Data Analysis

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R Markdown

Breaking data down by party and gender

```r
library(haven)
anti_a <- read_dta("data/anti_abort replication leg_party_compet 28Jan20.dta")

# Subsets of the data potentially for future use
women <- subset(anti_a, Female == 1)
men <- subset(anti_a, Female == 0)
republicans <- subset(anti_a, party == "R")
democrats <- subset(anti_a, party == "D")

# ideology scale summary
summary(anti_a$np_score_2)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   0.000   2.745   3.679   3.529   4.245   7.259
```

```r
# population proportions of party and gender
table(anti_a$Female, anti_a$party)
```

```
##
##        D    I    R   WI
##   0 2699   16 3021    1
##   1 1062    2  685    0
```

```r
prop.table(table(anti_a$Female, anti_a$party))
```

```
##
##              D            I            R           WI
##   0 0.3605396741 0.0021373230 0.4035532995 0.0001335827
##   1 0.1418648143 0.0002671654 0.0915041411 0.0000000000
```

```r
# setting types within gender party so I can use this later
anti_a$gender_party <- NA
anti_a$gender_party[anti_a$Female == 1 & anti_a$party == "D"] <- "Dem. Woman"
anti_a$gender_party[anti_a$Female == 1 & anti_a$party == "R"] <- "Rep. Woman"
anti_a$gender_party[anti_a$Female == 0 & anti_a$party == "D"] <- "Dem. Man"
anti_a$gender_party[anti_a$Female == 0 & anti_a$party == "R"] <- "Rep. Man"
```
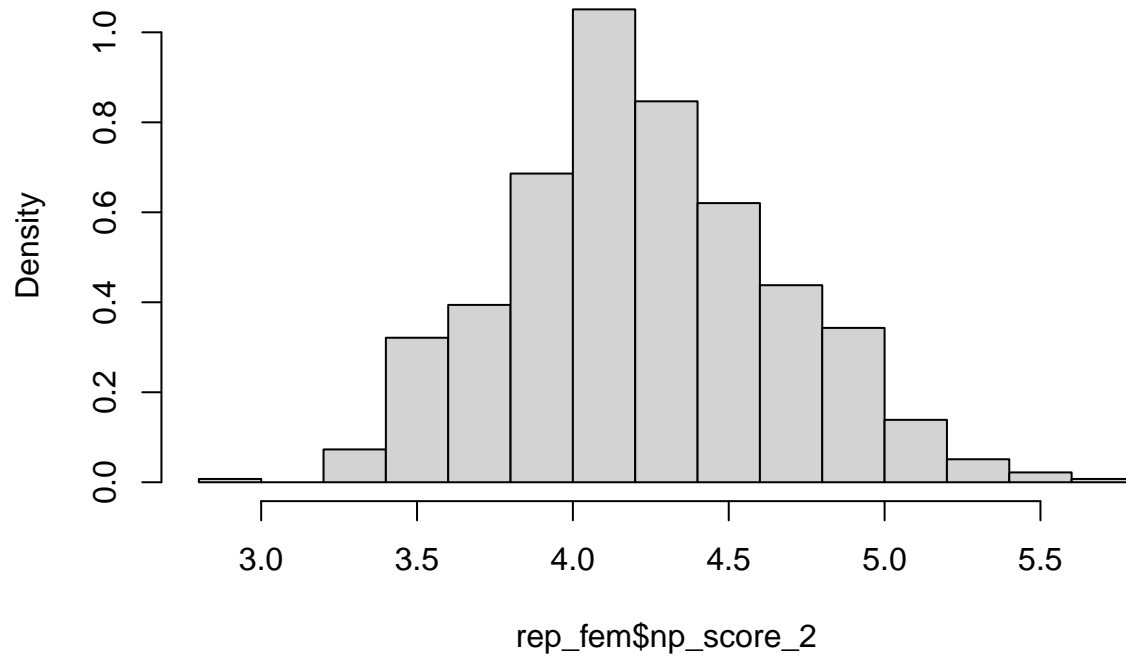
Plots

```
##
## Call:
## lm(formula = anti_a$Female ~ anti_a$bin_anti_fetus)
##
## Coefficients:
##          (Intercept)  anti_a$bin_anti_fetus
##              0.23350                0.01036
```
