

# Thesis Code

Nicholas Johnson

2025-01-23

## Loading Packages

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.3      v readr      2.1.4
## v forcats    1.0.0      v stringr   1.5.0
## v ggplot2    3.4.3      v tibble    3.2.1
## v lubridate  1.9.2      v tidyr     1.3.0
## v purrr      1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(tibble)
library(MASS)
```

```
##
## Attaching package: 'MASS'
##
## The following object is masked from 'package:dplyr':
##
##     select
```

```
library(ordinal)
```

```
## Warning: package 'ordinal' was built under R version 4.3.3
```

```
##
## Attaching package: 'ordinal'
##
## The following object is masked from 'package:dplyr':
##
##     slice
```

```
library(pscl)
```

```
## Warning: package 'pscl' was built under R version 4.3.3
```

```
## Classes and Methods for R originally developed in the  
## Political Science Computational Laboratory  
## Department of Political Science  
## Stanford University (2002-2015),  
## by and under the direction of Simon Jackman.  
## hurdle and zeroinfl functions by Achim Zeileis.
```

```
library(nnet)
```

```
## Warning: package 'nnet' was built under R version 4.3.3
```

```
library(ggplot2)  
library(dplyr)  
library(tidyr)  
library(ggeffects)
```

```
## Warning: package 'ggeffects' was built under R version 4.3.3
```

```
library(car)
```

```
## Warning: package 'car' was built under R version 4.3.3
```

```
## Loading required package: carData
```

```
## Warning: package 'carData' was built under R version 4.3.3
```

```
##  
## Attaching package: 'car'  
##  
## The following object is masked from 'package:dplyr':  
##  
##     recode  
##  
## The following object is masked from 'package:purrr':  
##  
##     some
```

```
library(effects)
```

```
## Warning: package 'effects' was built under R version 4.3.3
```

```
## lattice theme set by effectsTheme()  
## See ?effectsTheme for details.
```

```
library(officer)
```

```
## Warning: package 'officer' was built under R version 4.3.3
```

```
library(flextable)
```

```
## Warning: package 'flextable' was built under R version 4.3.3
```

```
##  
## Attaching package: 'flextable'  
##  
## The following object is masked from 'package:purrr':  
##  
##     compose
```

```
library(nnet)  
library(broom)
```

```
## Warning: package 'broom' was built under R version 4.3.3
```

```
library(knitr)
```

Reorganize NJ1-3 to be 2 rows: frame and value, using pivot longer/wider.

```
load("C:/Users/nickj/OneDrive/Desktop/Thesis2025/NJ_Omnibus_1 (1).rdata")  
data <- NJ_Omnibus_1  
x <- pivot_longer(data, cols = c(NJ1, NJ2, NJ3),  
                  names_to = "Frame",  
                  values_to = "Importance",  
                  values_drop_na = TRUE)
```

Convert all necessary responses to their corresponding type (character/factor)

```
x$Frame <- as.factor(x$Frame)  
x$Frame <- relevel(x$Frame, ref = "NJ3")
```

## Organizing Data for Ordinal Regression

```
## Reclassifying variables  
x$NJ6 <- as.factor(x$NJ6)  
x$NJ11 <- as.factor(x$NJ11)  
x$racethn <- as.factor(x$racethn)  
x$sex <- as.factor(x$sex)  
x$D5 <- as.numeric(x$D5)
```

```
x$D8 <- as.factor(x$D8)
x$D1 <- as.factor(x$D1)
x$Importance <- factor(x$Importance, ordered = T)
x$NJ4 <- factor(x$NJ4, ordered = T)
x$NJ5 <- factor(x$NJ5, ordered = T)
```

## Running an Ordinal Model to Predict the Importance Assigned to SSEC Reform

```
## Running the ordinal logistic regression with pscl package
ordinal_model_imp <- clm(Importance ~ Frame + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
  NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D5 + D8, data = x)

## Summarizing the model
summary(ordinal_model_imp)
```

```
## formula:
## Importance ~ Frame + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 + NJ11 + NJ12 + D1 + sex + agecat + education + 
## data:      x
##
## link threshold nobs logLik   AIC      niter max.grad cond.H
## logit flexible 1988 -2083.93 4233.86 5(0)  1.42e-08 9.8e+04
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## FrameNJ1    0.18122    0.11608   1.561  0.11848
## FrameNJ2    0.10576    0.11370   0.930  0.35231
## NJ62        -0.53681    0.12701  -4.227  2.37e-05 ***
## NJ63        -0.33670    0.12292  -2.739  0.00616 **
## NJ7         -0.06659    0.03886  -1.714  0.08659 .
## NJ8          0.03991    0.04440   0.899  0.36868
## NJ9          0.48946    0.04789  10.220 < 2e-16 ***
## NJ10_1       0.04507    0.03886   1.160  0.24612
## NJ112        0.04313    0.15851   0.272  0.78554
## NJ113       -0.75064    0.18793  -3.994  6.49e-05 ***
## NJ114       -0.12758    0.18154  -0.703  0.48220
## NJ115        0.37956    0.28250   1.344  0.17909
## NJ116        0.09296    0.19048   0.488  0.62553
## NJ12         0.24208    0.04071   5.947  2.73e-09 ***
## D12         -0.34861    0.77423  -0.450  0.65252
## D13         -0.29955    0.59504  -0.503  0.61468
## D14          0.17272    0.97644   0.177  0.85959
## D15         -0.84462    1.22388  -0.690  0.49012
## sex2         0.67668    0.76724   0.882  0.37779
## agecat       0.19481    0.01741  11.187 < 2e-16 ***
## education    0.05730    0.03736   1.534  0.12509
## racethn2    -0.10927    0.13368  -0.817  0.41369
## racethn3    -0.23989    0.15465  -1.551  0.12086
## racethn4    -0.42410    0.16577  -2.558  0.01052 *
## racethn5    -0.15573    0.15884  -0.980  0.32687
## D5           0.04289    0.01776   2.415  0.01575 *
## D82          0.14685    0.12174   1.206  0.22771
```

```
## D83          0.03963    0.12716    0.312  0.75532
## D84          0.05187    0.19831    0.262  0.79366
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 1|2  -0.1729     0.3937  -0.439
## 2|3   1.4055     0.3797   3.702
## 3|4   2.5223     0.3814   6.613
## 4|5   3.6378     0.3862   9.420
## (15 observations deleted due to missingness)
```

```
pr2(ordinal_model_imp)
```

```
## fitting null model for pseudo-r2
```

```
##          llh          llhNull          G2          McFadden          r2ML
## -2083.9289566 -2344.6483631    521.4388129    0.1111977    0.2307145
##          r2CU
##          0.2548018
```

## Rerun the regression as OLS for additional vetting

```
lm_importance<- lm(as.numeric(x$Importance)~x$Frame + as.factor(x$NJ6) + x$NJ7+
x$NJ8+ x$NJ9 +x$NJ10_1 +as.factor(x$NJ11) + x$NJ12 + as.factor(x$D1)+
  as.factor(x$sex) + as.factor(x$agecat)+ x$education + as.factor(x$racethn) +
  x$D5 + as.factor(x$D8) + as.factor(x$vote))
```

```
summary(lm_importance)
```

```
##
## Call:
## lm(formula = as.numeric(x$Importance) ~ x$Frame + as.factor(x$NJ6) +
##      x$NJ7 + x$NJ8 + x$NJ9 + x$NJ10_1 + as.factor(x$NJ11) + x$NJ12 +
##      as.factor(x$D1) + as.factor(x$sex) + as.factor(x$agecat) +
##      x$education + as.factor(x$racethn) + x$D5 + as.factor(x$D8) +
##      as.factor(x$vote))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -4.3009 -0.4404  0.2328  0.6189  2.1908
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    2.402539   0.177759  13.516 < 2e-16 ***
## x$FrameNJ1      0.042842   0.053893   0.795  0.426749
## x$FrameNJ2      0.027789   0.053963   0.515  0.606642
## as.factor(x$NJ6)2 -0.323216   0.064480  -5.013 5.86e-07 ***
## as.factor(x$NJ6)3 -0.152676   0.062038  -2.461 0.013942 *
```

```

## x$NJ7          -0.035823    0.017780   -2.015  0.044070 *
## x$NJ8           0.043675    0.020804    2.099  0.035915 *
## x$NJ9           0.238540    0.021839   10.923 < 2e-16 ***
## x$NJ10_1       -0.009686    0.017807   -0.544  0.586555
## as.factor(x$NJ11)2    0.062962    0.071741    0.878  0.380248
## as.factor(x$NJ11)3   -0.326815    0.090787   -3.600  0.000326 ***
## as.factor(x$NJ11)4   -0.001500    0.084988   -0.018  0.985924
## as.factor(x$NJ11)5    0.261571    0.131112    1.995  0.046180 *
## as.factor(x$NJ11)6    0.131409    0.088701    1.481  0.138642
## x$NJ12          0.105901    0.018632    5.684  1.52e-08 ***
## as.factor(x$D1)2     -0.342994    0.384207   -0.893  0.372111
## as.factor(x$D1)3     -0.291576    0.301865   -0.966  0.334206
## as.factor(x$D1)4      0.017324    0.433599    0.040  0.968133
## as.factor(x$D1)5     -0.511273    0.580206   -0.881  0.378323
## as.factor(x$sex)2     0.505444    0.381310    1.326  0.185145
## as.factor(x$agecat)2  0.181014    0.097828    1.850  0.064416 .
## as.factor(x$agecat)3  0.229587    0.093238    2.462  0.013888 *
## as.factor(x$agecat)4  0.357227    0.095601    3.737  0.000192 ***
## as.factor(x$agecat)5  0.561531    0.093262    6.021  2.07e-09 ***
## as.factor(x$agecat)6  0.404102    0.107079    3.774  0.000166 ***
## as.factor(x$agecat)7  0.623912    0.108289    5.762  9.67e-09 ***
## as.factor(x$agecat)8  0.643855    0.106462    6.048  1.76e-09 ***
## as.factor(x$agecat)9  0.843152    0.111274    7.577  5.42e-14 ***
## as.factor(x$agecat)10 0.808802    0.107865    7.498  9.77e-14 ***
## as.factor(x$agecat)11 0.819330    0.098518    8.317 < 2e-16 ***
## x$education       0.018592    0.017858    1.041  0.297962
## as.factor(x$racethn)2 -0.043590    0.063272   -0.689  0.490951
## as.factor(x$racethn)3 -0.113577    0.075155   -1.511  0.130892
## as.factor(x$racethn)4 -0.097099    0.082932   -1.171  0.241809
## as.factor(x$racethn)5 -0.060838    0.076646   -0.794  0.427430
## x$D5              0.024683    0.008477    2.912  0.003637 **
## as.factor(x$D8)2      0.082583    0.072293    1.142  0.253451
## as.factor(x$D8)3      0.078235    0.065507    1.194  0.232510
## as.factor(x$D8)4      0.141832    0.103925    1.365  0.172486
## as.factor(x$vote)2     0.011943    0.069860    0.171  0.864275
## as.factor(x$vote)3     0.094415    0.148157    0.637  0.524027
## as.factor(x$vote)4    -0.198333    0.068007   -2.916  0.003582 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9695 on 1946 degrees of freedom
## (15 observations deleted due to missingness)
## Multiple R-squared:  0.2316, Adjusted R-squared:  0.2154
## F-statistic: 14.3 on 41 and 1946 DF, p-value: < 2.2e-16

```

*## OLS confirms nonsignificance of frames, significance of other predictors.*

## Trump Ordinal Regression Interpreting Incomes as Cutoffs

```

## Defining the cutoff point for incomes above and below 34,00-44,000 USD
## As described by Trump, those above this threshold are eligible to receive
## Tax cuts.

```

```
## Creating the cutoff
x$D5 <- as.numeric(x$D5)
trump <- x |> filter(D5<4 | D5>5) |> mutate(cutoff = ifelse(D5 > 5, 1, 0)) # high values get a 1
trump$cutoff <- as.factor(trump$cutoff)
## Running the model
ordinal_model_t_cutoff <- clm(NJ4 ~ Frame*cutoff + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
                             NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D8, data = trump)

## Summarizing the model
summary(ordinal_model_t_cutoff)
```

```
## formula:
## NJ4 ~ Frame * cutoff + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 + NJ11 + NJ12 + D1 + sex + agecat + education +
## data: trump
##
## link threshold nobs logLik AIC niter max.grad cond.H
## logit flexible 1581 -2293.67 4657.35 5(0) 1.75e-09 7.7e+04
##
## Coefficients:
## Estimate Std. Error z value Pr(>|z|)
## FrameNJ1 0.04919 0.17435 0.282 0.777832
## FrameNJ2 -0.13452 0.17531 -0.767 0.442882
## cutoff1 0.24276 0.17200 1.411 0.158130
## NJ62 -0.16912 0.13377 -1.264 0.206144
## NJ63 0.09553 0.12267 0.779 0.436123
## NJ7 0.09425 0.03813 2.472 0.013435 *
## NJ8 0.07068 0.04447 1.590 0.111915
## NJ9 0.14516 0.04705 3.085 0.002033 **
## NJ10_1 0.05934 0.03818 1.554 0.120149
## NJ112 0.24481 0.14858 1.648 0.099418 .
## NJ113 -0.34793 0.18464 -1.884 0.059513 .
## NJ114 0.02034 0.17354 0.117 0.906703
## NJ115 0.05301 0.26094 0.203 0.839020
## NJ116 0.16314 0.18249 0.894 0.371330
## NJ12 0.13250 0.03902 3.396 0.000684 ***
## D12 0.26398 0.73830 0.358 0.720680
## D13 -0.05092 0.59380 -0.086 0.931658
## D14 0.36269 0.96567 0.376 0.707228
## D15 -0.46392 0.94290 -0.492 0.622710
## sex2 -0.18972 0.73099 -0.260 0.795219
## agecat 0.09545 0.01664 5.736 9.72e-09 ***
## education 0.07088 0.03637 1.949 0.051309 .
## racethn2 -0.22164 0.13098 -1.692 0.090624 .
## racethn3 -0.20313 0.15861 -1.281 0.200316
## racethn4 -0.42128 0.16684 -2.525 0.011567 *
## racethn5 -0.20473 0.15530 -1.318 0.187410
## D82 -0.16729 0.11910 -1.405 0.160138
## D83 -0.28581 0.12610 -2.267 0.023420 *
## D84 -0.15576 0.19605 -0.795 0.426894
## FrameNJ1:cutoff1 -0.20183 0.22934 -0.880 0.378847
## FrameNJ2:cutoff1 0.28862 0.22973 1.256 0.208992
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 1|2  -0.4303    0.3795  -1.134
## 2|3   0.6605    0.3756   1.758
## 3|4   2.1363    0.3789   5.639
## 4|5   3.2188    0.3836   8.392
## (12 observations deleted due to missingness)
```

