

Project notepad

For the project

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Packages

```
library(tidyverse)
library(tidymodels)
library(knitr)
```

Load data

```
abortion_data <- read_csv("data/wvs-usa-abortion-attitudes-data.csv")
```

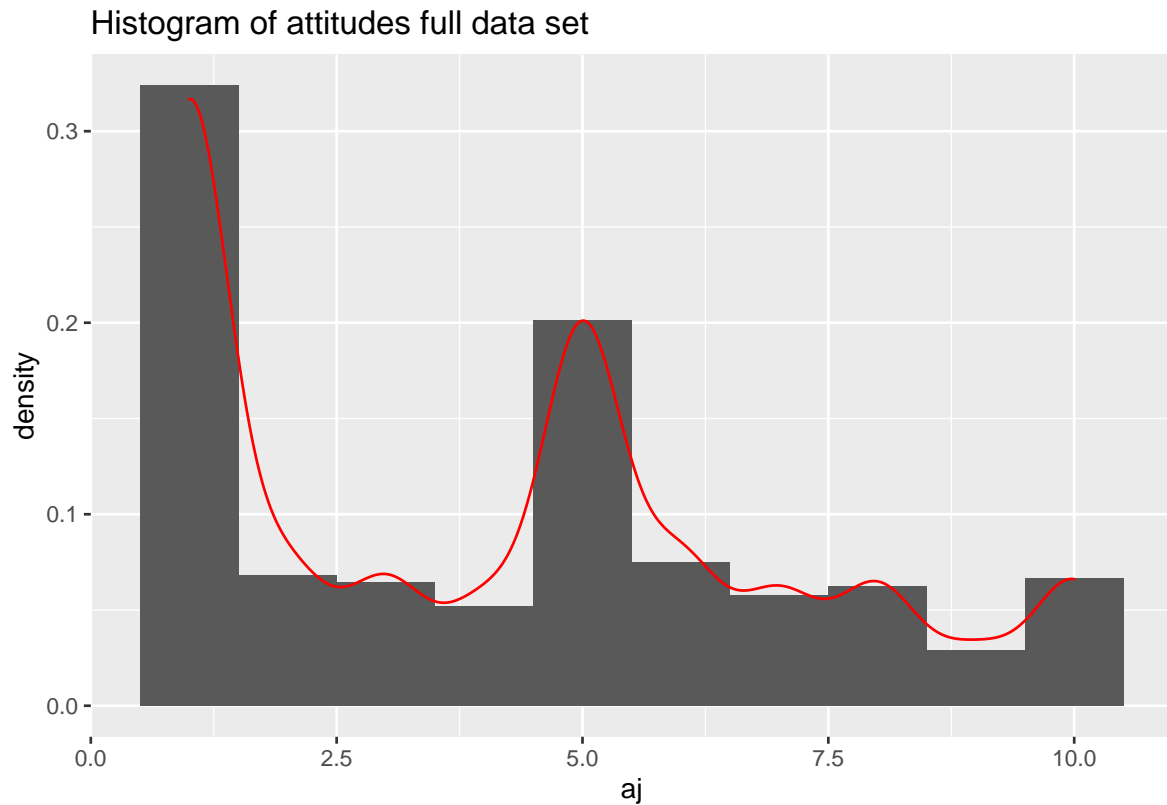
Exploratory Data Analysis

Visualization and summary statistics for the response variable

```
ggplot(abortion_data, aes(x = aj)) +
  geom_histogram(binwidth = 1, aes(y=..density..)) +
  geom_density(color = "red") +
  labs(title = "Histogram of attitudes full data set")
```

Warning: Removed 299 rows containing non-finite values (stat_bin).

Warning: Removed 299 rows containing non-finite values (stat_density).



```
summary(abortion_data$aj)
```

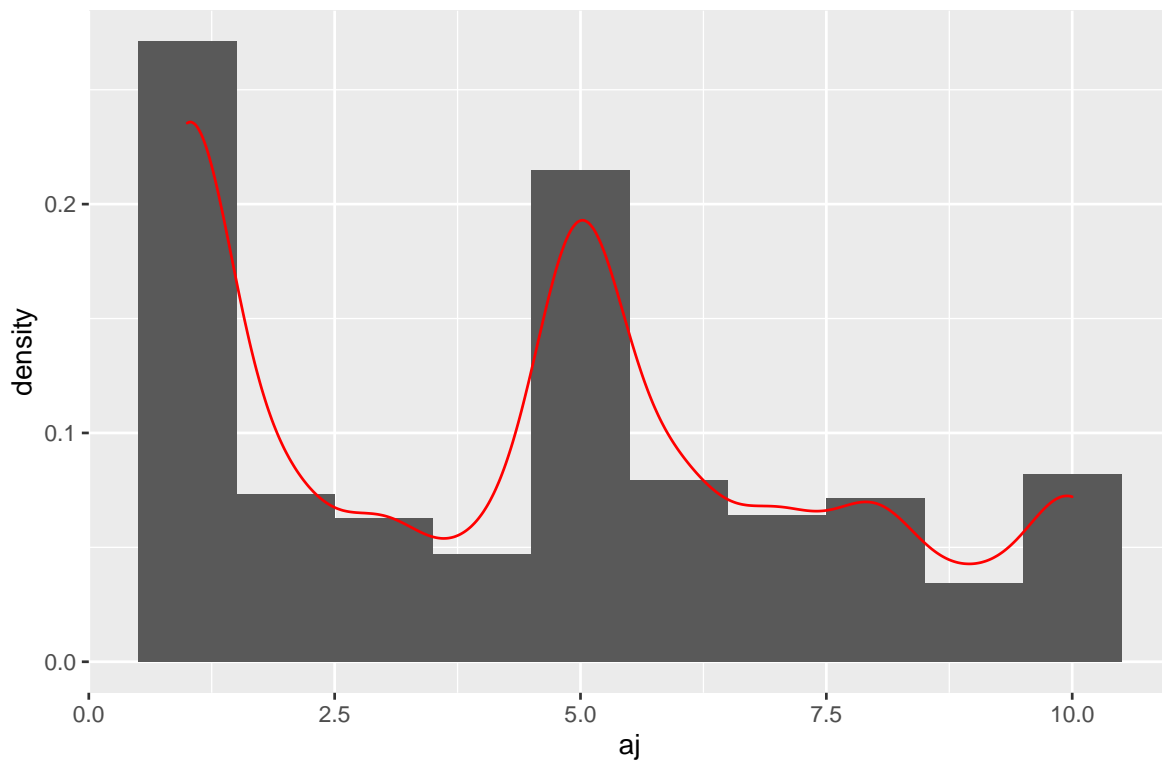
Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
1.000	1.000	4.000	4.147	6.000	10.000	299