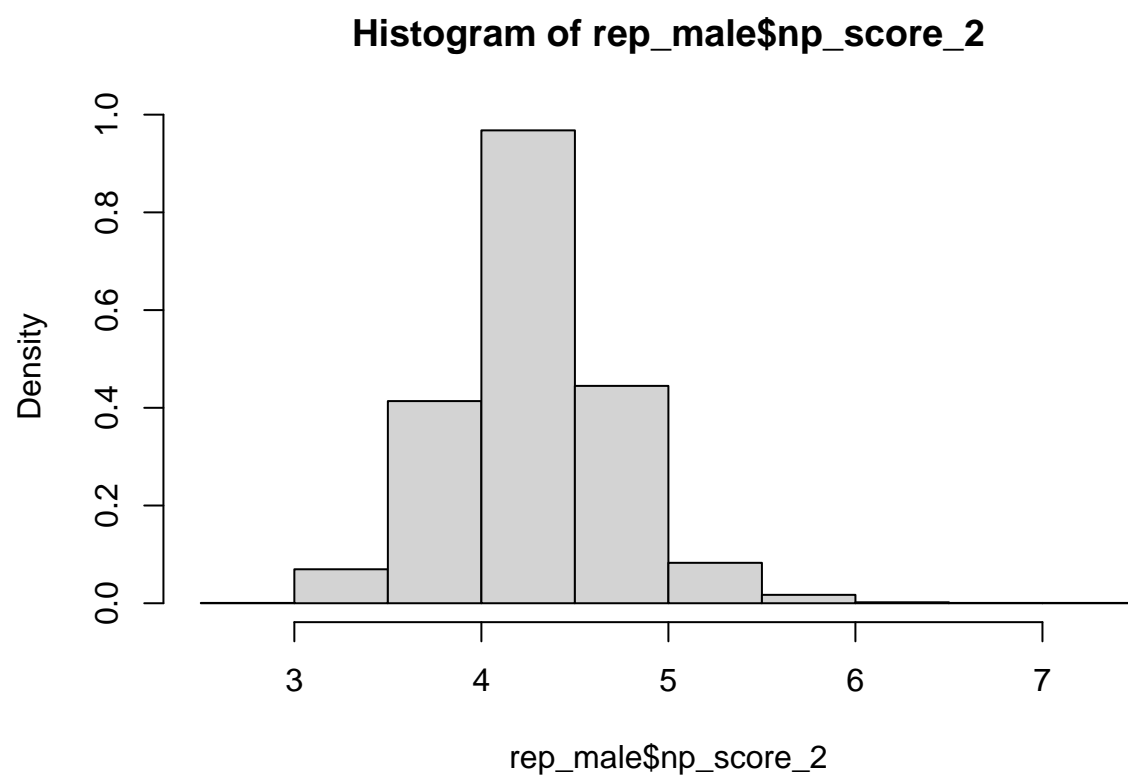
Histogram of dem_fem$np_score_2
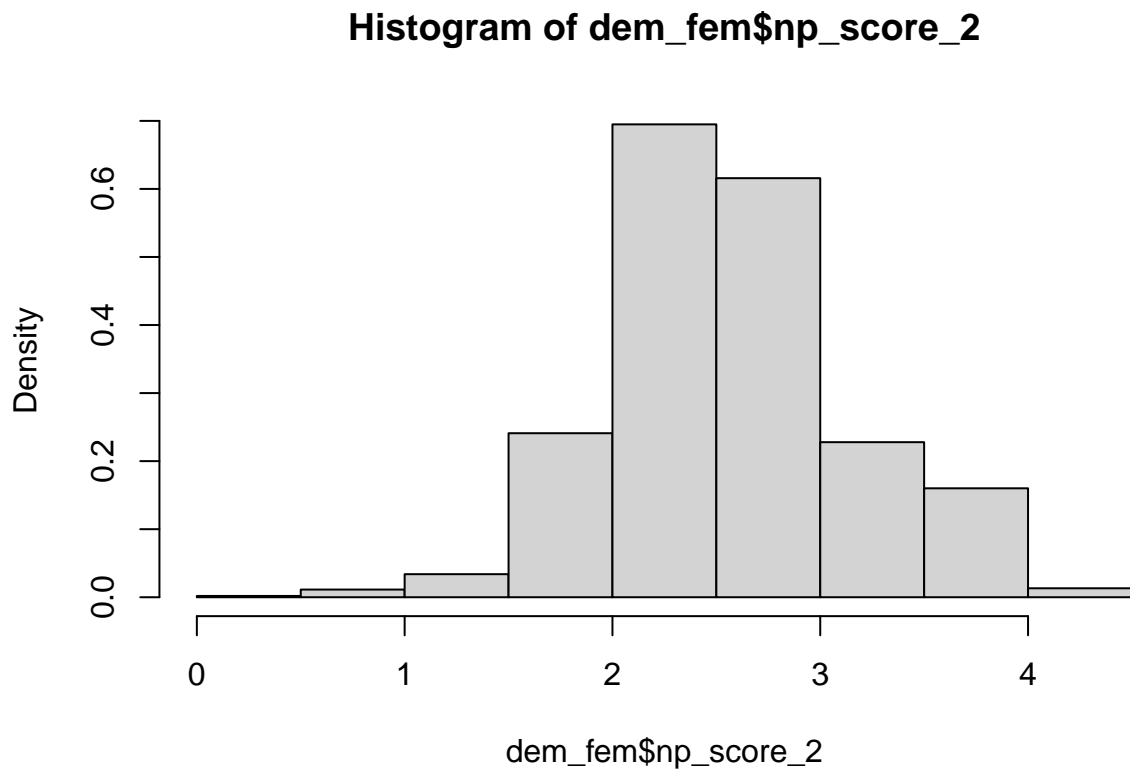
Histogram of dem_male$np_score_2

dem_male$np_score_2
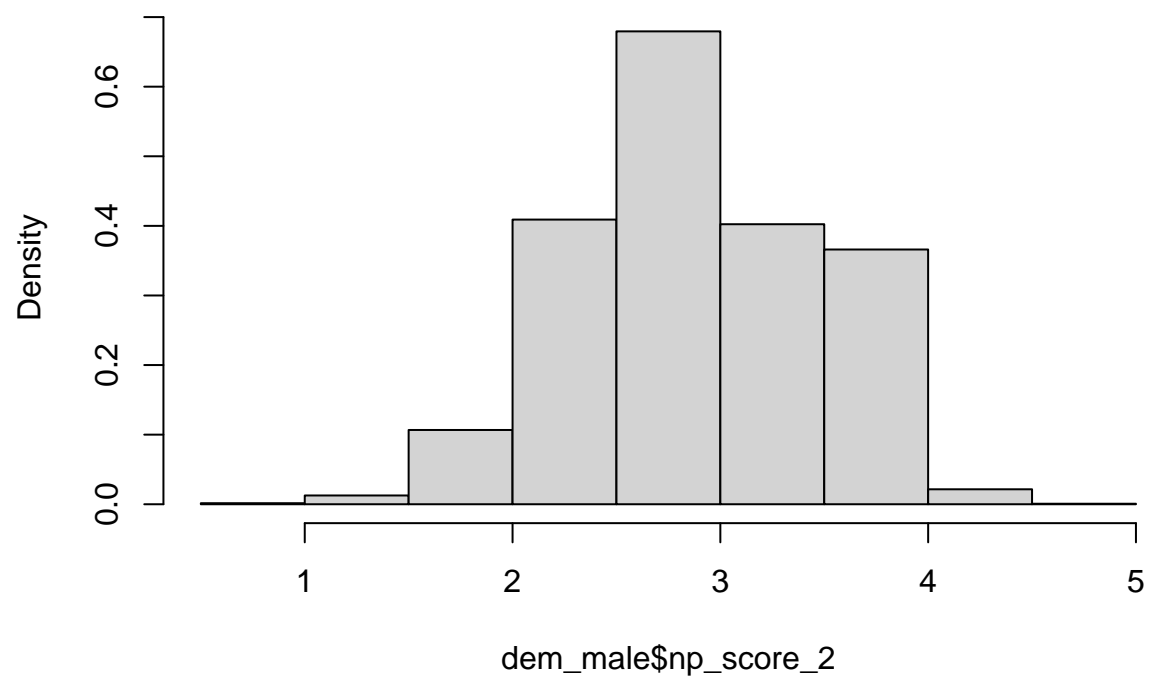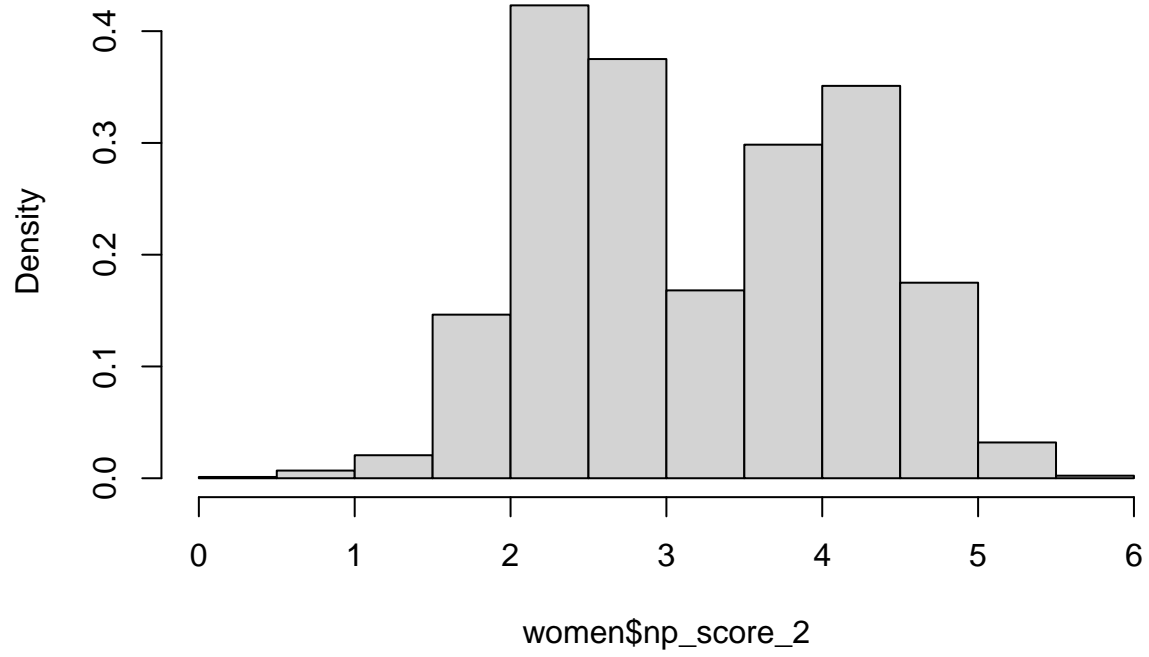
Histogram of rep_fem$np_score_2

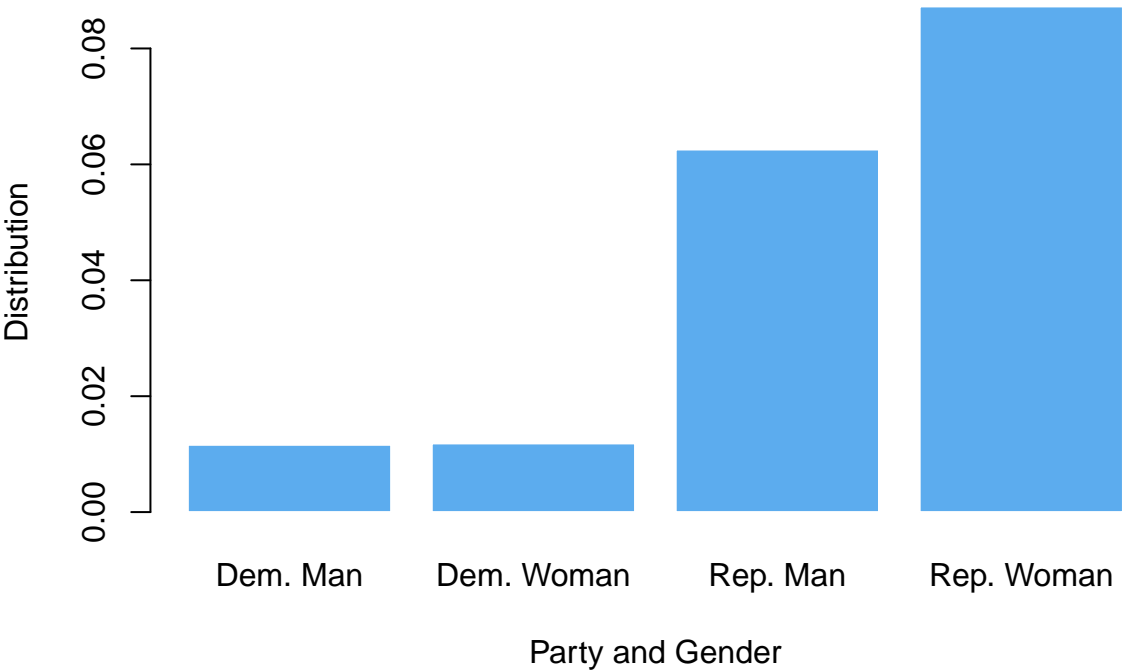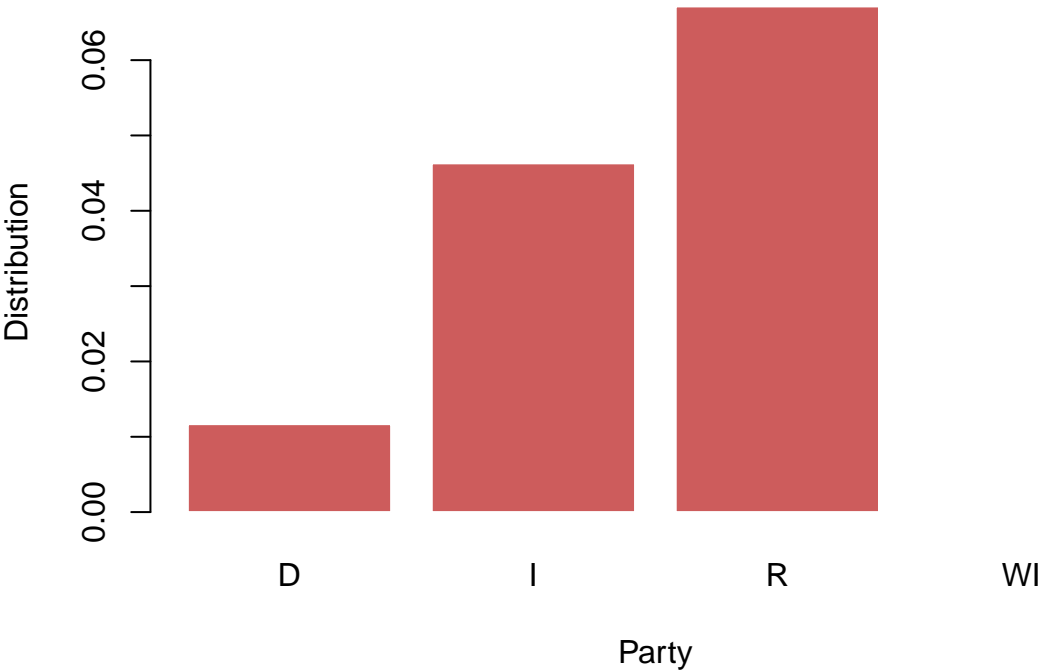**Histogram of rep_male$np_score_2**