```
pR2(ordinal_model_t_cutoff)
```

```
## fitting null model for pseudo-r2
```

```
##          llh          llhNull          G2          McFadden          r2ML
## -2.293675e+03 -2.384937e+03  1.825241e+02  3.826602e-02  1.090335e-01
##          r2CU
##  1.146452e-01
```

*# Delineating between groups at incomes who are guaranteed to benefit from Trump's policy, and those who are guaranteed to not benefit from Trumps policy is significant. However, individualist and collectivist frames have no impacts on these groups.*

## Running an Ordinal Model to Predict Support for Trump's SSEC Policy (no cutoff)

```
## Running the ordinal logistic regression with pscl package
ordinal_model_t <- clm(NJ4 ~ Frame + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
  NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D5 + D8, data = x)

## Summarizing the model
summary(ordinal_model_t)
```

```
## formula:
## NJ4 ~ Frame + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 + NJ11 + NJ12 + D1 + sex + agecat + education + racethn
## data:    x
##
## link threshold nobs logLik  AIC      niter max.grad cond.H
## logit flexible  1988 -2886.84 5839.68 5(0)  9.57e-10 1.2e+05
##
## Coefficients:
##          Estimate Std. Error z value Pr(>|z|)
## FrameNJ1   0.02173    0.09981   0.218  0.8276
## FrameNJ2   0.11156    0.09981   1.118  0.2637
## NJ62      -0.16635    0.11727  -1.419  0.1560
## NJ63       0.13172    0.11002   1.197  0.2312
## NJ7        0.07403    0.03372   2.196  0.0281 *
## NJ8        0.06894    0.04021   1.714  0.0865 .
## NJ9        0.16425    0.04149   3.959 7.53e-05 ***
## NJ10_1     0.05927    0.03366   1.761  0.0783 .
```



```
## NJ112      0.13370      0.13538      0.988      0.3234
## NJ113     -0.36651      0.16745     -2.189      0.0286 *
## NJ114      0.02112      0.15870      0.133      0.8941
## NJ115      0.07644      0.23929      0.319      0.7494
## NJ116      0.09303      0.16591      0.561      0.5750
## NJ12       0.14722      0.03515      4.189 2.81e-05 ***
## D12        0.23547      0.69979      0.336      0.7365
## D13        0.34751      0.53698      0.647      0.5175
## D14       -0.04198      0.90180     -0.047      0.9629
## D15       -0.45664      0.95217     -0.480      0.6315
## sex2       -0.16732      0.69426     -0.241      0.8096
## agecat      0.10990      0.01477      7.441 1.00e-13 ***
## education   0.05028      0.03274      1.536      0.1246
## racethn2   -0.20509      0.11615     -1.766      0.0775 .
## racethn3   -0.24728      0.13939     -1.774      0.0761 .
## racethn4   -0.36657      0.14976     -2.448      0.0144 *
## racethn5   -0.12732      0.13874     -0.918      0.3588
## D5          0.03877      0.01562      2.482      0.0131 *
## D82        -0.25926      0.10516     -2.465      0.0137 *
## D83        -0.26251      0.11166     -2.351      0.0187 *
## D84        -0.24638      0.17664     -1.395      0.1631
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 1|2  -0.3119      0.3398  -0.918
## 2|3   0.8018      0.3361   2.385
## 3|4   2.2393      0.3391   6.603
## 4|5   3.2965      0.3437   9.592
## (15 observations deleted due to missingness)
```

```
pR2(ordinal_model_t)
```

```
## fitting null model for pseudo-r2
```

```
##          llh          llhNull          G2          McFadden          r2ML
## -2.886842e+03 -3.000428e+03  2.271725e+02  3.785668e-02  1.079846e-01
##          r2CU
##  1.135332e-01
```

```
## Even ignoring the cutoff, people at higher incomes support the policy more than
## People at lower incomes.
```

## Re-running this model with an interaction term

```
## The goal is to investigate whether income and frame have any interaction
ordinal_model_t_int <- clm(NJ4 ~ Frame*D5 + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
      NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D8, data = x)

## Summarizing the model
summary(ordinal_model_t_int)
```

```

## formula:
## NJ4 ~ Frame * D5 + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 + NJ11 + NJ12 + D1 + sex + agecat + education + ra
## data:      x
##
## link threshold nobs logLik   AIC      niter max.grad cond.H
## logit flexible  1988 -2885.57 5841.14 5(0)  9.83e-10 1.3e+05
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## FrameNJ1      0.20631    0.20240   1.019 0.308048
## FrameNJ2      0.01507    0.20388   0.074 0.941080
## D5             0.04505    0.02419   1.863 0.062500 .
## NJ62          -0.17275    0.11733  -1.472 0.140924
## NJ63           0.12634    0.11018   1.147 0.251514
## NJ7            0.07632    0.03374   2.262 0.023695 *
## NJ8            0.06456    0.04029   1.602 0.109071
## NJ9            0.16054    0.04159   3.860 0.000113 ***
## NJ10_1         0.05765    0.03370   1.711 0.087137 .
## NJ112          0.13487    0.13547   0.996 0.319480
## NJ113          -0.37447    0.16753  -2.235 0.025401 *
## NJ114          0.02205    0.15873   0.139 0.889509
## NJ115          0.07461    0.23933   0.312 0.755236
## NJ116          0.09310    0.16608   0.561 0.575086
## NJ12           0.14678    0.03524   4.165 3.11e-05 ***
## D12            0.25379    0.69773   0.364 0.716052
## D13            0.34721    0.53654   0.647 0.517552
## D14            -0.09276    0.89866  -0.103 0.917787
## D15            -0.48693    0.94536  -0.515 0.606505
## sex2           -0.17428    0.69205  -0.252 0.801172
## agecat         0.10947    0.01480   7.395 1.42e-13 ***
## education      0.05087    0.03275   1.554 0.120275
## racethn2       -0.20317    0.11616  -1.749 0.080275 .
## racethn3       -0.24079    0.13959  -1.725 0.084537 .
## racethn4       -0.36153    0.15000  -2.410 0.015942 *
## racethn5       -0.11971    0.13876  -0.863 0.388308
## D82            -0.26772    0.10534  -2.542 0.011036 *
## D83            -0.26511    0.11170  -2.373 0.017626 *
## D84            -0.23718    0.17659  -1.343 0.179230
## FrameNJ1:D5   -0.03489    0.03311  -1.054 0.292003
## FrameNJ2:D5    0.01820    0.03354   0.542 0.587490
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 1|2  -0.3015    0.3519  -0.857
## 2|3   0.8121    0.3484   2.331
## 3|4   2.2509    0.3515   6.405
## 4|5   3.3098    0.3558   9.302
## (15 observations deleted due to missingness)

```

```

## Does income influence how people percieve themselves in relation to the policy
## And subsequently influence the significance of the frames?

```

```
## The data suggests no - not with these frames.
```

## Rerun Regression as OLS for additional vetting

```
# Trump Policy Support
lm_trump<- lm(as.numeric(x$NJ4)~x$Frame + as.factor(x$NJ6) + x$NJ7+ x$NJ8+ x$NJ9 +x$NJ10_1 +
  as.factor(x$NJ11) + x$NJ12 + as.factor(x$D1)+ as.factor(x$sex) + as.factor(x$agecat)
  + x$education + as.factor(x$racethn) + x$D5 + as.factor(x$D8)
  + as.factor(x$vote))

summary(lm_trump)
```

```
##
## Call:
## lm(formula = as.numeric(x$NJ4) ~ x$Frame + as.factor(x$NJ6) +
##     x$NJ7 + x$NJ8 + x$NJ9 + x$NJ10_1 + as.factor(x$NJ11) + x$NJ12 +
##     as.factor(x$D1) + as.factor(x$sex) + as.factor(x$agecat) +
##     x$education + as.factor(x$racethn) + x$D5 + as.factor(x$D8) +
##     as.factor(x$vote))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.4930 -0.7342  0.1021  0.9729  2.3357
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      2.28568    0.21782  10.494 < 2e-16 ***
## x$FrameNJ1        0.01336    0.06604   0.202  0.839714
## x$FrameNJ2        0.06589    0.06612   0.997  0.319122
## as.factor(x$NJ6)2  -0.08567    0.07901  -1.084  0.278400
## as.factor(x$NJ6)3   0.15484    0.07602   2.037  0.041795 *
## x$NJ7             0.04337    0.02179   1.991  0.046639 *
## x$NJ8             0.04166    0.02549   1.634  0.102394
## x$NJ9             0.09612    0.02676   3.592  0.000336 ***
## x$NJ10_1          0.02181    0.02182   1.000  0.317645
## as.factor(x$NJ11)2  0.10818    0.08791   1.231  0.218617
## as.factor(x$NJ11)3 -0.21328    0.11125  -1.917  0.055356 .
## as.factor(x$NJ11)4  0.03964    0.10414   0.381  0.703514
## as.factor(x$NJ11)5  0.07707    0.16066   0.480  0.631506
## as.factor(x$NJ11)6  0.09332    0.10869   0.859  0.390689
## x$NJ12            0.07930    0.02283   3.473  0.000525 ***
## as.factor(x$D1)2    0.07827    0.47079   0.166  0.867974
## as.factor(x$D1)3    0.22976    0.36989   0.621  0.534562
## as.factor(x$D1)4   -0.10748    0.53131  -0.202  0.839713
## as.factor(x$D1)5   -0.40500    0.71096  -0.570  0.568975
## as.factor(x$sex)2   -0.01685    0.46724  -0.036  0.971235
## as.factor(x$agecat)2 -0.07079    0.11987  -0.591  0.554918
## as.factor(x$agecat)3  0.17125    0.11425   1.499  0.134059
## as.factor(x$agecat)4  0.10497    0.11714   0.896  0.370345
## as.factor(x$agecat)5  0.24807    0.11428   2.171  0.030069 *
## as.factor(x$agecat)6  0.34999    0.13121   2.667  0.007708 **
```

```
## as.factor(x$agecat)7    0.27696    0.13269    2.087 0.036997 *
## as.factor(x$agecat)8    0.40670    0.13045    3.118 0.001850 **
## as.factor(x$agecat)9    0.56440    0.13635    4.139 3.63e-05 ***
## as.factor(x$agecat)10   0.65682    0.13217    4.969 7.30e-07 ***
## as.factor(x$agecat)11   0.60572    0.12072    5.018 5.71e-07 ***
## x$education             0.03988    0.02188    1.822 0.068577 .
## as.factor(x$racethn)2   -0.11828    0.07753   -1.526 0.127284
## as.factor(x$racethn)3   -0.17151    0.09209   -1.862 0.062698 .
## as.factor(x$racethn)4   -0.20457    0.10162   -2.013 0.044243 *
## as.factor(x$racethn)5   -0.05297    0.09392   -0.564 0.572830
## x$D5                    0.02141    0.01039    2.061 0.039417 *
## as.factor(x$D8)2        0.10717    0.08858    1.210 0.226503
## as.factor(x$D8)3       -0.00288    0.08027   -0.036 0.971387
## as.factor(x$D8)4        0.04281    0.12735    0.336 0.736781
## as.factor(x$vote)2      -0.37990    0.08560   -4.438 9.59e-06 ***
## as.factor(x$vote)3      -0.32894    0.18155   -1.812 0.070157 .
## as.factor(x$vote)4      -0.28561    0.08333   -3.427 0.000622 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.188 on 1946 degrees of freedom
## (15 observations deleted due to missingness)
## Multiple R-squared:  0.1049, Adjusted R-squared:  0.08604
## F-statistic: 5.562 on 41 and 1946 DF, p-value: < 2.2e-16
```

*## OLS results confirm non-significance of frames, significance of other predictors.*

## Running an Ordinal Model to Predict Support for Harris' SSEC Policy

```
## Running the model
ordinal_model_h <- clm(NJ5 ~ Frame + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
  NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D5 + D8, data = x)

## Summarizing the model
summary(ordinal_model_h)
```

```
## formula:
## NJ5 ~ Frame + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 + NJ11 + NJ12 + D1 + sex + agecat + education + racethn
## data:    x
##
## link threshold nobs logLik  AIC      niter max.grad cond.H
## logit flexible 1988 -2950.34 5966.68 5(0)  3.69e-11 1.1e+05
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## FrameNJ1    0.05102    0.09918   0.514 0.606981
## FrameNJ2   -0.08450    0.09994  -0.846 0.397796
## NJ62       -0.21030    0.11737  -1.792 0.073160 .
## NJ63       -0.06958    0.11049  -0.630 0.528873
## NJ7        -0.04855    0.03399  -1.428 0.153161
## NJ8         0.14880    0.03971   3.747 0.000179 ***
```

