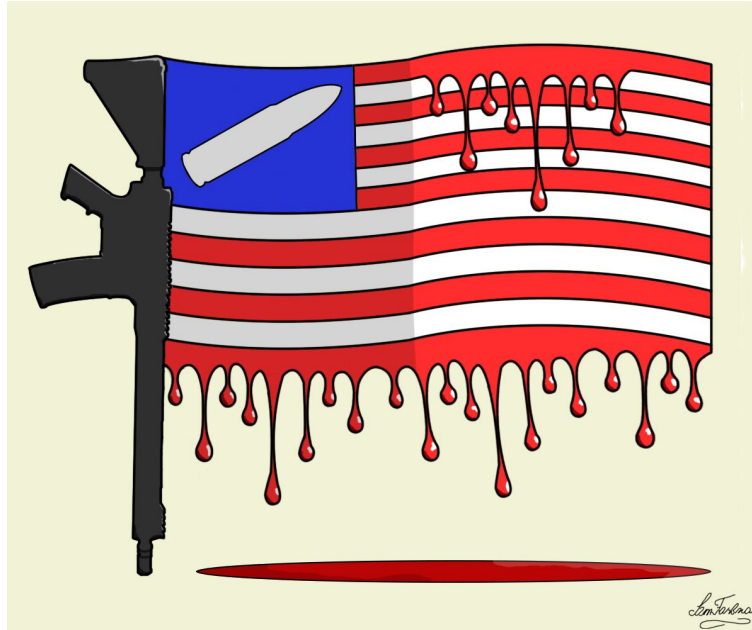


Mass Shootings in the USA



Shreya Khettry & Ariel Fine

**The US ranks 1st in Civilian
Weapon Ownership per capita (120.5
per 100) GLOBALLY...**

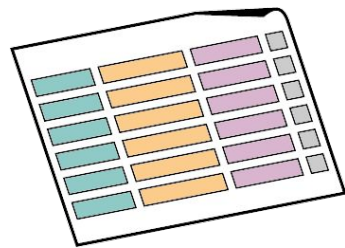
**The next closest nation is the Falkland
Islands, with NEARLY HALF that
amount (62.1)**

Mass Shootings in the media

- Second amendment right to bear arms has led to social/political debate
- Gun violence is present in mainstream media almost daily
- Homicides, gang violence, school shootings, etc. are all examples of common media content and news coverage
- Different definitions of “mass shootings” lead to vastly different headlines
- Claims of “Hundreds and Hundreds of mass shootings” annually



Our Dataset



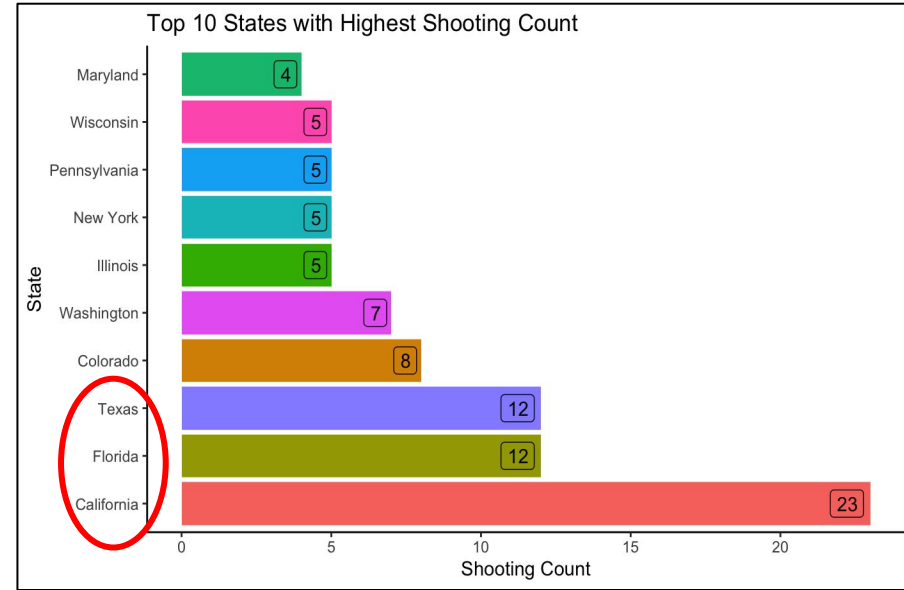
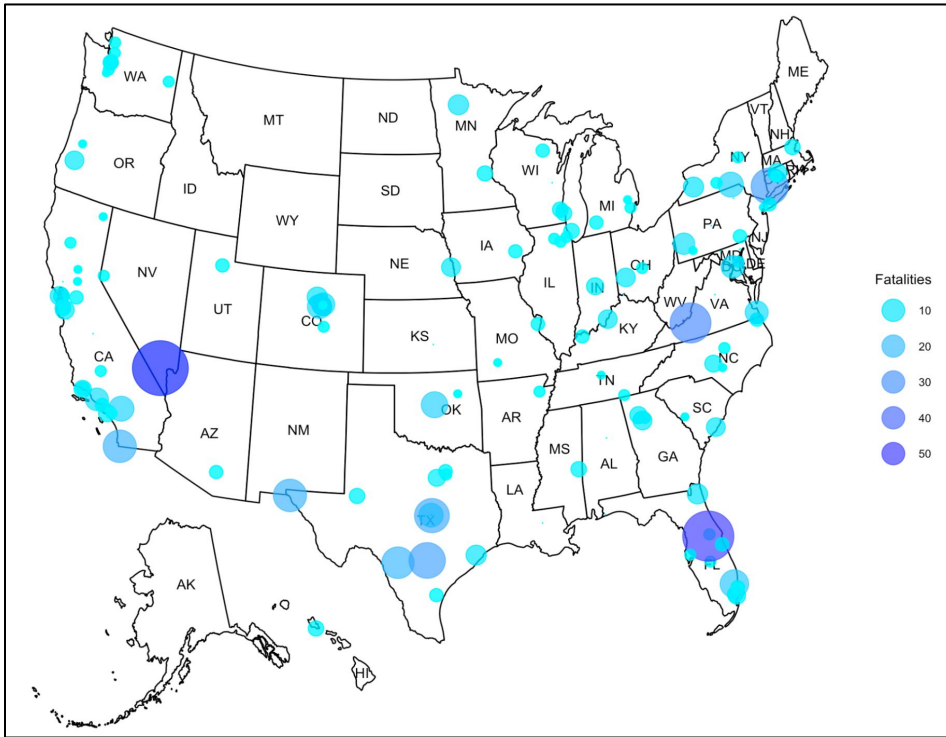
- *Mother Jones Magazine* journalists and researchers have updated their own mass shooting database
- Ranging from 1982 to present day (updated 11/22/22)
- 137 total observations across 25 different variables
- **It does NOT outline ALL instances of gun violence or mass shootings**
- Follows the federal mass shooting definition set by a **minimum of 3 fatalities** other than the perpetrator

