

Exploratory Data Analysis

Nancy Martinez Perez

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```
library(readxl)
police<-read_excel("/Users/nancy/OneDrive/Documents/math130/data/fatal-police-shootings-data.xlsx", sheet="police")
head(police)
```

```
## # A tibble: 6 x 14
##   id name date manner_of_death armed age gender race city
##   <dbl> <chr> <dtm> <chr> <chr> <dbl> <chr> <chr> <chr>
## 1 3 Tim ~ 2015-01-02 00:00:00 shot gun 53 M A Shel~
## 2 4 Lewi~ 2015-01-02 00:00:00 shot gun 47 M W Aloha
## 3 5 John~ 2015-01-03 00:00:00 shot and Taser~ unar~ 23 M H Wich~
## 4 8 Matt~ 2015-01-04 00:00:00 shot toy ~ 32 M W San ~
## 5 9 Mich~ 2015-01-04 00:00:00 shot nail~ 39 M H Evans
## 6 11 Kenn~ 2015-01-04 00:00:00 shot gun 18 M W Guth~
## # ... with 5 more variables: state <chr>, signs_of_mental_illness <lgl>,
## # threat_level <chr>, flee <chr>, body_camera <lgl>
```

Introduction Police Shootings

I am going to observe the data in Police Shootings in the year 2015, gather by the Washington Post. I will be looking at the relationship between gender and the manner of death. I want to know if gender has any involvement with the way of death. I know inequality is a huge problem and we almost see it everywhere and I want to see if gender is a problem through this data.

```
police <- read_excel("/Users/nancy/OneDrive/Documents/math130/data/fatal-police-shootings-data.xlsx", sheet="police")
```

Univariate Exploration

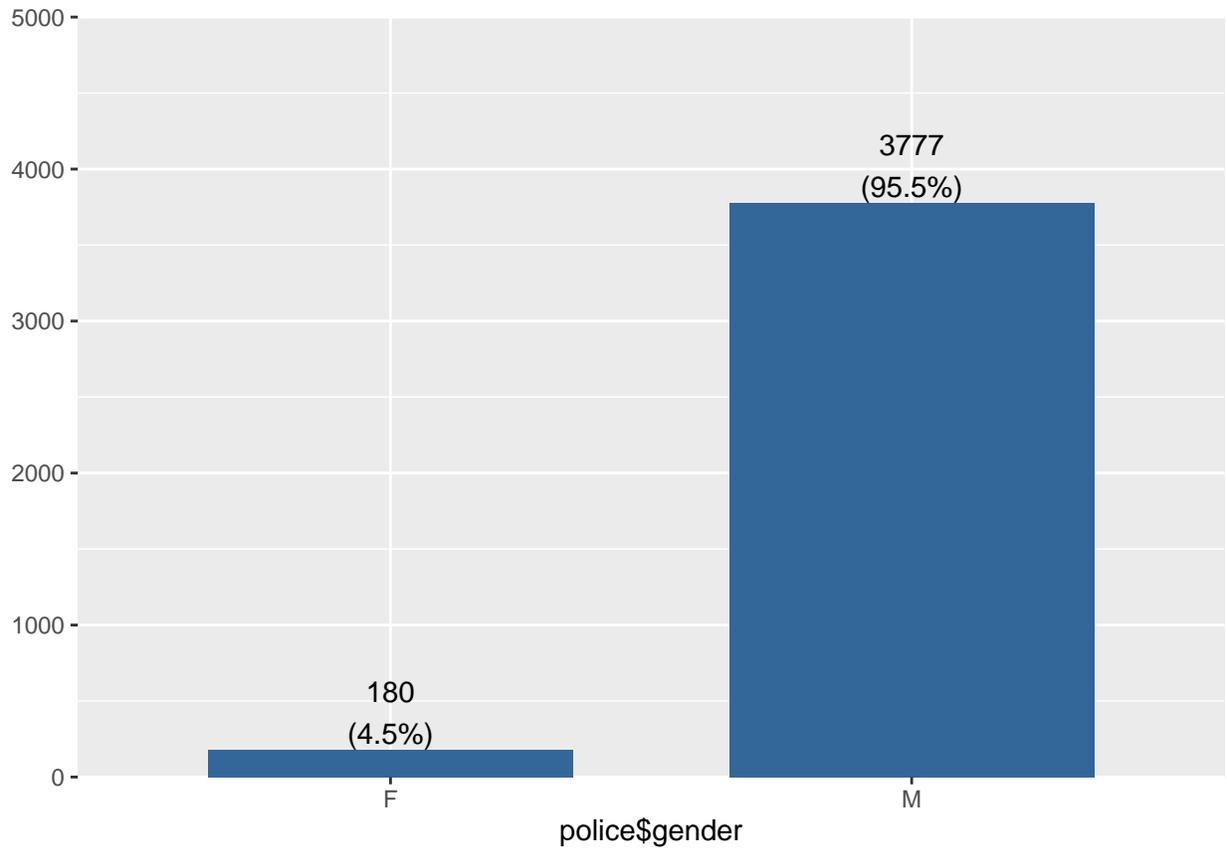
We can see that there are more male than female police officers. The percentage of female police officers is 4.5% and for males is 95.5%. We can see that there are barely any women who are police officers. We can also see the police officers were mostly shot and there were a few of them that got shot and tasered.