EDA on how to populate “ideology”

We will run all EDA on the set of responses that include ideology values and separately on the set of responses that do not in order to inform how we should populate those values.

```
all_complete <- abortion_data[complete.cases(abortion_data),]  
  
ggplot(all_complete, aes(x = aj)) +  
  geom_histogram(binwidth = 1, aes(y=..density..)) +  
  geom_density(color = "red") +  
  labs(title = "Histogram of attitudes only complete entries data set")
```

Histogram of attitudes only complete entries data set



```
summary(all_complete$aj)
```

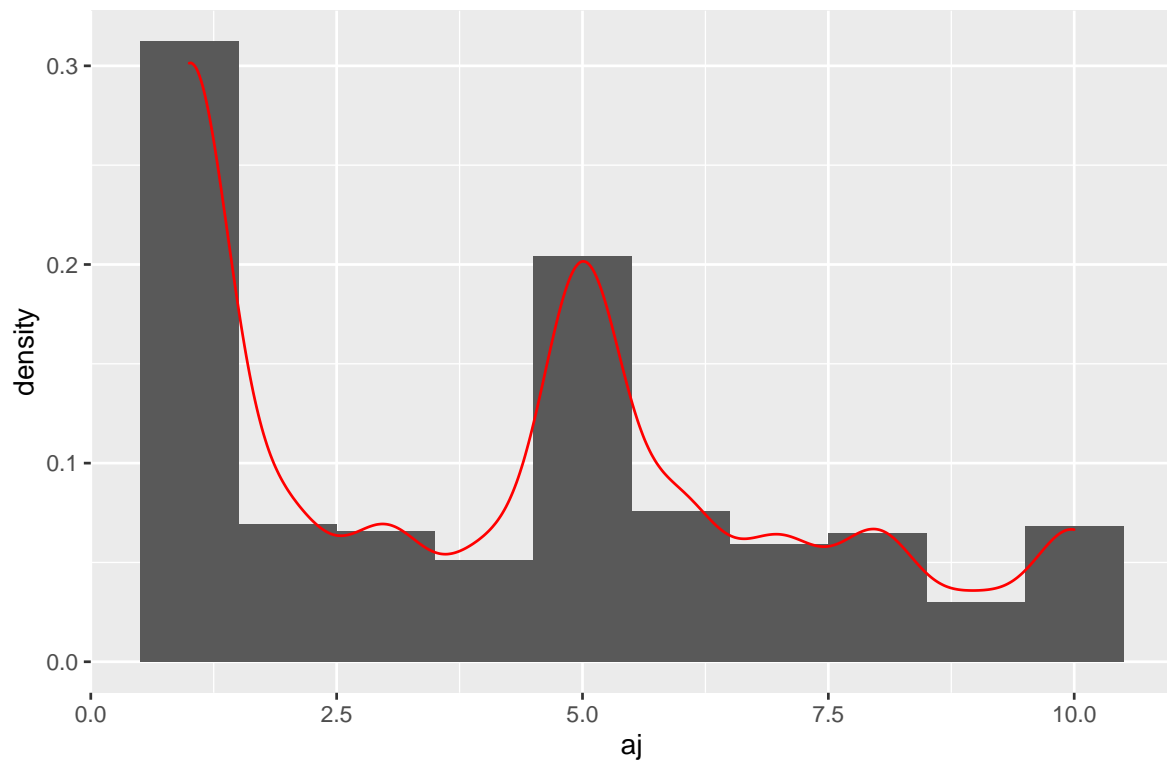
Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
1.000	1.000	5.000	4.492	7.000	10.000

```
no_ideology <- abortion_data[!(abortion_data$ideology==""),]  
  
ggplot(no_ideology, aes(x = aj)) +  
  geom_histogram(binwidth = 1, aes(y=..density..))+  
  geom_density(color = "red") +  
  labs(title = "Histogram of attitudes excluding ideology=NA data set")
```

Warning: Removed 1010 rows containing non-finite values (stat_bin).

Warning: Removed 1010 rows containing non-finite values (stat_density).

Histogram of attitudes excluding ideology=NA data set



```
summary(no_ideology$aj)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
1.00	1.00	5.00	4.21	6.00	10.00	1010

List of variables that will be considered as predictors

To discuss as group

Run MLR on some variables

Just to show a preview of our analysis