Study Questions / Aims of the Study

- 1) What clear trends exist regarding populations susceptible to gun violence perpetration? (Race, Gender, Age)
- 2) Are mass shootings related to prior mental health concerns?
- 3) What types of weapons are involved in mass shootings (legality, type, etc.)?
- 4) What is the ongoing political legislature targeting to mitigate the impacts of gun violence? Does our data support it?

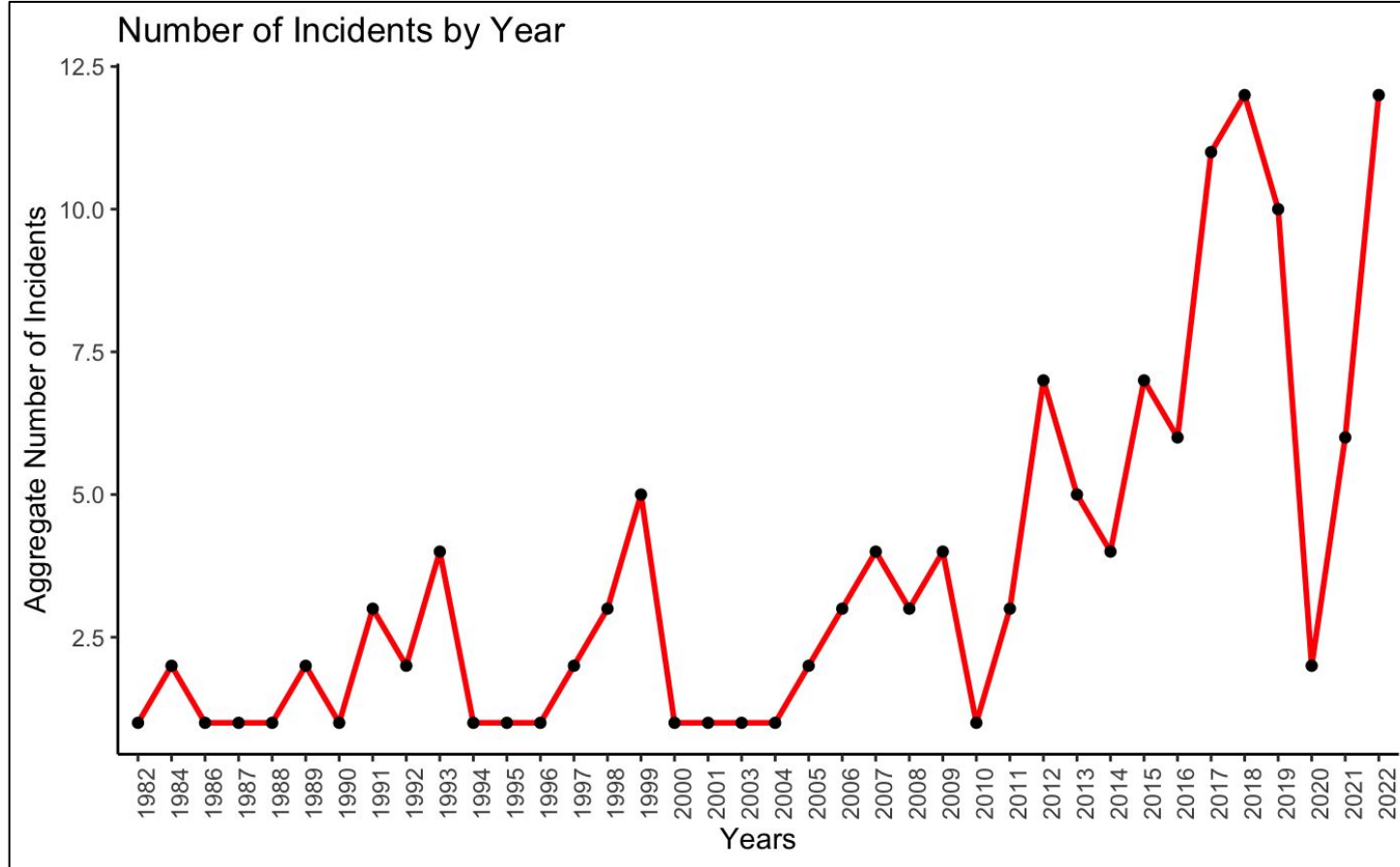


Demographics



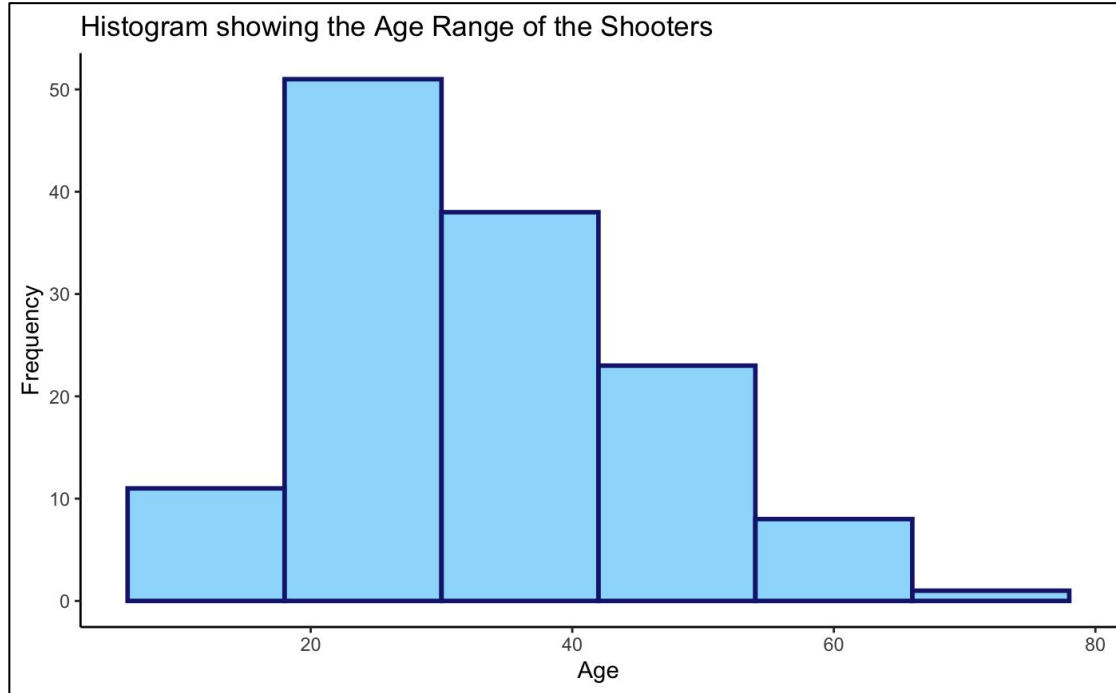
- US Map displaying the locations of where the shootings took place.
- Size of circles and darker color relative to the fatality count of the shooting ie. the larger and darker shade the circle is, the higher the fatality count is.
- The flipped bar chart displays the top 10 states with the highest number of mass shootings

Demographics cont.



- Over the years there has been an overall increasing trend.
- The dip in 2020 could be due to Covid 19.
- 2022 hasn't ended and could potentially record the highest incident count

Demographics cont.