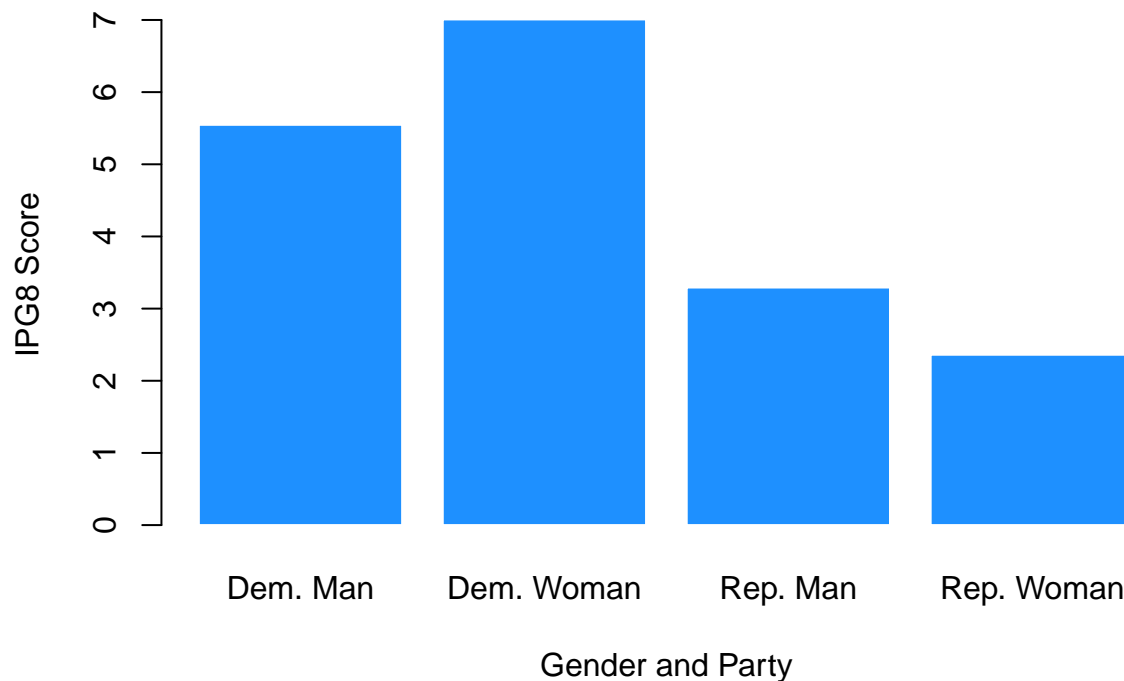
Histogram of women$np_score_2

Distribution of Voting for Anti−Abortion Bills by Gender and Party

Distribution of Anti−Abortion Bill Votes by Party

Distribution of IPG8 Scores by Party and Gender

Here I take some regressions of quantities of interest and did some preliminary interpretations, that candidly, I am very unsure about.