```
## NJ9      0.30532      0.04164      7.333 2.25e-13 ***
## NJ10_1    -0.03118      0.03316     -0.940 0.347207
## NJ112     0.09212      0.13332      0.691 0.489592
## NJ113    -0.22448      0.16891     -1.329 0.183847
## NJ114     0.03407      0.15723      0.217 0.828439
## NJ115     0.03206      0.24303      0.132 0.895063
## NJ116     0.07867      0.16283      0.483 0.628997
## NJ12      0.06110      0.03499      1.746 0.080777 .
## D12      -0.79974      0.69983     -1.143 0.253138
## D13      -0.76149      0.50631     -1.504 0.132584
## D14      -0.76444      0.85194     -0.897 0.369565
## D15       0.26237      1.06345      0.247 0.805130
## sex2      0.55613      0.69420      0.801 0.423063
## agecat    0.04696      0.01463      3.210 0.001330 **
## education 0.11987      0.03237      3.703 0.000213 ***
## racethn2  -0.58164      0.11596     -5.016 5.28e-07 ***
## racethn3  -0.28606      0.13929     -2.054 0.039999 *
## racethn4  -0.50307      0.14760     -3.408 0.000654 ***
## racethn5  -0.29604      0.14142     -2.093 0.036317 *
## D5        0.03375      0.01542      2.190 0.028554 *
## D82       0.65396      0.10532      6.209 5.32e-10 ***
## D83       0.49824      0.10944      4.553 5.29e-06 ***
## D84       0.49642      0.18001      2.758 0.005822 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 1|2  -0.1255      0.3308  -0.380
## 2|3   0.8660      0.3290   2.632
## 3|4   2.2074      0.3318   6.652
## 4|5   3.3198      0.3360   9.881
## (15 observations deleted due to missingness)
```

```
pr2(ordinal_model_h)
```

```
## fitting null model for pseudo-r2
```

```
##      llh      llhNull      G2      McFadden      r2ML
## -2.950338e+03 -3.057467e+03  2.142568e+02  3.503828e-02  1.021704e-01
##      r2CU
## 1.071134e-01
```

## Rerun regression as OLS for additional vetting

```
lm3<- lm(as.numeric(x$NJ5)~x$Frame + as.factor(x$NJ6) + x$NJ7+ x$NJ8+ x$NJ9 +x$NJ10_1 +
  as.factor(x$NJ11) + x$NJ12 + as.factor(x$D1)+ as.factor(x$sex) + as.factor(x$agecat)
  + x$education + as.factor(x$racethn) + x$D5 + as.factor(x$D8)
  + as.factor(x$vote))

summary(lm3)
```

```
##
## Call:
## lm(formula = as.numeric(x$NJ5) ~ x$Frame + as.factor(x$NJ6) +
##     x$NJ7 + x$NJ8 + x$NJ9 + x$NJ10_1 + as.factor(x$NJ11) + x$NJ12 +
##     as.factor(x$D1) + as.factor(x$sex) + as.factor(x$agecat) +
##     x$education + as.factor(x$racethn) + x$D5 + as.factor(x$D8) +
##     as.factor(x$vote))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.6969 -0.7353  0.1049  0.9325  2.8028
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      2.0763875   0.2239178    9.273 < 2e-16 ***
## x$FrameNJ1        0.0497524   0.0678880    0.733  0.46373
## x$FrameNJ2       -0.0489778   0.0679757   -0.721  0.47129
## as.factor(x$NJ6)2  -0.0962175   0.0812243   -1.185  0.23632
## as.factor(x$NJ6)3   0.0172877   0.0781479    0.221  0.82495
## x$NJ7            -0.0240419   0.0223976   -1.073  0.28322
## x$NJ8             0.0949121   0.0262063    3.622  0.00030 ***
## x$NJ9            0.1986935   0.0275099    7.223 7.28e-13 ***
## x$NJ10_1         -0.0322599   0.0224306   -1.438  0.15054
## as.factor(x$NJ11)2  0.0928698   0.0903699    1.028  0.30424
## as.factor(x$NJ11)3 -0.1489517   0.1143617   -1.302  0.19291
## as.factor(x$NJ11)4  0.0679268   0.1070575    0.634  0.52584
## as.factor(x$NJ11)5  0.0005109   0.1651586    0.003  0.99753
## as.factor(x$NJ11)6  0.0932902   0.1117346    0.835  0.40386
## x$NJ12           0.0327501   0.0234705    1.395  0.16306
## as.factor(x$D1)2   -0.4029955   0.4839754   -0.833  0.40513
## as.factor(x$D1)3   -0.3944836   0.3802511   -1.037  0.29966
## as.factor(x$D1)4   -0.3974614   0.5461934   -0.728  0.46689
## as.factor(x$D1)5    0.1813088   0.7308703    0.248  0.80410
## as.factor(x$sex)2   0.2512493   0.4803256    0.523  0.60098
## as.factor(x$agecat)2 -0.1446073   0.1232309   -1.173  0.24075
## as.factor(x$agecat)3  0.0173984   0.1174490    0.148  0.88225
## as.factor(x$agecat)4 -0.0377165   0.1204258   -0.313  0.75417
## as.factor(x$agecat)5 -0.0067317   0.1174798   -0.057  0.95431
## as.factor(x$agecat)6 -0.0665317   0.1348847   -0.493  0.62189
## as.factor(x$agecat)7  0.1887092   0.1364089    1.383  0.16670
## as.factor(x$agecat)8 -0.0213832   0.1341068   -0.159  0.87333
## as.factor(x$agecat)9  0.0004878   0.1401685    0.003  0.99722
## as.factor(x$agecat)10 0.2118438   0.1358752    1.559  0.11913
## as.factor(x$agecat)11 0.3292499   0.1241009    2.653  0.00804 **
## x$education        0.0709963   0.0224953    3.156  0.00162 **
## as.factor(x$racethn)2 -0.3715626   0.0797023   -4.662 3.35e-06 ***
## as.factor(x$racethn)3 -0.1594832   0.0946712   -1.685  0.09223 .
## as.factor(x$racethn)4 -0.2907874   0.1044668   -2.784  0.00543 **
## as.factor(x$racethn)5 -0.1684506   0.0965484   -1.745  0.08119 .
## x$D5              0.0220430   0.0106789    2.064  0.03913 *
## as.factor(x$D8)2     0.1639958   0.0910652    1.801  0.07188 .
## as.factor(x$D8)3     0.2209650   0.0825177    2.678  0.00747 **
## as.factor(x$D8)4     0.2017712   0.1309113    1.541  0.12341
## as.factor(x$vote)2   0.3595313   0.0880002    4.086 4.58e-05 ***
```

```
## as.factor(x$vote)3      0.2327352  0.1866289   1.247  0.21253
## as.factor(x$vote)4      0.1075249  0.0856672   1.255  0.20958
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.221 on 1946 degrees of freedom
## (15 observations deleted due to missingness)
## Multiple R-squared:  0.1052, Adjusted R-squared:  0.08633
## F-statistic: 5.579 on 41 and 1946 DF,  p-value: < 2.2e-16
```

```
## OLS confirms non significance of frames, significance of other predictors
```

## Re-running this model with an interaction term

```
## The goal is to investigate whether income and frame have any interaction
ordinal_model_h_int <- glm(NJ5 ~ Frame*D5 + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
  NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D8, data = x)

## Summarizing the model
summary(ordinal_model_h_int)
```

```
## formula:
## NJ5 ~ Frame * D5 + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 + NJ11 + NJ12 + D1 + sex + agecat + education + ra
## data:      x
##
## link threshold nobs logLik   AIC      niter max.grad cond.H
## logit flexible  1988 -2950.33 5970.66 5(0)  3.70e-11 1.2e+05
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## FrameNJ1      0.0701161  0.2008293   0.349  0.726990
## FrameNJ2     -0.0809905  0.2045576  -0.396  0.692157
## D5             0.0351992  0.0241900   1.455  0.145637
## NJ62          -0.2107929  0.1174688  -1.794  0.072740 .
## NJ63          -0.0700318  0.1105639  -0.633  0.526469
## NJ7           -0.0484811  0.0340434  -1.424  0.154418
## NJ8            0.1485105  0.0397859   3.733  0.000189 ***
## NJ9            0.3049640  0.0417516   7.304  2.79e-13 ***
## NJ10_1        -0.0311502  0.0332180  -0.938  0.348372
## NJ112          0.0920054  0.1333952   0.690  0.490370
## NJ113         -0.2249608  0.1689666  -1.331  0.183060
## NJ114          0.0340750  0.1572394   0.217  0.828436
## NJ115          0.0317854  0.2431598   0.131  0.895998
## NJ116          0.0792066  0.1629429   0.486  0.626896
## NJ12           0.0612169  0.0351281   1.743  0.081390 .
## D12           -0.7993420  0.7000996  -1.142  0.253556
## D13           -0.7616093  0.5063346  -1.504  0.132540
## D14           -0.7696574  0.8536185  -0.902  0.367248
## D15            0.2592797  1.0631845   0.244  0.807331
## sex2           0.5564298  0.6943167   0.801  0.422896
## agecat         0.0468547  0.0146685   3.194  0.001402 **
```

```
## education      0.1199926  0.0323914   3.704 0.000212 ***
## racethn2      -0.5816878  0.1159724  -5.016 5.28e-07 ***
## racethn3      -0.2853664  0.1394356  -2.047 0.040699 *
## racethn4      -0.5026637  0.1477089  -3.403 0.000666 ***
## racethn5      -0.2957435  0.1414590  -2.091 0.036558 *
## D82            0.6533313  0.1054712   6.194 5.85e-10 ***
## D83            0.4981565  0.1094500   4.551 5.33e-06 ***
## D84            0.4964999  0.1801651   2.756 0.005855 **
## FrameNJ1:D5   -0.0036252  0.0331485  -0.109 0.912915
## FrameNJ2:D5   -0.0006939  0.0336140  -0.021 0.983529
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 1|2   -0.1194     0.3432  -0.348
## 2|3    0.8722     0.3415   2.554
## 3|4    2.2135     0.3442   6.431
## 4|5    3.3260     0.3483   9.550
## (15 observations deleted due to missingness)
```

```
## Does income influence how people percieve themselves in relation to the policy
## And subsequently influence the significance of the frames?

## The data suggests no - not with these frames.
```

## Plotting Regression Outputs

### Confidence Intervals for Ordinal Regression on SSEC Reform Importance by Frame

```
# Compute predicted probabilities for Frame
frame_effect <- ggpredict(ordinal_model_imp, terms = "Frame")

# Convert to data.frame
frame_effect <- as.data.frame(frame_effect)

# Relabel response categories
frame_effect$response.label <- factor(frame_effect$response.level,
                                     levels = c("1", "2", "3", "4", "5"),
                                     labels = c("Not Important at All",
                                                "Mildly Unimportant",
                                                "Neither Important nor Unimportant",
                                                "Mildly Important",
                                                "Important"))

# Relabel Frame categories
frame_effect$x <- factor(frame_effect$x,
                        levels = c("NJ3", "NJ1", "NJ2"),
                        labels = c("Control", "Collectivist", "Individualist"))
```



```

# Plot with proper groupings and restored colors
ggplot(frame_effect, aes(x = x, y = predicted,
                        ymin = conf.low, ymax = conf.high,
                        color = response.label,
                        shape = response.label,
                        group = response.label)) +

geom_hline(yintercept = seq(0, 1, by = 0.1), color = "gray90", linetype = "dotted") +

geom_errorbar(linewidth = 1, position = position_dodge(width = 0.4), width = 0.15, na.rm = TRUE) +

geom_point(size = 3, position = position_dodge(width = 0.4), na.rm = TRUE) +

scale_color_manual(name = "Level of Importance",
                   values = c("Not Important at All" = "#440154FF",
                              "Mildly Unimportant" = "#3B528BFF",
                              "Neither Important nor Unimportant" = "#21908CFF",
                              "Mildly Important" = "#5DC863FF",
                              "Important" = "#800000"))+

scale_shape_manual(name = "Level of Importance",
                   values = c("Not Important at All" = 19,
                              "Mildly Unimportant" = 19, #from 17
                              "Neither Important nor Unimportant" = 19, #from 15
                              "Mildly Important" = 19, #from 18
                              "Important" = 19)) + #from 16

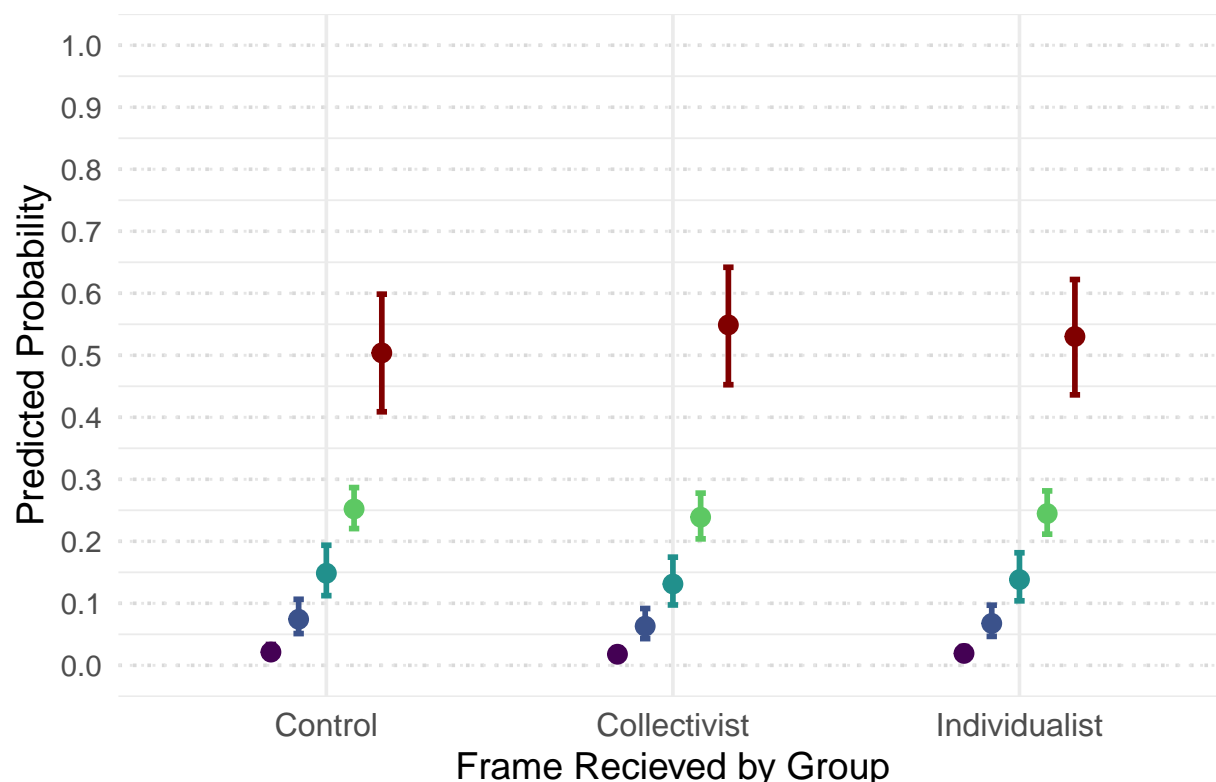
scale_y_continuous("Predicted Probability", limits = c(0, 1), breaks = seq(0, 1, by = 0.1)) +

labs(subtitle = str_wrap("How Respondents Ranked SSEC Reform Importance Across Frames"),
     x = "Frame Recieved by Group",
     y = "Predicted Probability of Ranking")+

theme_minimal(base_size = 14) +
theme(legend.position = c(2, 1),
      legend.justification = c(1, 1),
      legend.background = element_rect(fill = "white", color = NA),
      legend.key.size = unit(0.8, "cm"),
      legend.text = element_text(size = 11),
      legend.title = element_text(size = 12, face = "bold"),
      panel.grid.major.y = element_line(color = "gray85", linetype = "dotted"),
      axis.text.x = element_text(size = 12))

```

## How Respondents Ranked SSEC Reform Importance Across Frame