Mean age: 33

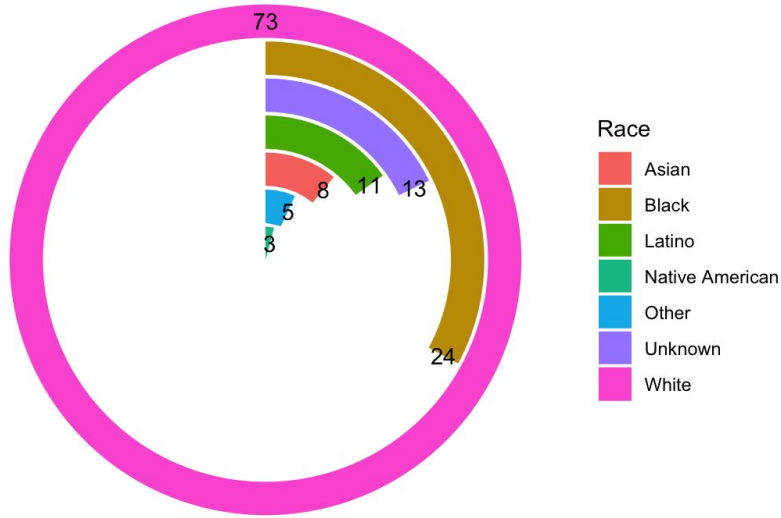
Min Age: 11

Max Age: 70

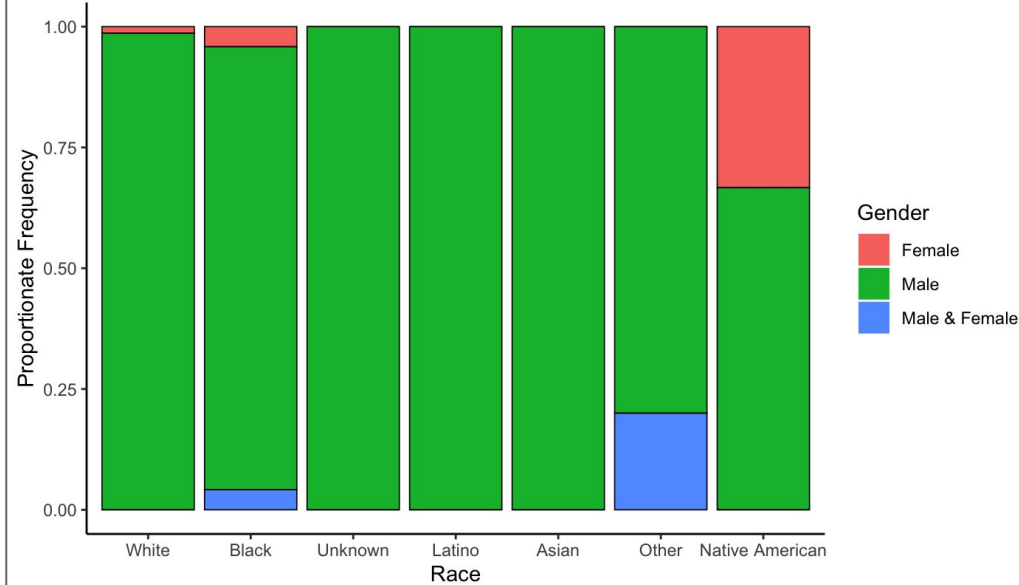
- The age distribution shows us that most shooters are within the ages of 20 to 40.
- Summary statistics show us the mean age of the shooters, the youngest shooter and the oldest shooter

Demographics cont.

