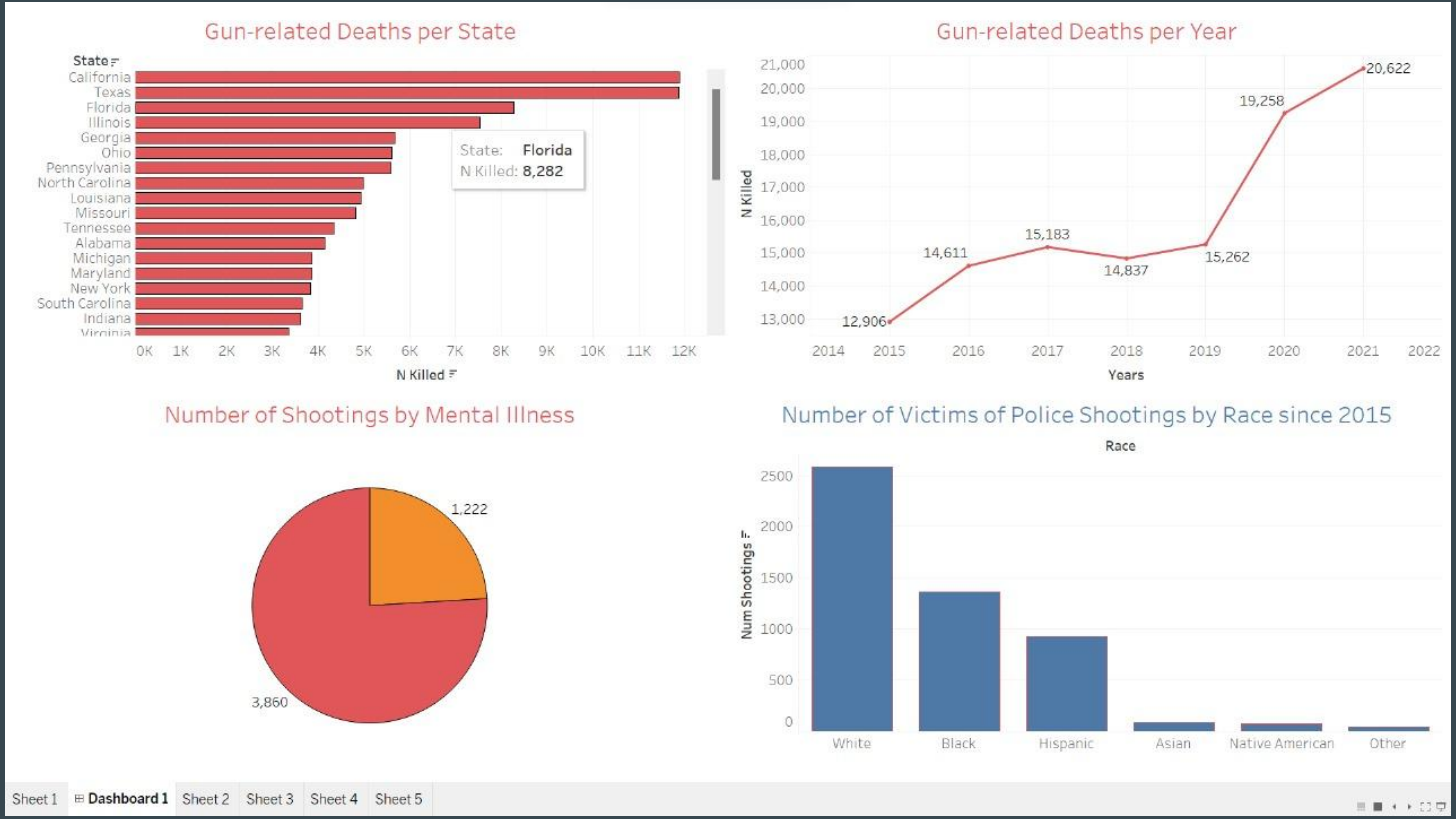
The bar charts we obtained, shows the number of victims per race as a proportion of the total US population of respective race. Earlier, when we looked at the total number of people killed, we saw that twice as many Whites were killed as Blacks. However, if you look at the numbers as the proportion of the racial population, Blacks are approximately 3 times as likely to be killed by police than Whites.

The age distribution of Blacks and Hispanics is skewed to the left, whereas the age distribution for Whites is more spread out. On average, Blacks and Hispanics are being killed at a younger age than Whites - which is consistent with the initial hypothesis that black males are subject to police killings at a young age.

Website Charts

Time Series Chart	• Mini 'brush' chart shows the context of the data in focus in the main chart. • Text at top changes to indicate the range of data in focus.
Categorical Donut Chart	• Filter in order to see the distribution of each category. • Choose dates range from the date picker.
Categorical Bar Chart	• Filter in order to see the distribution of each category • Hover the mouse over the bars to view the relevant data in a tooltip
Dynamic Pie Chart	• Presents bar chart of the pie percentage hovered over • Hover the mouse over to the pie to dynamically change the bar chart

Tableau Dashboard



The Team

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