```
ggsave("framing_plot_word_ready.png", width = 7, height = 5, dpi = 450)
```

## Trump Policy Facet Graph

```
x$D5 <- as.numeric(x$D5)
trump <- x |> filter(D5<4 | D5>5) |> mutate(Cutoff_Income = ifelse(D5 > 5, 1, 0)) # high values get a 1

trump$Cutoff_Income <- as.factor(trump$Cutoff_Income)

ordinal_model_t_cutoff <- clm(NJ4 ~ Frame*Cutoff_Income + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
  NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D8, data = trump)

ordinal_model_t_cutoff_no <- clm(NJ4 ~ Frame + Cutoff_Income + NJ6 + NJ7+ NJ8+ NJ9 +NJ10_1 +
  NJ11 + NJ12 + D1 + sex + agecat+ education + racethn + D8, data = trump)

frame_income_effect_trump <- ggpredict(ordinal_model_t_cutoff, terms = c("Frame", "Cutoff_Income"))
print(frame_income_effect_trump)

## # Predicted probabilities of NJ4
##
## NJ4: 1
## Cutoff_Income: 0
##
```

```

## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.08 | 0.05, 0.12
## NJ1   |      0.08 | 0.05, 0.11
## NJ2   |      0.09 | 0.06, 0.13
##
## NJ4: 1
## Cutoff_Income: 1
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.06 | 0.04, 0.09
## NJ1   |      0.07 | 0.05, 0.11
## NJ2   |      0.05 | 0.04, 0.08
##
## NJ4: 2
## Cutoff_Income: 0
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.12 | 0.09, 0.17
## NJ1   |      0.12 | 0.08, 0.17
## NJ2   |      0.14 | 0.10, 0.19
##
## NJ4: 2
## Cutoff_Income: 1
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.10 | 0.07, 0.14
## NJ1   |      0.12 | 0.08, 0.16
## NJ2   |      0.09 | 0.07, 0.13
##
## NJ4: 3
## Cutoff_Income: 0
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.32 | 0.28, 0.37
## NJ1   |      0.32 | 0.27, 0.37
## NJ2   |      0.33 | 0.30, 0.38
##
## NJ4: 3
## Cutoff_Income: 1
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.30 | 0.25, 0.35
## NJ1   |      0.32 | 0.27, 0.36
## NJ2   |      0.28 | 0.23, 0.33
##
## NJ4: 4
## Cutoff_Income: 0
##

```

```

## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.24 | 0.21, 0.28
## NJ1   |      0.24 | 0.21, 0.28
## NJ2   |      0.23 | 0.19, 0.27
##
## NJ4: 4
## Cutoff_Income: 1
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.25 | 0.23, 0.29
## NJ1   |      0.25 | 0.21, 0.28
## NJ2   |      0.26 | 0.23, 0.29
##
## NJ4: 5
## Cutoff_Income: 0
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.23 | 0.17, 0.32
## NJ1   |      0.24 | 0.17, 0.33
## NJ2   |      0.21 | 0.15, 0.29
##
## NJ4: 5
## Cutoff_Income: 1
##
## Frame | Predicted |      95% CI
## -----
## NJ3   |      0.28 | 0.21, 0.37
## NJ1   |      0.25 | 0.18, 0.33
## NJ2   |      0.31 | 0.24, 0.40
##
## Adjusted for:
## *      NJ6 =    1
## *      NJ7 = 2.00
## *      NJ8 = 2.00
## *      NJ9 = 3.00
## *    NJ10_1 = 3.00
## *      NJ11 =    1
## *      NJ12 = 3.00
## *        D1 =    1
## *       sex =    1
## *    agecat = 5.00
## * education = 3.00
## *   racethn =    1
## *        D8 =    1

```

```

# Convert to data frame
frame_income_effect_trump <- as.data.frame(frame_income_effect_trump)

# Frame relabeling
frame_income_effect_trump$Frame <- factor(frame_income_effect_trump$x,

```

```

                                levels = c("NJ3", "NJ1", "NJ2"),
                                labels = c("Control", "Collectivist", "Individualist"))

# Response labeling
frame_income_effect_trump$response.label <- factor(frame_income_effect_trump$response.level,
                                                    levels = c("1", "2", "3", "4", "5"),
                                                    labels = c("Completely Opposed",
                                                                "Somewhat Opposed",
                                                                "Neutral",
                                                                "Somewhat Supportive",
                                                                "Completely Supportive"))

# Income Group Relabeling
frame_income_effect_trump$Income_group <- factor(frame_income_effect_trump$group,
                                                  levels = c("0", "1"),
                                                  labels = c("Below Income Cutoff",
                                                            "Above Income Cutoff"))

# Plotting

ggplot(frame_income_effect_trump, aes(x = Frame, y = predicted,
                                     ymin = conf.low, ymax = conf.high,
                                     color = response.label,
                                     shape = response.label,
                                     group = interaction(response.label, Income_group))) +

  geom_hline(yintercept = seq(0, 1, by = 0.1), color = "gray90", linetype = "dotted") +

  geom_errorbar(linewidth = 0.8,
               position = position_dodge(width = 0.6), width = 0.15,
               na.rm = TRUE) +

  geom_point(size = 3,
             position = position_dodge(width = 0.6),
             na.rm = TRUE) +

  scale_color_manual(name = "Level of Support",
                    values = c("Completely Opposed" = "#440154FF",
                              "Somewhat Opposed" = "#3B528BFF",
                              "Neutral" = "#21908CFF",
                              "Somewhat Supportive" = "#5DC863FF",
                              "Completely Supportive" = "#800000")) +

  scale_shape_manual(name = "Level of Support",
                    values = c(19, 19, 19, 19, 19)) +

  scale_y_continuous("Predicted Probability", limits = c(0, 1), breaks = seq(0, 1, by = 0.1)) +

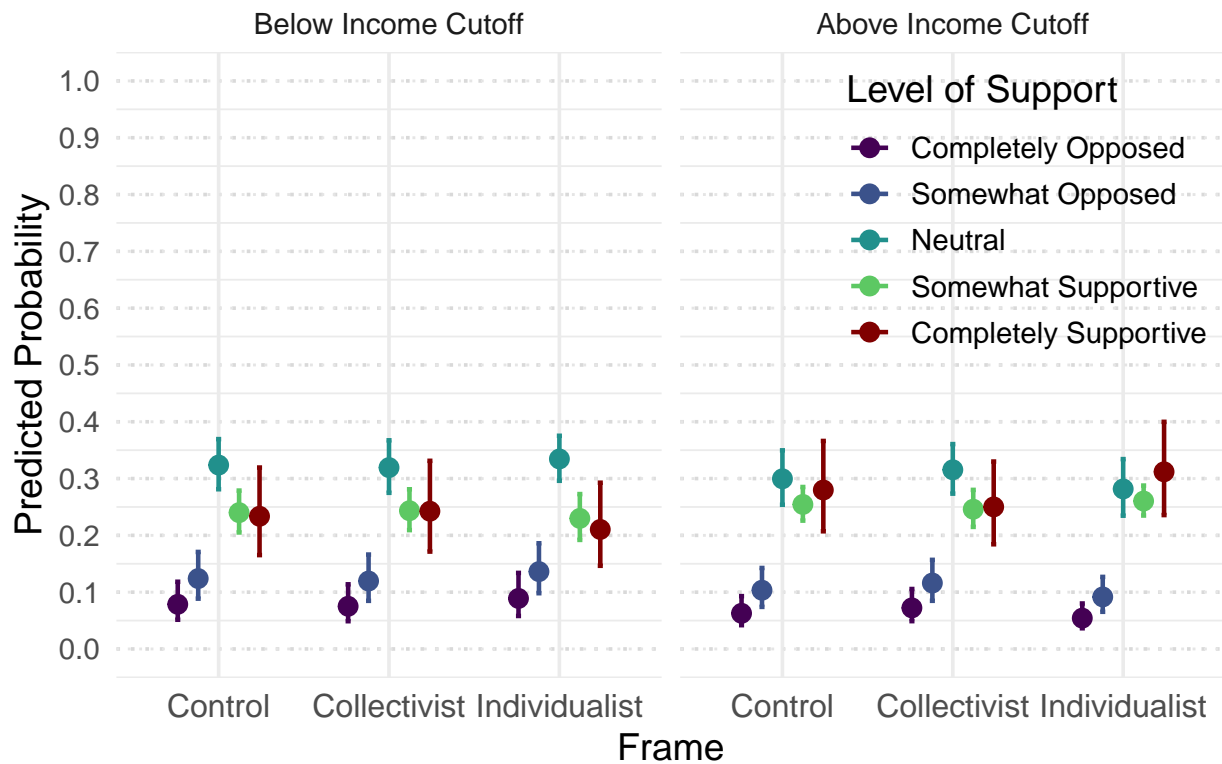
  labs(subtitle = "Predicted Support for Social Security Reform by Frame × Income",
       x = "Frame",
       y = "Predicted Probability") +

  facet_wrap(~ Income_group) +

```

```
theme_minimal(base_size = 14) +
theme(legend.position = c(1, 1),
      legend.justification = c(1, 1),
      panel.grid.major.y = element_line(color = "gray85", linetype = "dotted"),
      axis.text.x = element_text(size = 12))
```

## Predicted Support for Social Security Reform by Frame x Income



```
ggsave("framing_interaction_plot_word.png", width = 7, height = 5, dpi = 450)
```

## Plot Ordinal Model Harris Policy

```
# Compute predicted probabilities for Frame
frame_effect_h <- ggpredict(ordinal_model_h, terms = "Frame")

# Convert to data.frame
frame_effect_h <- as.data.frame(frame_effect_h)

# Relabeling response categories
frame_effect_h$response.label <- factor(frame_effect_h$response.level,
                                       levels = c("1", "2", "3", "4", "5"),
                                       labels = c("Completely Opposed",
                                                  "Somewhat Opposed",
```

```

"Neutral",
"Somewhat Supportive",
"Completely Supportive"))

# Relabel Frame categories
frame_effect_h$x <- factor(frame_effect_h$x,
                           levels = c("NJ3", "NJ1", "NJ2"),
                           labels = c("Control", "Collectivist", "Individualist"))

# Plotting
ggplot(frame_effect_h, aes(x = x, y = predicted,
                           ymin = conf.low, ymax = conf.high,
                           color = response.label,
                           shape = response.label,
                           group = response.label)) +

geom_hline(yintercept = seq(0, 1, by = 0.1), color = "gray90", linetype = "dotted") +

geom_errorbar(linewidth = 1, position = position_dodge(width = 0.6), width = 0.15, na.rm = TRUE) +

geom_point(size = 3, position = position_dodge(width = 0.6), na.rm = TRUE) +

scale_color_manual(name = "Level of Support",
                   values = c("Completely Opposed" = "#440154FF",
                              "Somewhat Opposed" = "#3B528BFF",
                              "Neutral" = "#21908CFF",
                              "Somewhat Supportive" = "#5DC863FF",
                              "Completely Supportive" = "#800000")) +

scale_shape_manual(name = "Level of Support",
                   values = c("Completely Opposed" = 19,
                              "Somewhat Opposed" = 19,
                              "Neutral" = 19,
                              "Somewhat Supportive" = 19,
                              "Completely Supportive" = 19)) +