Race of the Shooters in Relative Proportion to each other

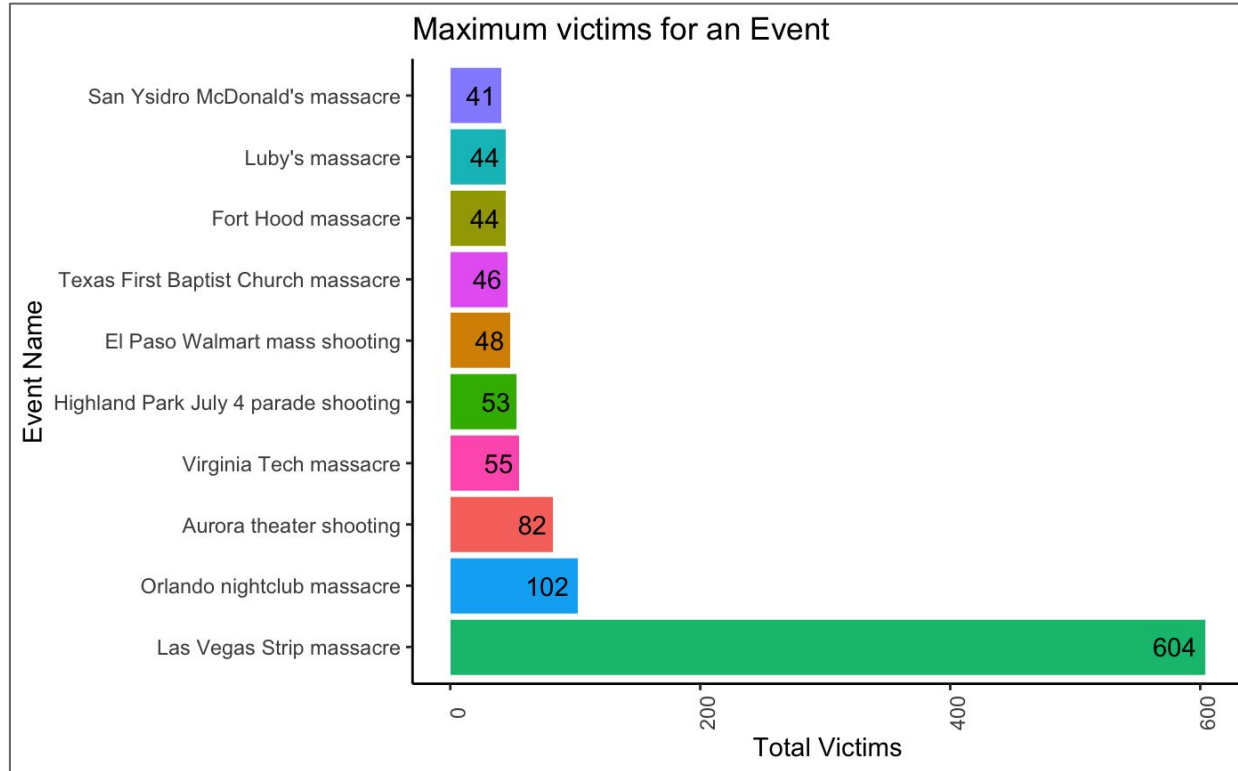


Relation between Race and Gender



- Whites are responsible for the majority of mass shootings, Blacks come up to almost one-third of that Whites.
- Males are responsible for majority of the shootings.
- Therefore White Males are the majority Perpetrators.

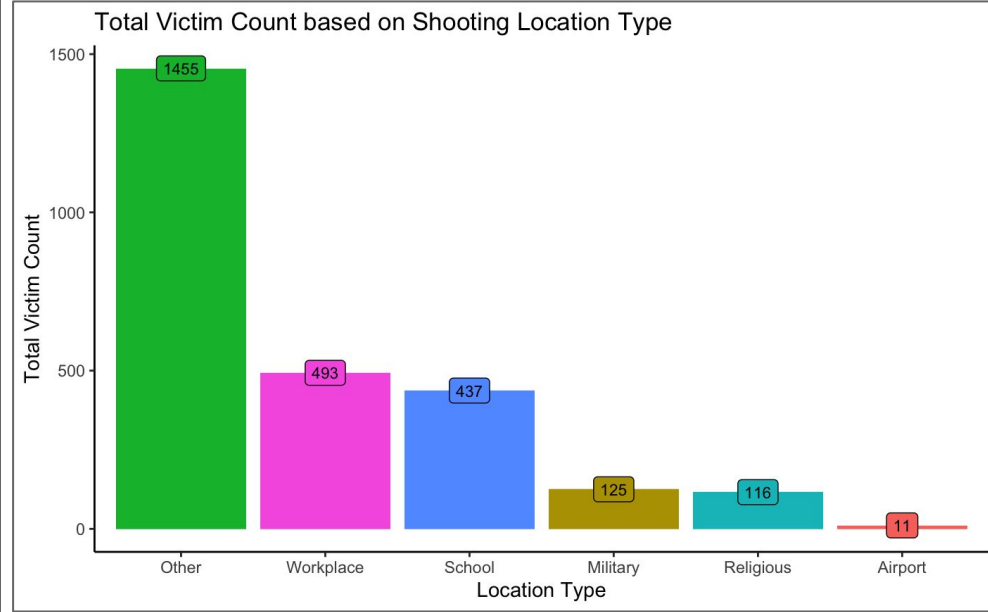
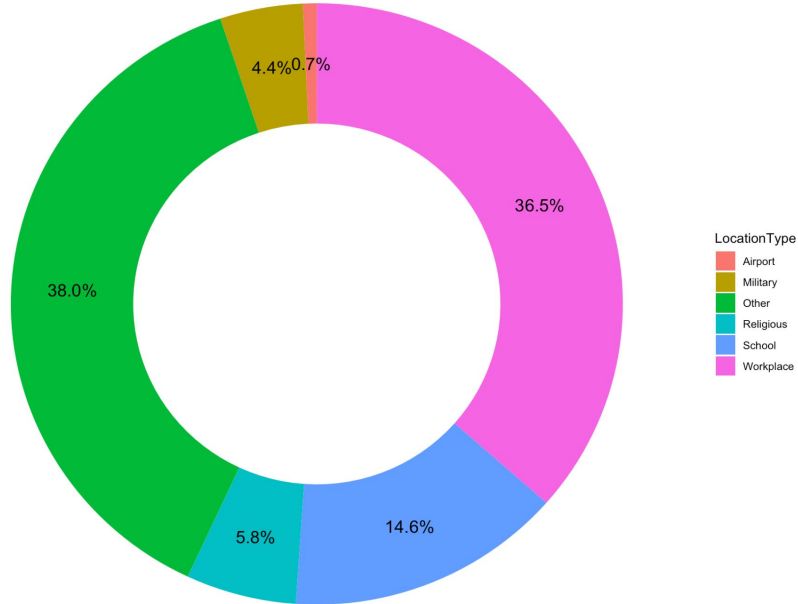
Shootings and Victims



- Shows us that the maximum victims were for the Las Vegas Massacre, the highest ever in the history, with almost 6 times more victims than the second worst shooting.