```
relationship<-table(police$gender, police$manner_of_death)
relationship
```

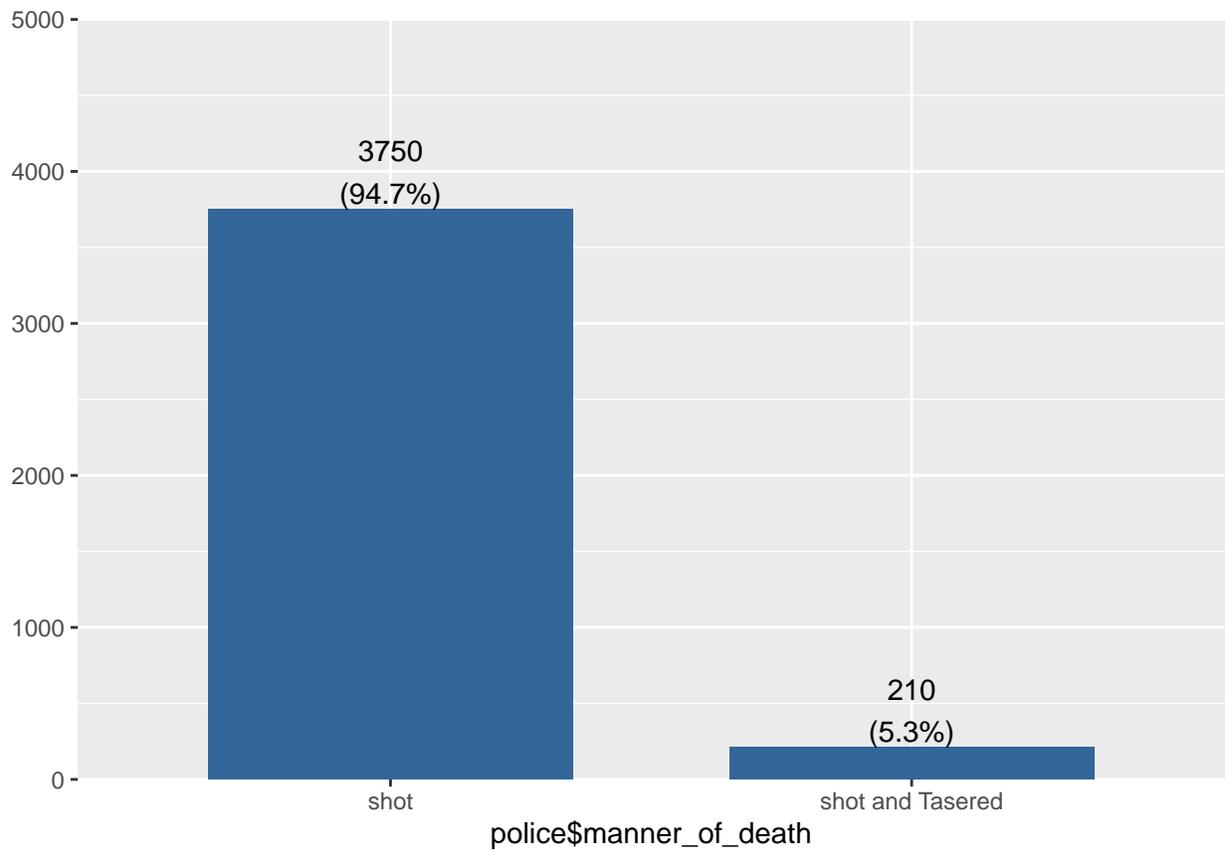
```
##
##   shot shot and Tasered
## F 174 6
## M 3573 204
```