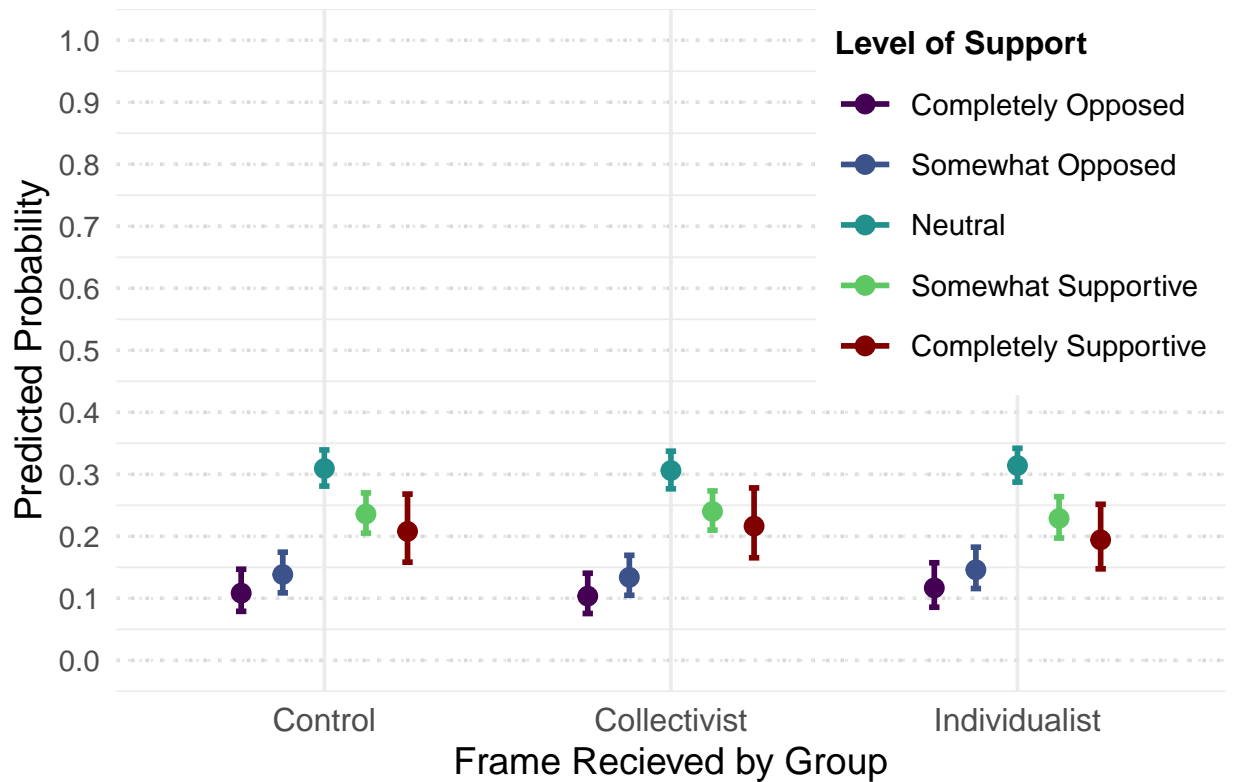
scale_y_continuous("Predicted Probability", limits = c(0, 1.0), breaks = seq(0, 1, by = 0.1)) +

labs(subtitle = str_wrap("How Respondents Felt About Harris' Policy, Across Frames"),
     x = "Frame Recieved by Group",
     y = "Predicted Probability of Support Level")+

theme_minimal(base_size = 14) +
theme(legend.position = c(1, 1),
      legend.justification = c(1, 1),
      legend.background = element_rect(fill = "white", color = NA),
      legend.key.size = unit(0.8, "cm"),
      legend.text = element_text(size = 11),
      legend.title = element_text(size = 12, face = "bold"),
      panel.grid.major.y = element_line(color = "gray85", linetype = "dotted"),
      axis.text.x = element_text(size = 12))

```

## How Respondents Felt About Harris' Policy, Across Frames



```
ggsave("framing_plot_harris_word.png", width = 7, height = 5, dpi = 450)
```

## Experiment Part 2: Voting Patterns

### Do Voters' Preferences Match their Votes

```
x <- x |>
mutate(SupportCategory_4 = case_when(
  NJ4 %in% c(4, 5) ~ "Support",
  NJ4 == 3 ~ "Neutral",
  NJ4 %in% c(1, 2) ~ "Not Support"
))

x <- x |>
mutate(SupportCategory_5 = case_when(
  NJ5 %in% c(4, 5) ~ "Support",
  NJ5 == 3 ~ "Neutral",
  NJ5 %in% c(1, 2) ~ "Not Support"
))

# Calculate the percentage of "Not Support" voters for each candidate
non_support_summary_trump <- x |>
group_by(vote) |>
```



```

summarize(
  Total_Voters = n(),
  Non_Support_Voters = sum(SupportCategory_4 == "Not Support"),
  Percentage_Non_Support = (Non_Support_Voters / Total_Voters) * 100
)

# Results
print(non_support_summary_trump)

```

```

## # A tibble: 4 x 4
##   vote Total_Voters Non_Support_Voters Percentage_Non_Support
##   <int>         <int>         <int>             <dbl>
## 1     1           652             114             17.5
## 2     2           768             171             22.3
## 3     3           51              11             21.6
## 4     4          532            107             20.1

```

*# 17 percent of Trump supporters do not support Trump's policies, while 22% of Harris voters did not support Trump's policies.*

```

# Calculate the percentage of "Not Support" voters for each candidate for Harris Policy
non_support_summary_harris <- x |>
  group_by(vote) |>
  summarize(
    Total_Voters = n(),
    Non_Support_Voters = sum(SupportCategory_5 == "Not Support"),
    Percentage_Non_Support = (Non_Support_Voters / Total_Voters) * 100
  )

# Results
print(non_support_summary_harris)

```

```

## # A tibble: 4 x 4
##   vote Total_Voters Non_Support_Voters Percentage_Non_Support
##   <int>         <int>         <int>             <dbl>
## 1     1           652             176             27.0
## 2     2           768             145             18.9
## 3     3           51              9             17.6
## 4     4          532            122             22.9

```

*# 27% of Trump Supporters do not support Harris' policy. Conversely, 18 percent of Harris supporters do not support her own policy.*

*# The first table analyzes the percentage of each category of voters who do (not) support Trump's policy.*

*# The second table analyzes the percentage of each category of voters who do (not) support Harris*

```

# Calculate the percentage of "Support" voters for each candidate Harris Policy
support_summary_5 <- x %>%
  group_by(vote) %>%

```

```

summarize(
  Total_Voters = n(),
  Support_Voters = sum(SupportCategory_5 == "Support"),
  Percentage_Support = (Support_Voters / Total_Voters) * 100
)

print(support_summary_5)

```

```

## # A tibble: 4 x 4
##   vote Total_Voters Support_Voters Percentage_Support
##   <int>      <int>      <int>      <dbl>
## 1     1        652         306         46.9
## 2     2        768         461         60.0
## 3     3         51          29         56.9
## 4     4        532         202         38.0

```

```

# Supporters for Trump Policy
support_summary_4 <- x %>%
  group_by(vote) %>%
  summarize(
    Total_Voters = n(),
    Support_Voters = sum(SupportCategory_4 == "Support"),
    Percentage_Support = (Support_Voters / Total_Voters) * 100
  )

print(support_summary_4)

```

```

## # A tibble: 4 x 4
##   vote Total_Voters Support_Voters Percentage_Support
##   <int>      <int>      <int>      <dbl>
## 1     1        652         404         62.0
## 2     2        768         384         50
## 3     3         51          29         56.9
## 4     4        532         207         38.9

```

```

sum_support_trump <- support_summary_4 |> summarize(Total = sum(Total_Voters), Support = sum(Support_Voters))

sum_support_trump <- sum_support_trump |> mutate(Oppose = Total - Support)
print(sum_support_trump)

```

```

## # A tibble: 1 x 4
##   Total Support Percentage_Total_Support Oppose
##   <int>  <int>      <dbl>  <int>
## 1  2003  1024      0.511   979

```

```

sum_support_harris <- support_summary_5 |> summarize(Total = sum(Total_Voters), Support = sum(Support_Voters))

sum_support_harris <- sum_support_harris |> mutate(Oppose = Total - Support)
print(sum_support_harris)

```

```

## # A tibble: 1 x 4

```

```
## Total Support Percentage_Total_Support Oppose
## <int> <int> <dbl> <int>
## 1 2003 998 0.498 1005
```

## Analyzing whether policy preferences are predictive of voting behavior

```
## Subsetting out non-voters
x2<- x |> filter(vote!=4)

# Fit multinomial logistic regression
multimodel <- multinom(vote ~ NJ4 + NJ5+ NJ6 + NJ7+
+ NJ8+ NJ9 +NJ10_1 +
+ NJ11 + NJ12 + D1+ sex +
+ agecat+ education + as.factor(racethn) + D5
+ D8, data = x2)
```

```
## # weights: 111 (72 variable)
## initial value 1605.072554
## iter 10 value 865.965198
## iter 20 value 743.006703
## iter 30 value 671.185749
## iter 40 value 654.576152
## iter 50 value 650.042683
## iter 60 value 649.597590
## iter 70 value 649.566278
## iter 80 value 649.546039
## iter 90 value 649.538816
## final value 649.538733
## converged
```

```
# Extract coefficients and standard errors
summary_model <- summary(multimodel)
coefs <- summary_model$coefficients
std_errors <- summary_model$standard.errors

# Z-values
z_values <- coefs / std_errors

# P-values
p_values <- 2 * (1 - pnorm(abs(z_values)))
```

## Creating an interpretable multinomial regression table

```
# Fit multinomial logistic regression
multimodel <- multinom(vote ~ NJ4 + NJ5 + NJ6 + NJ7 + NJ8 + NJ9 + NJ10_1 +
+ NJ11 + NJ12 + D1 + sex + agecat + education +
+ as.factor(racethn) + D5 + D8, data = x2)
```

```
## # weights: 111 (72 variable)
```

```

## initial value 1605.072554
## iter 10 value 865.965198
## iter 20 value 743.006703
## iter 30 value 671.185749
## iter 40 value 654.576152
## iter 50 value 650.042683
## iter 60 value 649.597590
## iter 70 value 649.566278
## iter 80 value 649.546039
## iter 90 value 649.538816
## final value 649.538733
## converged

# Convert model output into a structured data frame
results_table <- tidy(multimodel, conf.int = TRUE) %>%
  mutate(Odds_Ratio = exp(estimate)) %>%
  dplyr::select(y.level, term, estimate, std.error, statistic, p.value, conf.low, conf.high)

# Rename columns
results_table <- results_table %>%
  rename(`Outcome` = y.level,
         `Variable` = term,
         `Coef.` = estimate,
         `Std. Err.` = std.error,
         `Z` = statistic,
         `P>|z|` = p.value,
         `[95% Conf. Interval] Lower` = conf.low,
         `[95% Conf. Interval] Upper` = conf.high)

# Format p-values to adjust for small values
results_table <- results_table %>%
  mutate(`P>|z|` = ifelse(`P>|z|` < 0.0001, format(`P>|z|`, scientific = TRUE, digits = 2),
                          round(`P>|z|`, 4)))

# Format numeric values to 4 decimal places
results_table <- results_table %>%
  mutate(across(where(is.numeric), ~round(., 4)))