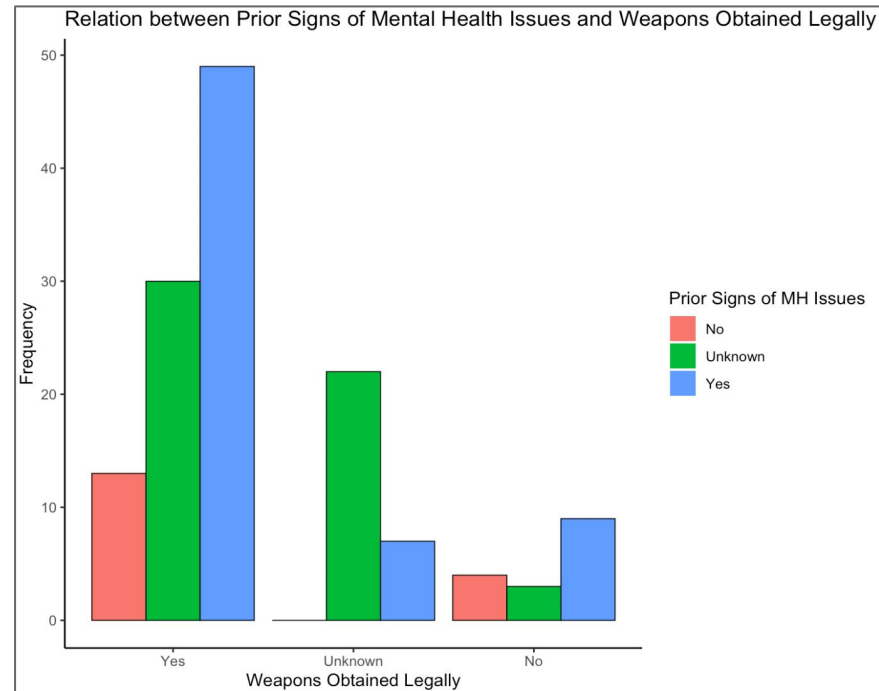
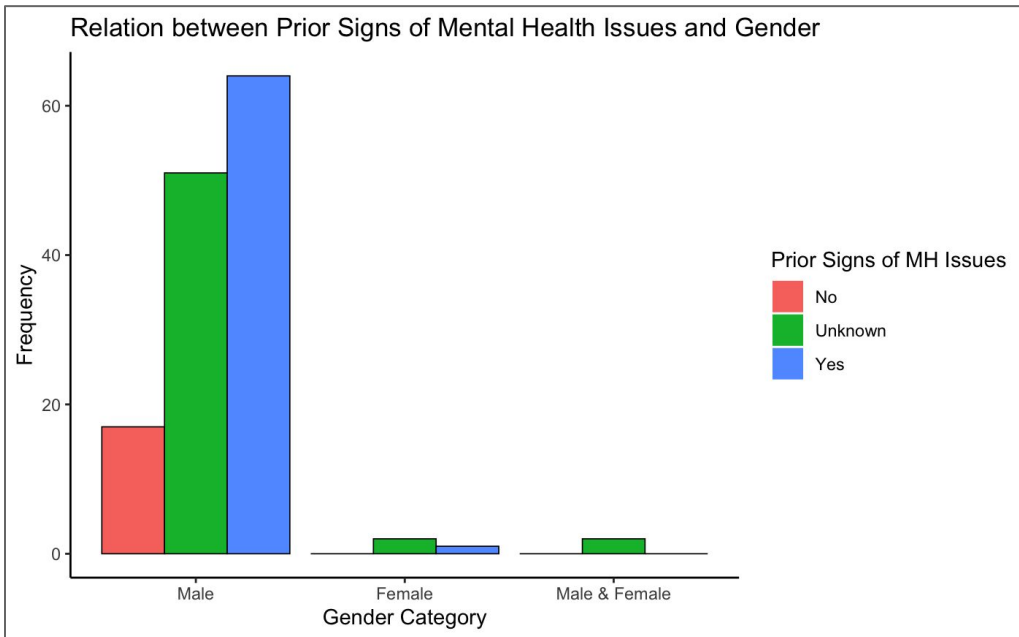
Victims and Locations