```
library(sjPlot)
```

```
plot_frq(police$gender)
```



```
plot_frq(police$manner_of_death)
```

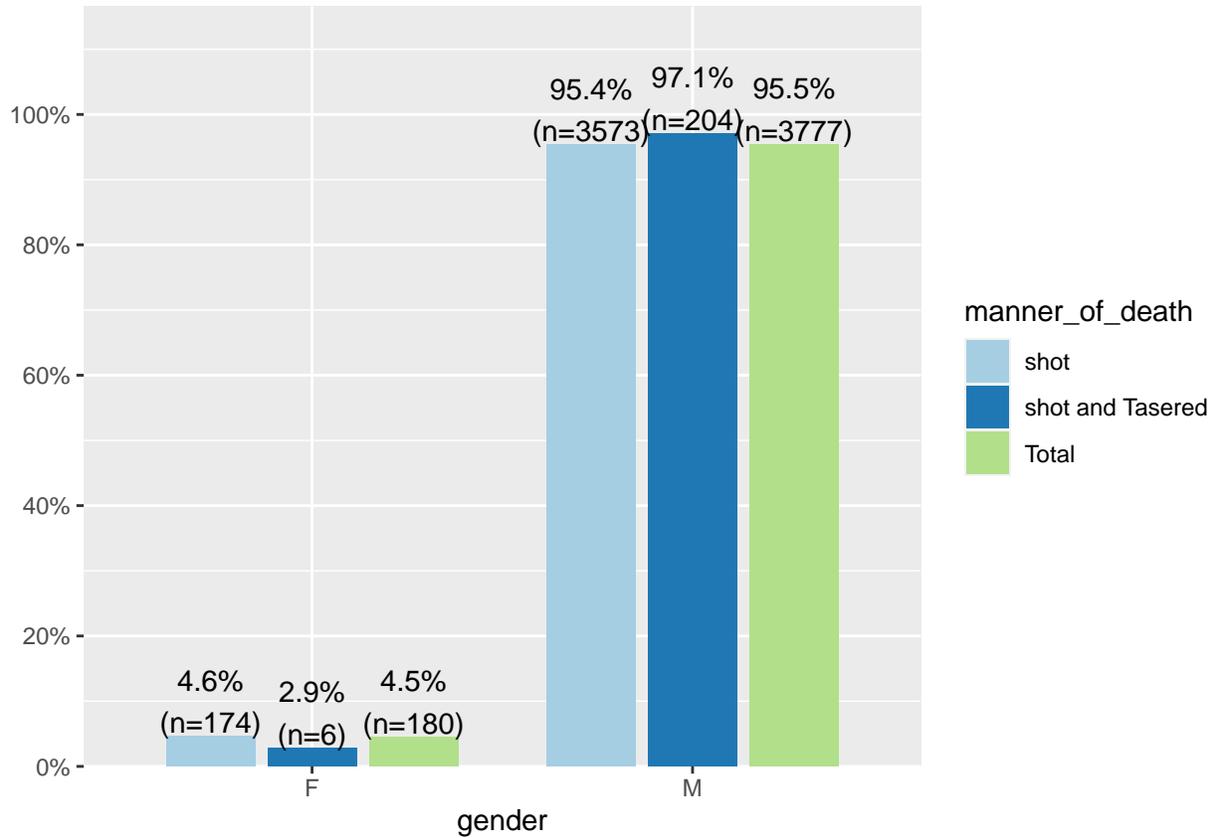


Bivariate Exploration