```r
# regress both gender and party onto bill votes

# What resonates most by gender? (unsure if these should be proportions
# or probabilities)

lm(anti_a$Female ~ anti_a$bin_anti_all)
```

```
## 
## Call:
## lm(formula = anti_a$Female ~ anti_a$bin_anti_all)
## 
## Coefficients:
##         (Intercept)  anti_a$bin_anti_all
##             0.23277              0.02196
```

```r
# unsure of the order here, but I might interpret this one as 23% of males having
# voted for at least one anti-abortion bill.

gender_all_fit <- lm(anti_a$bin_anti_all ~ anti_a$Female)
# males are four percent more likely to have voted for at least
# one anti abortion bill. or among males, the prop that has
# supported a bill as such is ~ 4 percent
```

```
gender_antiwom_fit<- lm(anti_a$bin_anti_womtot ~ anti_a$Female)
# Males are 2.3% more likely to have voted for an anti abortion
# bill that was pro-woman and pro-life

gender_antirelig_fit <- lm(anti_a$bin_anti_relig ~ anti_a$Female)
# males are 1.7% more likely to have voted for an anti abortion bill
# that adheres to a religious or moral issue frame

gender_antifetus_fit <- lm(anti_a$bin_anti_fetus ~ anti_a$Female)
#males are 1.3% more likely to have votes for an anti abortion bill that
# adheres to a fetal centric issue frame

# What resonates most by ideology?

lm(anti_a$bin_anti_all ~ anti_a$np_score_2)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_all ~ anti_a$np_score_2)
##
## Coefficients:
##       (Intercept)  anti_a$np_score_2
##          -0.09079            0.03683
```

```
# if you increase the IPG8 score by one unit, the probability of voting for an
# anti abortion bill would be a difference of 3.6 percentage points

lm(anti_a$bin_anti_womtot ~ anti_a$np_score_2)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_womtot ~ anti_a$np_score_2)
##
## Coefficients:
##       (Intercept)  anti_a$np_score_2
##          -0.06324            0.02475
```

```
# if you increase the IPG8 score by one unit, the probability of voting for an
# anti abortion bill would be a difference of 2.4 percentage points

lm(anti_a$bin_anti_relig ~ anti_a$np_score_2)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_relig ~ anti_a$np_score_2)
##
## Coefficients:
##       (Intercept)  anti_a$np_score_2
##          -0.03866            0.01570
```

```r
# if you increase the IPG8 score by one unit, the probability of voting for an
# anti abortion bill would be a difference of 1.5 percentage points

lm(anti_a$bin_anti_fetus ~ anti_a$np_score_2)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_fetus ~ anti_a$np_score_2)
##
## Coefficients:
##       (Intercept)  anti_a$np_score_2
##          -0.03209            0.01282
```

```r
## if you increase the IPG8 score by one unit, the probability of voting for an
# anti abortion bill would be a difference of 1.2 percentage points

# What resonates most by party?

lm(anti_a$bin_anti_all ~ anti_a$party)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_all ~ anti_a$party)
##
## Coefficients:
##     (Intercept)    anti_a$partyI    anti_a$partyR   anti_a$partyWI
##         0.01168          0.03462          0.05545         -0.01168
```

```r
# r = .05545, is highest out of all parties

lm(anti_a$bin_anti_relig ~ anti_a$party)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_relig ~ anti_a$party)
##
## Coefficients:
##     (Intercept)    anti_a$partyI    anti_a$partyR   anti_a$partyWI
##        0.004485        -0.004485         0.024800        -0.004485
```

```r
# r = 0.0248, is highest out of all parties, independent is slightly negative
# and d = .004485

lm(anti_a$bin_anti_fetus ~ anti_a$party)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_fetus ~ anti_a$party)
##
## Coefficients:
##     (Intercept)    anti_a$partyI    anti_a$partyR   anti_a$partyWI
##        0.002808        -0.002808         0.020949        -0.002808
```

```r
# r = .020949, highest of all again, I is negative and d is positive but
# closer to zero

lm(anti_a$bin_anti_womtot ~ anti_a$party)
```

```
##
## Call:
## lm(formula = anti_a$bin_anti_womtot ~ anti_a$party)
##
## Coefficients:
##    (Intercept)    anti_a$partyI    anti_a$partyR  anti_a$partyWI
##       0.006997         0.039299         0.034420        -0.006997
```

```r
# I = .039299, I is surprisingly the highest here, followed by R, and then D
```

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.