# Print table
kable(results_table, format = "pipe", align = "r", caption = "Multinomial Logistic Regression Results")

```

Table 1: Multinomial Logistic Regression Results

Outcome	Variable	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval] Lower	[95% Conf. Interval] Upper
2	(Intercept)	- 3.9071	0.7058	- 5.535300e+00	3.1e-08	-5.2905	-2.5237
2	NJ4.L	- 0.7691	0.2373	- 3.241500e+00	0.0012	-1.2341	-0.3041
2	NJ4.Q	- 0.5672	0.2306	- 2.460000e+00	0.0139	-1.0192	-0.1153
2	NJ4.C	0.0863	0.2145	4.021000e- 01	0.6876	-0.3342	0.5067

Outcome	Variable	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval] Lower	[95% Conf. Interval] Upper
2	NJ4^4	0.1933	0.1914	1.010100e+00	0.3124	-0.1818	0.5684
2	NJ5.L	0.5756	0.2203	2.613200e+00	0.009	0.1439	1.0073
2	NJ5.Q	0.9483	0.2152	4.406700e+00	1.0e-05	0.5265	1.3700
2	NJ5.C	-	0.2109	-	0.5216	-0.5484	0.2781
		0.1351		6.408000e-01			
2	NJ5^4	0.2536	0.1928	1.315000e+00	0.1885	-0.1244	0.6315
2	NJ62	-	0.2494	-	0.2248	-0.7915	0.1861
		0.3027		1.213800e+00			
2	NJ63	0.0950	0.2448	3.878000e-01	0.6982	-0.3849	0.5748
2	NJ7	-	0.0678	-	0.3769	-0.1928	0.0730
		0.0599		8.837000e-01			
2	NJ8	0.0298	0.0791	3.769000e-01	0.7062	-0.1252	0.1848
2	NJ9	0.0732	0.0876	8.353000e-01	0.4036	-0.0986	0.2449
2	NJ10_1	-	0.0677	-	0.9494	-0.1371	0.1285
		0.0043		6.350000e-02			
2	NJ112	-	0.2627	-	0.778	-0.5890	0.4408
		0.0741		2.820000e-01			
2	NJ113	-	0.3366	-	0.2792	-1.0241	0.2955
		0.3643		1.082200e+00			
2	NJ114	-	0.3187	-	0.213	-1.0217	0.2278
		0.3969		1.245300e+00			
2	NJ115	0.2963	0.4907	6.038000e-01	0.546	-0.6654	1.2580
2	NJ116	0.2672	0.3663	7.294000e-01	0.4658	-0.4508	0.9852
2	NJ12	0.0511	0.0701	7.296000e-01	0.4656	-0.0862	0.1885
2	D12	-	1.8957	-	0.5472	-4.8565	2.5743
		1.1411		6.020000e-01			
2	D13	-	1.3607	-	0.4246	-3.7533	1.5805
		1.0864		7.984000e-01			
2	D14	-	0.0000	-	0.0e+00	-25.4022	-25.4022
		25.4022		7.797767e+10			
2	D15	7.6938	0.0001	9.141933e+04	0.0e+00	7.6937	7.6940
2	sex2	1.6264	1.8864	8.622000e-01	0.3886	-2.0709	5.3237
2	agecat	0.0106	0.0309	3.423000e-01	0.7321	-0.0499	0.0710
2	education	0.1970	0.0654	3.014000e+00	0.0026	0.0689	0.3251
2	as.factor(racethn)	0.2586	0.2494	4.244700e+00	2.2e-05	0.5698	1.5474

Outcome	Variable	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval] Lower	[95% Conf. Interval] Upper
2	as.factor(racethn)3	-0.1799	0.2694	-6.678000e-01	0.5042	-0.7079	0.3481
2	as.factor(racethn)4	0.4456	0.3337	4.363000e-01	0.6626	-0.5084	0.7996
2	as.factor(racethn)5	0.1972	0.2988	6.600000e-01	0.5093	-0.3884	0.7829
2	D5	-0.0023	0.0327	-7.070000e-02	0.9436	-0.0663	0.0617
2	D82	4.7233	0.2393	1.973820e+01	1.0e-86	4.2543	5.1923
2	D83	2.4404	0.2286	1.067470e+01	1.3e-26	1.9923	2.8885
2	D84	2.6861	0.4273	6.285900e+00	3.3e-10	1.8486	3.5236
3	(Intercept)	-4.9952	1.5000	-3.330100e+00	9e-04	-7.9351	-2.0552
3	NJ4.L	-0.8108	0.4366	-1.857000e+00	0.0633	-1.6664	0.0449
3	NJ4.Q	0.1801	0.4258	4.228000e-01	0.6724	-0.6546	1.0147
3	NJ4.C	-0.4147	0.4343	-9.548000e-01	0.3397	-1.2658	0.4365
3	NJ4^4	0.1562	0.3984	3.919000e-01	0.6951	-0.6248	0.9371
3	NJ5.L	0.8302	0.5971	1.390300e+00	0.1644	-0.3401	2.0005
3	NJ5.Q	-0.6049	0.5423	-1.115400e+00	0.2647	-1.6678	0.4580
3	NJ5.C	0.1023	0.4479	2.285000e-01	0.8193	-0.7755	0.9802
3	NJ5^4	-0.1269	0.3793	-3.346000e-01	0.7379	-0.8703	0.6165
3	NJ62	0.6428	0.4669	1.376700e+00	0.1686	-0.2723	1.5579
3	NJ63	0.4796	0.4627	1.036400e+00	0.3	-0.4274	1.3865
3	NJ7	-0.0243	0.1412	-1.721000e-01	0.8634	-0.3010	0.2524
3	NJ8	-0.3542	0.1969	-1.799200e+00	0.072	-0.7401	0.0316
3	NJ9	-0.1533	0.1824	-8.408000e-01	0.4005	-0.5108	0.2041
3	NJ10_1	-0.0633	0.1314	-4.818000e-01	0.6299	-0.3207	0.1942
3	NJ112	-0.4296	0.4616	-9.306000e-01	0.3521	-1.3344	0.4752
3	NJ113	-1.7480	0.8946	-1.953800e+00	0.0507	-3.5015	0.0055

Outcome	Variable	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval] Lower	[95% Conf. Interval] Upper
3	NJ114	-0.6787	0.6070	-1.118000e+00	0.2636	-1.8684	0.5111
3	NJ115	0.4898	0.9273	5.282000e-01	0.5974	-1.3277	2.3072
3	NJ116	-0.3929	0.6718	-5.849000e-01	0.5586	-1.7097	0.9238
3	NJ12	-0.2133	0.1447	-1.474000e+00	0.1405	-0.4968	0.0703
3	D12	-0.5957	2.2205	-2.683000e-01	0.7885	-4.9478	3.7564
3	D13	1.8135	1.9694	9.208000e-01	0.3571	-2.0465	5.6735
3	D14	0.9745	1.9842	4.911000e-01	0.6233	-2.9144	4.8634
3	D15	-1.1701	0.0000	-2.198641e+05	0.0e+00	-1.1701	-1.1701
3	sex2	1.2949	2.1969	5.894000e-01	0.5556	-3.0110	5.6009
3	agecat	0.1680	0.0668	2.513900e+00	0.0119	0.0370	0.2989
3	education	0.1812	0.1333	1.359700e+00	0.1739	-0.0800	0.4425
3	as.factor(racethr)	0.2046	0.5469	9.226000e-01	0.3562	-0.5673	1.5765
3	as.factor(racethr)	0.1320	0.5819	2.268000e-01	0.8206	-1.0086	1.2725
3	as.factor(racethr)	0.4334	0.6073	2.197000e-01	0.8261	-1.0568	1.3237
3	as.factor(racethr)	0.5318	0.5261	1.200900e+00	0.2298	-0.3993	1.6629
3	D5	0.0637	0.0636	1.001600e+00	0.3165	-0.0609	0.1883
3	D82	2.4698	0.6662	3.707100e+00	2e-04	1.1640	3.7757
3	D83	3.0313	0.5543	5.468600e+00	4.5e-08	1.9449	4.1177
3	D84	4.4059	0.7280	6.052200e+00	1.4e-09	2.9791	5.8327

## Performing Chi-Squared Test to assess collinearity

```
## Trump associations
chi_trump_table <- table(x2$NJ4, x2$D8)

# Perform the Chi-Square test
chi_trump_test <- chisq.test(chi_trump_table)

## Warning in chisq.test(chi_trump_table): Chi-squared approximation may be
## incorrect

# View results
chi_trump_test

##
```

```
## Pearson's Chi-squared test
##
## data:  chi_trump_table
## X-squared = 34.31, df = 12, p-value = 0.0006027

## Trump associations
chi_harris_table <- table(x2$NJ5, x2$D8)

# Perform the Chi-Square test
chi_harris_test <- chisq.test(chi_harris_table)

## Warning in chisq.test(chi_harris_table): Chi-squared approximation may be
## incorrect

# View results
chi_harris_test

##
## Pearson's Chi-squared test
##
## data:  chi_harris_table
## X-squared = 37.378, df = 12, p-value = 0.0001939
```

## Creating Stacked Barplot Dataframes for Visual Aid

```
partisan_trump <- x |> group_by(D8, NJ4)|>
  summarise(Count = n(), .groups = "drop") |>
  filter(D8 ==1|D8==2)

## DF for Trump Policy Bar among Republicans
R_trump <- partisan_trump |> filter(D8 ==1) |>
  mutate(Percentage = Count / sum(Count) * 100)

sum(unique(R_trump$Percentage)) ## checking for accuracy

## [1] 100

## DF for Trump Policy Bar among Democrats
D_trump <- partisan_trump |> filter(D8 ==2) |>
  mutate(Percentage = Count / sum(Count) * 100)

sum(unique(D_trump$Percentage)) ## checking for accuracy

## [1] 100

partisan_harris <- x |> group_by(D8, NJ5) |> summarise(Count = n(), .groups = "drop")

R_harris <- partisan_harris |> filter(D8 ==1) |>
  mutate(Percentage = Count / sum(Count) * 100)

sum(unique(R_harris$Percentage)) ## checking for accuracy
```



```
## [1] 100
```

```
D_harris <- partisan_harris |> filter(D8 ==2) |>
  mutate(Percentage = Count / sum(Count) * 100)

sum(unique(D_harris$Percentage)) ## checking for accuracy
```

```
## [1] 100
```

```
all_american_trump <- x |> group_by(NJ4) |>
  summarise(Count = n(), .groups = "drop") %>%
  mutate(Percentage = Count / sum(Count) * 100)

all_american_harris <- x |> group_by(NJ5) |>
  summarise(Count = n(), .groups = "drop") |>
  mutate(Percentage = Count / sum(Count) * 100)

## If all dataframes are accurate, then the value 100 should be printed 4 times
```

## Reorganizing these Dataframes for Subsequent Plots

```
# Specifying the group
R_trump <- R_trump |> mutate(Group = "Republicans")
D_trump <- D_trump |> mutate(Group = "Democrats")
all_american_trump <- all_american_trump |> mutate(Group = "All Americans")

# Combining into one df
stacked_data <- bind_rows(R_trump, D_trump, all_american_trump)

# Renaming to match response levels
stacked_data$NJ4 <- factor(stacked_data$NJ4,
  levels = c("1", "2", "3", "4", "5"),
  labels = c("Completely Opposed",
             "Somewhat Opposed",
             "Neutral",
             "Somewhat Supportive",
             "Completely Supportive"))
```

## Plotting Trump Policy

```
ggplot(stacked_data, aes(x = Group, y = Percentage, fill = NJ4)) +
  geom_bar(stat = "identity", position = "stack") +
  geom_text(aes(label = paste0(round(Percentage, 0), "%")),
    position = position_stack(vjust = 0.5),
    size = 5,
    color = "white",
    fontface = "bold") +
  coord_flip() +
```

```

scale_fill_manual(values = c("Completely Opposed" = "#440154FF",
                             "Somewhat Opposed" = "#3B528BFF",
                             "Neutral" = "#21908CFF",
                             "Somewhat Supportive" = "#5DC863FF",
                             "Completely Supportive" = "#800000")) +

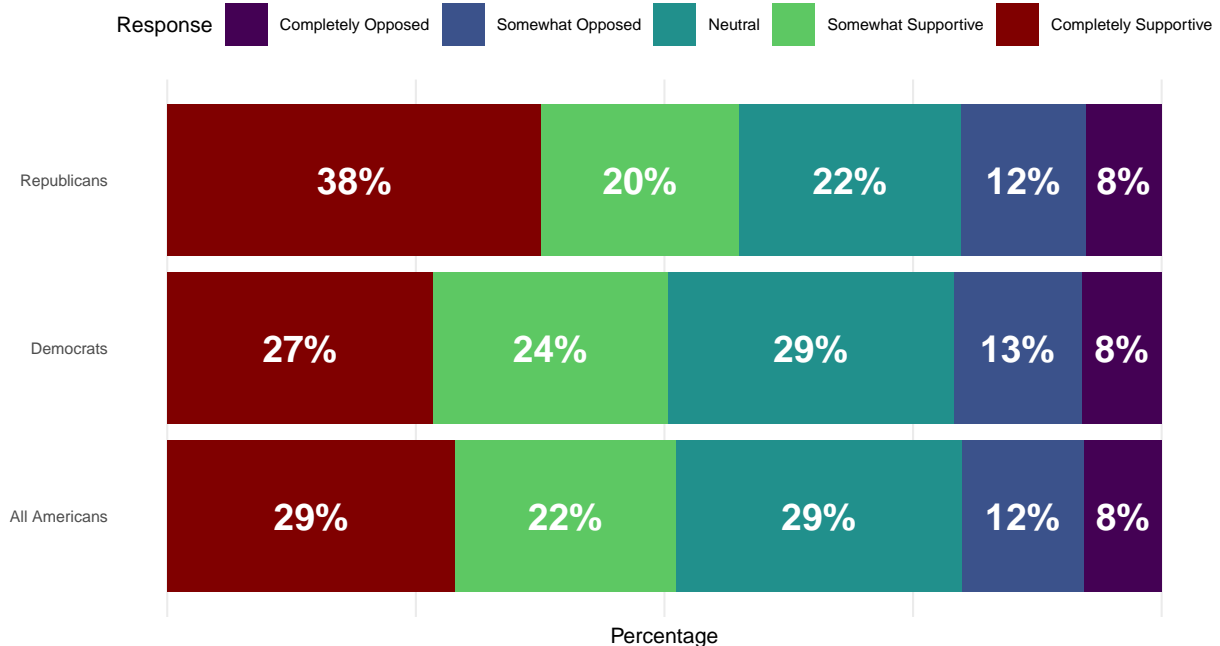
labs(
  title = "American Opinions on Trump's Proposed Social Security Plan \n",
  subtitle = "How do you feel about plans to eliminate the partial income taxation of Social Security
couples)?
\n",
  x = "",
  y = "Percentage",
  fill = "Response"
) +

theme_minimal(base_size = 8) +
theme(
  plot.title = element_text(hjust = 0.5),
  plot.subtitle=element_text(hjust = 0.5),
  panel.grid.major.y = element_blank(),
  panel.grid.minor = element_blank(),
  axis.text.x = element_blank(),
  axis.ticks.x = element_blank(),
  legend.position = "top"
)

```

## American Opinions on Trump's Proposed Social Security Plan

How do you feel about plans to eliminate the partial income taxation of Social Security benefits for seniors earning more than 34,000 USD annually (or 44,000 USD total for married couples)?



```
ggsave("descriptive_trump.png", width = 7, height = 5, dpi = 600)
```

## Organizing Data for Harris

```
# Group specification
R_harris <- R_harris |> mutate(Group = "Republicans")
D_harris <- D_harris |> mutate(Group = "Democrats")
all_american_harris <- all_american_harris |> mutate(Group = "All Americans")

# Creating one df
stacked_data <- bind_rows(R_harris, D_harris, all_american_harris)

# Renaming NJ5 to match response levels
stacked_data$NJ5 <- factor(stacked_data$NJ5,
                           levels = c("1", "2", "3", "4", "5"),
                           labels = c("Completely Opposed",
                                       "Somewhat Opposed",
                                       "Neutral",
                                       "Somewhat Supportive",
                                       "Completely Supportive"))
```

##Plotting Harris

```
ggplot(stacked_data, aes(x = Group, y = Percentage, fill = NJ5)) +
  geom_bar(stat = "identity", position = "stack") +
  geom_text(aes(label = paste0(round(Percentage, 0), "%"),
                position = position_stack(vjust = 0.5),
                size = 5,
                color = "white",
                fontface = "bold")) +

  coord_flip() +
  scale_fill_manual(values = c("Completely Opposed" = "#440154FF",
                              "Somewhat Opposed" = "#3B528BFF",
                              "Neutral" = "#21908CFF",
                              "Somewhat Supportive" = "#5DC863FF",
                              "Completely Supportive" = "#800000")) +