```
washpost <- read_excel("/Users/nancy/OneDrive/Documents/math130/data/fatal-police-shootings-data.xlsx")  
dim(washpost)
```

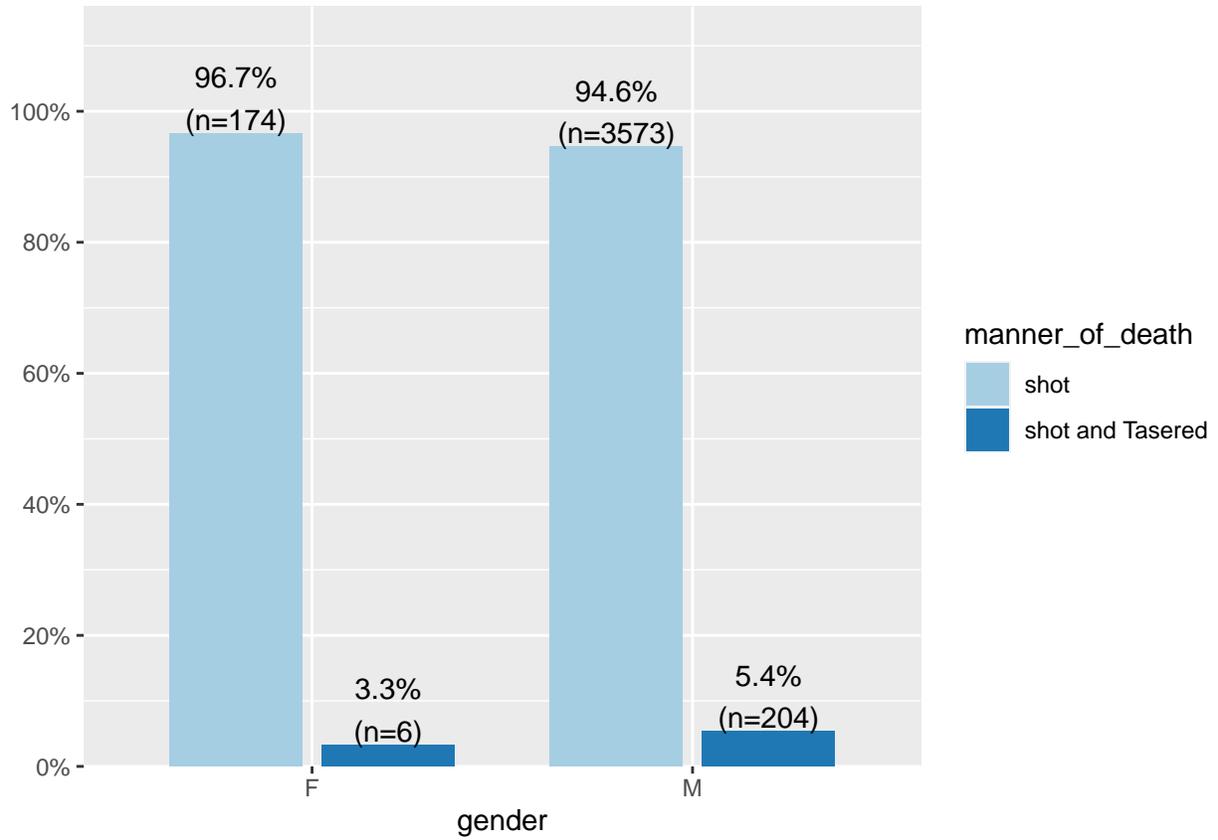
```
## [1] 3960 14
```

```
plot_xtab(police$gender, police$manner_of_death)
```



We can compare see the total number of deaths, total number of deaths from being shot, and total number of deaths from being shot and tased. We can also clearly see that more male victims were killed by a police officer compared to female.