Distribution of Shooting Location Types



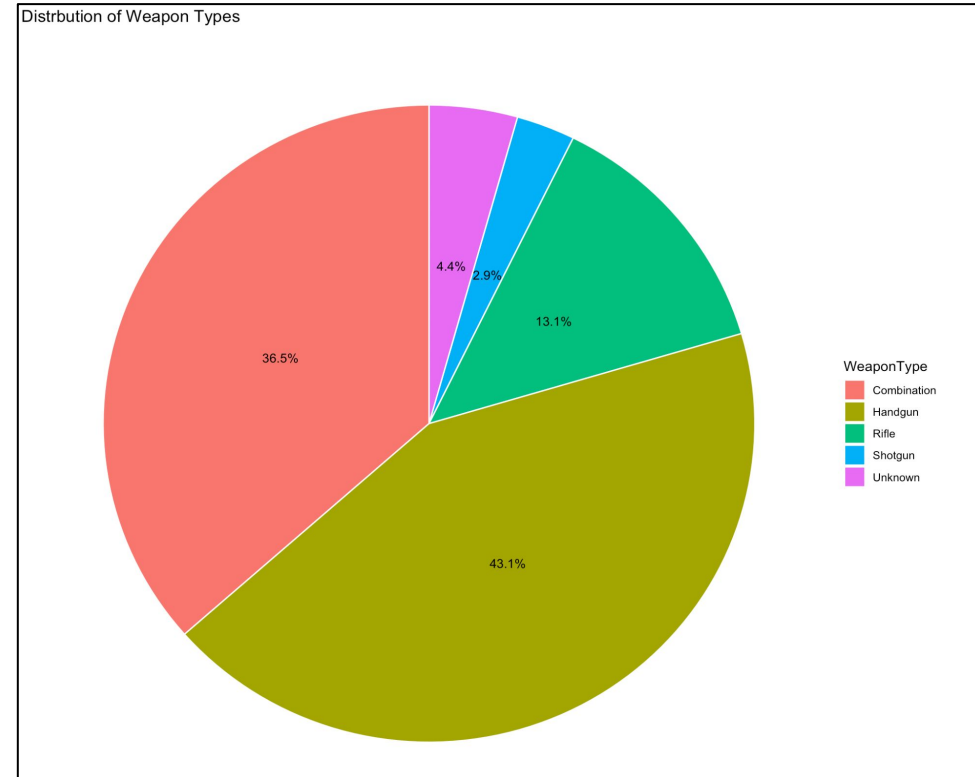
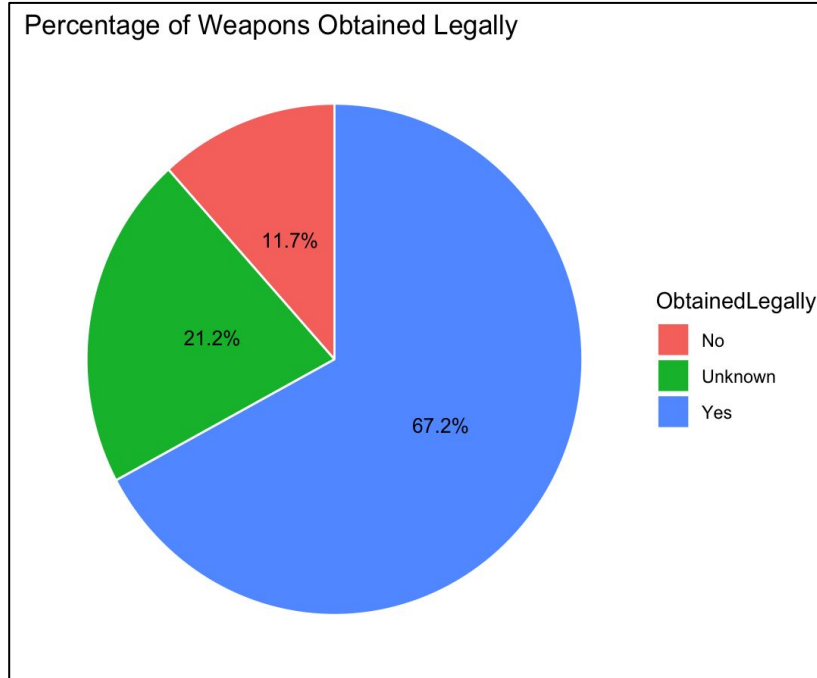
- The Donut Chart shows that there is no specific category for location type and shootings could happen anywhere, however Workplace and Schools have a high probability.
- Reaffirmed by the bar chart showing the total number of victims based on the location type.