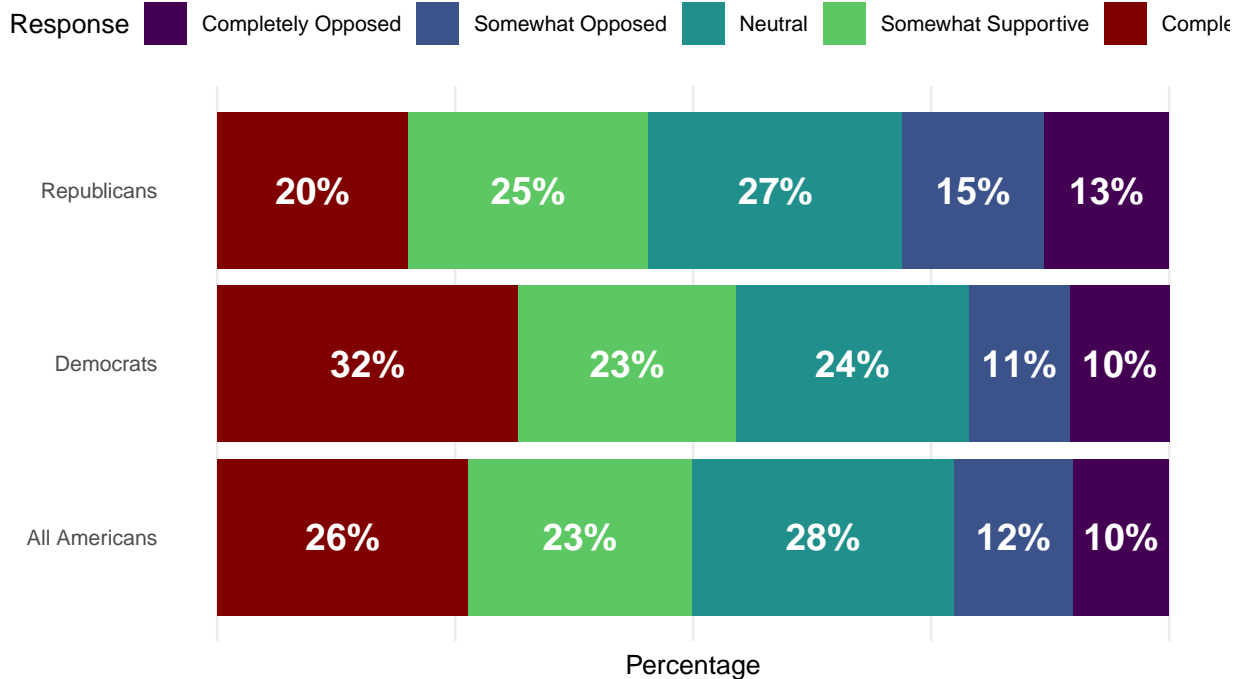
  labs(
    title = "American Opinions on Harris's Proposed Social Security Plan \n",
    subtitle = "How do you feel about plans to add a new tier of Social Security tax collection for Amer",
    x = "",
    y = "Percentage",
    fill = "Response"
  ) +

  theme_minimal(base_size = 10) +
  theme(
    plot.title = element_text(hjust = 0.5),
    plot.subtitle = element_text(hjust = 0.5),
    panel.grid.major.y = element_blank(),
    panel.grid.minor = element_blank(),
```

```
axis.text.x = element_blank(),
axis.ticks.x = element_blank(),
legend.position = "top"
)
```

## American Opinions on Harris's Proposed Social Security Plan

How do you feel about plans to add a new tier of Social Security tax collection for Americans within the highest income bracket?



```
ggsave("descriptive_harris.png", width = 7, height = 5, dpi = 600)
```

## Transferring Regression Tables to Word

### Ordinal Regression 1: Importance

```
coef(summary(ordinal_model_imp))
```

```
##           Estimate Std. Error   z value    Pr(>|z|)
## 1|2      -0.17291120 0.39371637 -0.4391771 6.605332e-01
## 2|3       1.40553268 0.37965792  3.7021028 2.138199e-04
## 3|4       2.52234935 0.38140515  6.6133070 3.758279e-11
## 4|5       3.63779092 0.38616080  9.4204046 4.493533e-21
## FrameNJ1  0.18122279 0.11607876  1.5612053 1.184753e-01
## FrameNJ2  0.10575583 0.11370204  0.9301137 3.523122e-01
## NJ62     -0.53681420 0.12700718 -4.2266446 2.372018e-05
## NJ63     -0.33669754 0.12291538 -2.7392629 6.157710e-03
```

```
## NJ7      -0.06659236 0.03885901 -1.7136917 8.658537e-02
## NJ8      0.03990999 0.04439624  0.8989497 3.686795e-01
## NJ9      0.48945997 0.04789318 10.2198262 1.616305e-24
## NJ10_1   0.04507169 0.03886095  1.1598196 2.461223e-01
## NJ112    0.04313096 0.15850849  0.2721050 7.855413e-01
## NJ113    -0.75064068 0.18792992 -3.9942586 6.489700e-05
## NJ114    -0.12757923 0.18153921 -0.7027640 4.822028e-01
## NJ115    0.37955512 0.28250020  1.3435570 1.790917e-01
## NJ116    0.09295818 0.19047583  0.4880314 6.255276e-01
## NJ12     0.24208115 0.04070577  5.9470973 2.729391e-09
## D12     -0.34861199 0.77423300 -0.4502675 6.525175e-01
## D13     -0.29954577 0.59503928 -0.5034050 6.146795e-01
## D14      0.17272496 0.97644290  0.1768920 8.595932e-01
## D15     -0.84462040 1.22387675 -0.6901188 4.901195e-01
## sex2     0.67668080 0.76723784  0.8819701 3.777930e-01
## agecat   0.19480800 0.01741305 11.1874737 4.696236e-29
## education 0.05730205 0.03736047  1.5337614 1.250884e-01
## racethn2 -0.10927040 0.13367703 -0.8174209 4.136879e-01
## racethn3 -0.23989454 0.15465461 -1.5511632 1.208626e-01
## racethn4 -0.42409949 0.16577064 -2.5583511 1.051699e-02
## racethn5 -0.15573206 0.15883868 -0.9804417 3.268681e-01
## D5       0.04288861 0.01776099  2.4147647 1.574538e-02
## D82      0.14685259 0.12174077  1.2062729 2.277123e-01
## D83      0.03962851 0.12716419  0.3116326 7.553197e-01
## D84      0.05187003 0.19831324  0.2615561 7.936637e-01
```

```
coef_table <- as.data.frame(coef(summary(ordinal_model_imp)))
print(coef_table)
```

```
##           Estimate Std. Error   z value    Pr(>|z|)
## 1|2      -0.17291120 0.39371637 -0.4391771 6.605332e-01
## 2|3       1.40553268 0.37965792  3.7021028 2.138199e-04
## 3|4       2.52234935 0.38140515  6.6133070 3.758279e-11
## 4|5       3.63779092 0.38616080  9.4204046 4.493533e-21
## FrameNJ1  0.18122279 0.11607876  1.5612053 1.184753e-01
## FrameNJ2  0.10575583 0.11370204  0.9301137 3.523122e-01
## NJ62     -0.53681420 0.12700718 -4.2266446 2.372018e-05
## NJ63     -0.33669754 0.12291538 -2.7392629 6.157710e-03
## NJ7      -0.06659236 0.03885901 -1.7136917 8.658537e-02
## NJ8      0.03990999 0.04439624  0.8989497 3.686795e-01
## NJ9      0.48945997 0.04789318 10.2198262 1.616305e-24
## NJ10_1   0.04507169 0.03886095  1.1598196 2.461223e-01
## NJ112    0.04313096 0.15850849  0.2721050 7.855413e-01
## NJ113    -0.75064068 0.18792992 -3.9942586 6.489700e-05
## NJ114    -0.12757923 0.18153921 -0.7027640 4.822028e-01
## NJ115    0.37955512 0.28250020  1.3435570 1.790917e-01
## NJ116    0.09295818 0.19047583  0.4880314 6.255276e-01
## NJ12     0.24208115 0.04070577  5.9470973 2.729391e-09
## D12     -0.34861199 0.77423300 -0.4502675 6.525175e-01
## D13     -0.29954577 0.59503928 -0.5034050 6.146795e-01
## D14      0.17272496 0.97644290  0.1768920 8.595932e-01
## D15     -0.84462040 1.22387675 -0.6901188 4.901195e-01
## sex2     0.67668080 0.76723784  0.8819701 3.777930e-01
## agecat   0.19480800 0.01741305 11.1874737 4.696236e-29
```

```
## education 0.05730205 0.03736047 1.5337614 1.250884e-01
## racethn2 -0.10927040 0.13367703 -0.8174209 4.136879e-01
## racethn3 -0.23989454 0.15465461 -1.5511632 1.208626e-01
## racethn4 -0.42409949 0.16577064 -2.5583511 1.051699e-02
## racethn5 -0.15573206 0.15883868 -0.9804417 3.268681e-01
## D5 0.04288861 0.01776099 2.4147647 1.574538e-02
## D82 0.14685259 0.12174077 1.2062729 2.277123e-01
## D83 0.03962851 0.12716419 0.3116326 7.553197e-01
## D84 0.05187003 0.19831324 0.2615561 7.936637e-01
```

```
colnames(coef_table) <- c("Estimate", "Std. Error", "z value", "p value")
```

```
coef_table <- coef_table %>%
  mutate(`p value` = ifelse(`p value` < 0.0001, format(`p value`, scientific = TRUE, digits = 2),
    round(`p value`, 4)))
```

```
# Making a flextable
```

```
ft <- flextable(coef_table) %>%
  colformat_num(j = c("Estimate", "Std. Error", "z value"), digits = 4) %>%
  colformat_char(j = "p value") %>%
  autofit()
```

```
# Saving as a Word document
```

```
save_as_docx(ft, path = "ordinal_regression_results_1.docx")
```

```
##Trump Ordinal Model
```

```
coef(summary(ordinal_model_t_cutoff_no))
```

```
##           Estimate Std. Error      z value      Pr(>|z|)
## 1|2          -0.39680758 0.37484973 -1.05857775 2.897921e-01
## 2|3           0.69427366 0.37092287  1.87174672 6.124165e-02
## 3|4           2.16758598 0.37415602  5.79326775 6.902992e-09
## 4|5           3.24637336 0.37900307  8.56555961 1.075522e-17
## FrameNJ1      -0.06575747 0.11240237 -0.58501855 5.585352e-01
## FrameNJ2       0.03457993 0.11301228  0.30598384 7.596170e-01
## Cutoff_Income1 0.26861143 0.10851258  2.47539448 1.330891e-02
## NJ62          -0.16199565 0.13368282 -1.21179106 2.255924e-01
## NJ63           0.09854182 0.12244698  0.80477133 4.209516e-01
## NJ7           0.08913856 0.03806652  2.34165246 1.919858e-02
## NJ8           0.07458839 0.04440744  1.67963706 9.302795e-02
## NJ9           0.15058662 0.04686800  3.21299450 1.313588e-03
## NJ10_1         0.06324046 0.03813918  1.65814931 9.728733e-02
## NJ112          0.23629279 0.14833188  1.59300074 1.111600e-01
## NJ113         -0.33958382 0.18457971 -1.83976788 6.580232e-02
## NJ114          0.01978051 0.17344364  0.11404573 9.092015e-01
## NJ115          0.05317574 0.26080702  0.20388923 8.384401e-01
## NJ116          0.16704085 0.18225311  0.91653224 3.593878e-01
## NJ12           0.13385404 0.03890309  3.44070435 5.802021e-04
## D12           0.20442067 0.73989070  0.27628496 7.823292e-01
## D13          -0.04903292 0.59342882 -0.08262646 9.341486e-01
```

```
## D14          0.36873351 0.96892763 0.38055836 7.035310e-01
## D15         -0.44589452 0.95376183 -0.46751139 6.401340e-01
## sex2        -0.14913859 0.73288477 -0.20349527 8.387479e-01
## agecat       0.09479590 0.01658017 5.71742622 1.081496e-08
## education    0.06980129 0.03636391 1.91952088 5.491845e-02
## racethn2    -0.22609566 0.13100594 -1.72584276 8.437570e-02
## racethn3    -0.21148210 0.15845386 -1.33466044 1.819875e-01
## racethn4    -0.42650816 0.16637659 -2.56351058 1.036195e-02
## racethn5    -0.21491631 0.15527869 -1.38406831 1.663375e-01
## D82         -0.15357844 0.11867882 -1.29406781 1.956420e-01
## D83         -0.28340740 0.12597632 -2.24968795 2.446876e-02
## D84         -0.16883845 0.19579268 -0.86233282 3.885044e-01
```

```
coef_table <- as.data.frame(coef(summary(ordinal_model_t_cutoff_no)))
print(coef_table)
```

```
##           Estimate Std. Error      z value      Pr(>|z|)
## 1|2          -0.39680758 0.37484973 -1.05857775 2.897921e-01
## 2|3           0.69427366 0.37092287 1.87174672 6.124165e-02
## 3|4           2.16758598 0.37415602 5.79326775 6.902992e-09
## 4|5           3.24637336 0.37900307 8.56555961 1.075522e-17
## FrameNJ1     -0.06575747 0.11240237 -0.58501855 5.585352e-01
## FrameNJ2       0.03457993 0.11301228 0.30598384 7.596170e-01
## Cutoff_Income1 0.26861143 0.10851258 2.47539448 1.330891e-02
## NJ62         -0.16199565 0.13368282 -1.21179106 2.255924e-01
## NJ63          0.09854182 0.12244698 0.80477133 4.209516e-01
## NJ7           0.08913856 0.03806652 2.34165246 1.919858e-02
## NJ8           0.07458839 0.04440744 1.67963706 9.302795e-02
## NJ9           0.15058662 0.04686800 3.21299450 1.313588e-03
## NJ10_1        0.06324046 0.03813918 1.65814931 9.728733e-02
## NJ112         0.23629279 0.14833188 1.59300074 1.111600e-01
## NJ113        -0.33958382 0.18457971 -1.83976788 6.580232e-02
## NJ114         0.01978051 0.17344364 0.11404573 9.092015e-01
## NJ115         0.05317574 0.26080702 0.20388923 8.384401e-01
## NJ116         0.16704085 0.18225311 0.91653224 3.593878e-01
## NJ12          0.13385404 0.03890309 3.44070435 5.802021e-04
## D12           0.20442067 0.73989070 0.27628496 7.823292e-01
## D13          -0.04903292 0.59342882 -0.08262646 9.341486e-01
## D14           0.36873351 0.96892763 0.38055836 7.035310e-01
## D15          -0.44589452 0.95376183 -0.46751139 6.401340e-01
## sex2         -0.14913859 0.73288477 -0.20349527 8.387479e-01
## agecat       0.09479590 0.01658017 5.71742622 1.081496e-08
## education    0.06980129 0.03636391 1.91952088 5.491845e-02
## racethn2    -0.22609566 0.13100594 -1.72584276 8.437570e-02
## racethn3    -0.21148210 0.15845386 -1.33466044 1.819875e-01
## racethn4    -0.42650816 0.16637659 -2.56351058 1.036195e-02
## racethn5    -0.21491631 0.15527869 -1.38406831 1.663375e-01
## D82         -0.15357844 0.11867882 -1.29406781 1.956420e-01
## D83         -0.28340740 0.12597632 -2.24968795 2.446876e-02
## D84         -0.16883845 0.19579268 -0.86233282 3.885044e-01
```