```
plot_xtab(police$gender, police$manner_of_death, margin='row', show.total = FALSE)
```

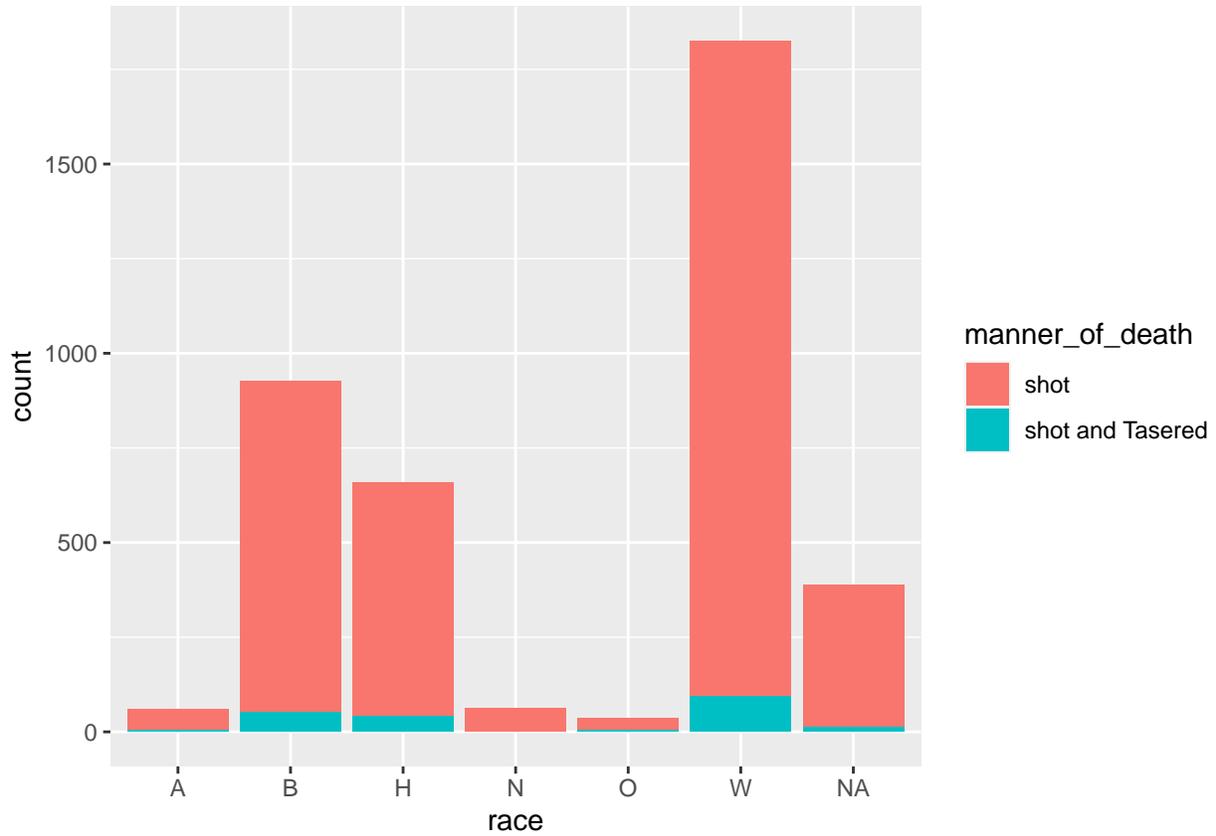


cdscf

```
table(police$race)
```

```
##
##   A   B   H   N   O   W
##  61  927  659  62  37 1825
```

```
library(ggplot2)
ggplot(police, aes(x=race, fill=manner_of_death)) + geom_bar()
```



I also looked at the relationship between the manner of death and race. Looking at the bar chart, I was able to see that there were a more than half of victims that were shot and killed by a white police officer compared to an African American.

Conclusion

My hypothesis was that there were going to be more African Americans getting killed by a white police officer since there has been many protests. It has happed way to long and its unfair, the family of the victims want justice, and this study proves that justice should be done.