Mental Health



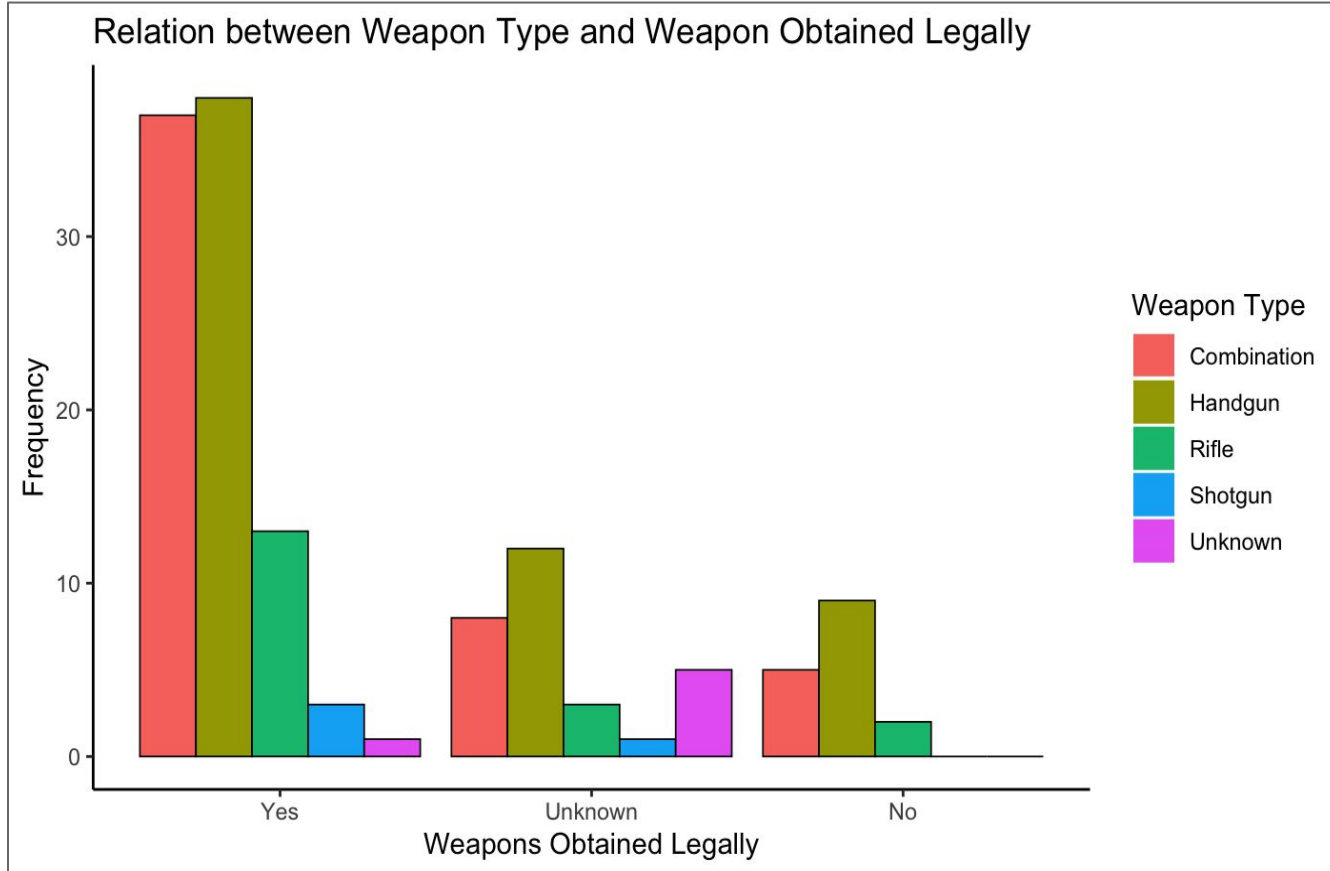
- Most Male perpetrators have known to display signs of mental health issues. Cannot be sure about females since there is not much data for it.
- Most shooters who have known to display signs of mental health issues have obtained their weapons legally, shows us how impactful the second amendment is and is a potential underlying cause for gun violence

Weapons Breakdown



- More than half of the weapons are obtained legally and for about 21% we do not know for sure.
- Majority of the weapons are handguns or a Combination (two or more different types)

Weapons Breakdown



- Majority of the weapons are obtained legally.
- Majority of the weapons used are Handguns and Combination (two or more different types)

Key Takeaways

While the data does not encapsulate all instances of “mass shootings” and gun violence...

Key trends remain consistent:

- Middle-age adults
- Prior mental health concerns
- Significantly vast majority White Males
- The Weapons are mostly obtained legally
- Handguns account for a vast majority of occurrences
- California, Texas, and Florida have had the most incidents



What is being done to stop mass shootings?

Legislature

- Debate over mental health vs. gun control approach:
 - Activists argue increased gun control won't infringe on the right to bear arms
 - Others claim it will... emphasis should be on mental health awareness
- A data driven answer to the question:
 - Increased age requirements
 - Restriction on legal distribution as opposed to black market crackdown
 - Restriction on handguns and assault weapons alike
 - Stricter background checks and mental health screening
- Where are we today? (Depends on where you are!)
 - Many states are working towards assault weapon bans and harsher screening
 - Court ordered seizure of weapons from potentially dangerous individuals
 - On the other hand, certain states allowing concealed carry license (NY)
 - Increased weapon presence in civilian areas
 - Particularly handguns....





THANK YOU