```
colnames(coef_table) <- c("Estimate", "Std. Error", "z value", "p value")
```

```

coef_table <- coef_table %>%
  mutate(`p value` = ifelse(`p value` < 0.0001, format(`p value`, scientific = TRUE, digits = 2),
    round(`p value`, 4)))

# Making a flextable
ft <- flextable(coef_table) %>%
  colformat_num(j = c("Estimate", "Std. Error", "z value"), digits = 4) %>%
  colformat_char(j = "p value") %>%
  autofit()

# Saving as a Word document
save_as_docx(ft, path = "ordinal_regression_results_t.docx")

```

## Harris Ordinal Model

```
coef(summary(ordinal_model_h))
```

	Estimate	Std. Error	z value	Pr(> z )
## 1 2	-0.12554270	0.33078065	-0.3795346	7.042909e-01
## 2 3	0.86602516	0.32903121	2.6320456	8.487247e-03
## 3 4	2.20740483	0.33183470	6.6521218	2.888975e-11
## 4 5	3.31981973	0.33599053	9.8806944	5.048186e-23
## FrameNJ1	0.05101759	0.09918127	0.5143873	6.069812e-01
## FrameNJ2	-0.08450296	0.09993683	-0.8455638	3.977961e-01
## NJ62	-0.21029960	0.11736563	-1.7918330	7.315973e-02
## NJ63	-0.06957866	0.11049011	-0.6297275	5.288729e-01
## NJ7	-0.04855047	0.03398811	-1.4284547	1.531610e-01
## NJ8	0.14879926	0.03970731	3.7474025	1.786752e-04
## NJ9	0.30532396	0.04163582	7.3332043	2.247139e-13
## NJ10_1	-0.03117555	0.03316477	-0.9400200	3.472073e-01
## NJ112	0.09212087	0.13332348	0.6909576	4.895922e-01
## NJ113	-0.22448133	0.16890944	-1.3290040	1.838466e-01
## NJ114	0.03407263	0.15723138	0.2167037	8.284392e-01
## NJ115	0.03205561	0.24302967	0.1319000	8.950634e-01
## NJ116	0.07866827	0.16282731	0.4831392	6.289969e-01
## NJ12	0.06109877	0.03498966	1.7461952	8.077704e-02
## D12	-0.79973638	0.69982799	-1.1427613	2.531377e-01
## D13	-0.76148616	0.50631129	-1.5039881	1.325844e-01
## D14	-0.76443850	0.85194314	-0.8972882	3.695652e-01
## D15	0.26236759	1.06345032	0.2467135	8.051299e-01
## sex2	0.55613302	0.69419601	0.8011181	4.230633e-01
## agecat	0.04696049	0.01463162	3.2095204	1.329566e-03
## education	0.11986942	0.03237305	3.7027531	2.132724e-04
## racethn2	-0.58164377	0.11596378	-5.0157365	5.283070e-07
## racethn3	-0.28606039	0.13928595	-2.0537634	3.999860e-02
## racethn4	-0.50306590	0.14760209	-3.4082573	6.537923e-04
## racethn5	-0.29604125	0.14141903	-2.0933623	3.631683e-02
## D5	0.03375356	0.01541549	2.1895869	2.855421e-02
## D82	0.65396485	0.10531997	6.2093149	5.321609e-10



```
## D83      0.49824027 0.10943631 4.5527876 5.293971e-06
## D84      0.49641757 0.18001499 2.7576457 5.821925e-03
```

```
coef_table <- as.data.frame(coef(summary(ordinal_model_h)))
print(coef_table)
```

```
##           Estimate Std. Error   z value    Pr(>|z|)
## 1|2      -0.12554270 0.33078065 -0.3795346 7.042909e-01
## 2|3       0.86602516 0.32903121 2.6320456 8.487247e-03
## 3|4       2.20740483 0.33183470 6.6521218 2.888975e-11
## 4|5       3.31981973 0.33599053 9.8806944 5.048186e-23
## FrameNJ1  0.05101759 0.09918127 0.5143873 6.069812e-01
## FrameNJ2 -0.08450296 0.09993683 -0.8455638 3.977961e-01
## NJ62      -0.21029960 0.11736563 -1.7918330 7.315973e-02
## NJ63      -0.06957866 0.11049011 -0.6297275 5.288729e-01
## NJ7       -0.04855047 0.03398811 -1.4284547 1.531610e-01
## NJ8       0.14879926 0.03970731 3.7474025 1.786752e-04
## NJ9       0.30532396 0.04163582 7.3332043 2.247139e-13
## NJ10_1    -0.03117555 0.03316477 -0.9400200 3.472073e-01
## NJ112     0.09212087 0.13332348 0.6909576 4.895922e-01
## NJ113     -0.22448133 0.16890944 -1.3290040 1.838466e-01
## NJ114     0.03407263 0.15723138 0.2167037 8.284392e-01
## NJ115     0.03205561 0.24302967 0.1319000 8.950634e-01
## NJ116     0.07866827 0.16282731 0.4831392 6.289969e-01
## NJ12      0.06109877 0.03498966 1.7461952 8.077704e-02
## D12       -0.79973638 0.69982799 -1.1427613 2.531377e-01
## D13       -0.76148616 0.50631129 -1.5039881 1.325844e-01
## D14       -0.76443850 0.85194314 -0.8972882 3.695652e-01
## D15       0.26236759 1.06345032 0.2467135 8.051299e-01
## sex2      0.55613302 0.69419601 0.8011181 4.230633e-01
## agecat    0.04696049 0.01463162 3.2095204 1.329566e-03
## education 0.11986942 0.03237305 3.7027531 2.132724e-04
## racethn2  -0.58164377 0.11596378 -5.0157365 5.283070e-07
## racethn3  -0.28606039 0.13928595 -2.0537634 3.999860e-02
## racethn4  -0.50306590 0.14760209 -3.4082573 6.537923e-04
## racethn5  -0.29604125 0.14141903 -2.0933623 3.631683e-02
## D5        0.03375356 0.01541549 2.1895869 2.855421e-02
## D82       0.65396485 0.10531997 6.2093149 5.321609e-10
## D83       0.49824027 0.10943631 4.5527876 5.293971e-06
## D84       0.49641757 0.18001499 2.7576457 5.821925e-03
```

```
colnames(coef_table) <- c("Estimate", "Std. Error", "z value", "p value")
```

```
coef_table <- coef_table %>%
  mutate(`p value` = ifelse(`p value` < 0.0001, format(`p value`, scientific = TRUE, digits = 2),
                             round(`p value`, 4)))
```

```
# Making a flextable
```

```
ft <- flextable(coef_table) %>%
  colformat_num(j = c("Estimate", "Std. Error", "z value"), digits = 4) %>%
```

```
colformat_char(j = "p value") %>%
autofit()

# Saving as Word document
save_as_docx(ft, path = "ordinal_regression_results_h.docx")
```

## Exporting multinomial regression to word

```
# Making a flextable
flex_table <- flextable(results_table) %>%
  theme_vanilla() %>%
  autofit()

# Save as Word document
doc <- read_docx() %>%
  body_add_flextable(flex_table) %>%
  body_add_par(" ")

print(doc, target = "Multinomial_Regression_Results.docx")

# Showing the results
flex_table
```

```
## Warning: fonts used in 'flextable' are ignored because the 'pdflatex' engine is
## used and not 'xelatex' or 'lualatex'. You can avoid this warning by using the
## 'set_flextable_defaults(fonts_ignore=TRUE)' command or use a compatible engine
## by defining 'latex_engine: xelatex' in the YAML header of the R Markdown
## document.
```

Outcome	Variable	Coef.	Std. Err.	Z	P> z	
2	(Intercept)	-3.9071	0.7058	-5.5353	3.1e-08	
2	NJ4.L	-0.7691	0.2373	-3.2415	0.0012	
2	NJ4.Q	-0.5672	0.2306	-2.4600	0.0139	
2	NJ4.C	0.0863	0.2145	0.4021	0.6876	
2	NJ4 <sup>4</sup>	0.1933	0.1914	1.0101	0.3124	
2	NJ5.L	0.5756	0.2203	2.6132	0.009	
2	NJ5.Q	0.9483	0.2152	4.4067	1.0e-05	
2	NJ5.C	-0.1351	0.2109	-0.6408	0.5216	
2	NJ5 <sup>4</sup>	0.2536	0.1928	1.3150	0.1885	
2	NJ62	-0.3027	0.2494	-1.2138	0.2248	
2	NJ63	0.0950	0.2448	0.3878	0.6982	
2	NJ7	-0.0599	0.0678	-0.8837	0.3769	

Outcome	Variable	Coef.	Std. Err.	Z	P> z	
2	NJ8	0.0298	0.0791	0.3769	0.7062	
2	NJ9	0.0732	0.0876	0.8353	0.4036	
2	NJ10_1	-0.0043	0.0677	-0.0635	0.9494	
2	NJ112	-0.0741	0.2627	-0.2820	0.778	
2	NJ113	-0.3643	0.3366	-1.0822	0.2792	
2	NJ114	-0.3969	0.3187	-1.2453	0.213	
2	NJ115	0.2963	0.4907	0.6038	0.546	
2	NJ116	0.2672	0.3663	0.7294	0.4658	
2	NJ12	0.0511	0.0701	0.7296	0.4656	
2	D12	-1.1411	1.8957	-0.6020	0.5472	
2	D13	-1.0864	1.3607	-0.7984	0.4246	
2	D14	-25.4022	0.0000	-77,977,669,172.4418	0.0e+00	
2	D15	7.6938	0.0001	91,419.3252	0.0e+00	
2	sex2	1.6264	1.8864	0.8622	0.3886	
2	agecat	0.0106	0.0309	0.3423	0.7321	
2	education	0.1970	0.0654	3.0140	0.0026	
2	as.factor(racethn)2	1.0586	0.2494	4.2447	2.2e-05	
2	as.factor(racethn)3	-0.1799	0.2694	-0.6678	0.5042	
2	as.factor(racethn)4	0.1456	0.3337	0.4363	0.6626	
2	as.factor(racethn)5	0.1972	0.2988	0.6600	0.5093	
2	D5	-0.0023	0.0327	-0.0707	0.9436	
2	D82	4.7233	0.2393	19.7382	1.0e-86	
2	D83	2.4404	0.2286	10.6747	1.3e-26	
2	D84	2.6861	0.4273	6.2859	3.3e-10	
3	(Intercept)	-4.9952	1.5000	-3.3301	9e-04	
3	NJ4.L	-0.8108	0.4366	-1.8570	0.0633	
3	NJ4.Q	0.1801	0.4258	0.4228	0.6724	
3	NJ4.C	-0.4147	0.4343	-0.9548	0.3397	
3	NJ4 <sup>4</sup>	0.1562	0.3984	0.3919	0.6951	
3	NJ5.L	0.8302	0.5971	1.3903	0.1644	
3	NJ5.Q	-0.6049	0.5423	-1.1154	0.2647	
3	NJ5.C	0.1023	0.4479	0.2285	0.8193	
3	NJ5 <sup>4</sup>	-0.1269	0.3793	-0.3346	0.7379	
3	NJ62	0.6428	0.4669	1.3767	0.1686	

Outcome	Variable	Coef.	Std. Err.	Z	P> z	
3	NJ63	0.4796	0.4627	1.0364	0.3	
3	NJ7	-0.0243	0.1412	-0.1721	0.8634	
3	NJ8	-0.3542	0.1969	-1.7992	0.072	
3	NJ9	-0.1533	0.1824	-0.8408	0.4005	
3	NJ10_1	-0.0633	0.1314	-0.4818	0.6299	
3	NJ112	-0.4296	0.4616	-0.9306	0.3521	
3	NJ113	-1.7480	0.8946	-1.9538	0.0507	
3	NJ114	-0.6787	0.6070	-1.1180	0.2636	
3	NJ115	0.4898	0.9273	0.5282	0.5974	
3	NJ116	-0.3929	0.6718	-0.5849	0.5586	
3	NJ12	-0.2133	0.1447	-1.4740	0.1405	
3	D12	-0.5957	2.2205	-0.2683	0.7885	
3	D13	1.8135	1.9694	0.9208	0.3571	
3	D14	0.9745	1.9842	0.4911	0.6233	
3	D15	-1.1701	0.0000	-219,864.0501	0.0e+00	
3	sex2	1.2949	2.1969	0.5894	0.5556	
3	agecat	0.1680	0.0668	2.5139	0.0119	
3	education	0.1812	0.1333	1.3597	0.1739	
3	as.factor(racethn)2	0.5046	0.5469	0.9226	0.3562	
3	as.factor(racethn)3	0.1320	0.5819	0.2268	0.8206	
3	as.factor(racethn)4	0.1334	0.6073	0.2197	0.8261	
3	as.factor(racethn)5	0.6318	0.5261	1.2009	0.2298	
3	D5	0.0637	0.0636	1.0016	0.3165	
3	D82	2.4698	0.6662	3.7071	2e-04	
3	D83	3.0313	0.5543	5.4686	4.5e-08	
3	D84	4.4059	0.7280	6.0522	1.4e-09	