## Data Cleaning

#### David Sutton

## 2/19/2020

```
##
## lm(formula = cbind(house12_vars$housevote10 == 1) ~ race_12 +
       gender_12 + Age + educ_12 + faminc_12, data = house12_vars)
##
##
## Residuals:
      Min
                1Q Median
                                3Q
                                       Max
## -0.6416 -0.4472 -0.4037 0.5443 0.6511
##
## Coefficients:
##
                Estimate Std. Error t value Pr(>|t|)
                          0.175396
                                     2.720 0.00677 **
## (Intercept) 0.477072
## race_12
              -0.010873
                           0.020799
                                    -0.523 0.60136
## gender_12
               0.047949
                           0.047174
                                     1.016 0.30995
## Age
               -0.001619
                           0.002136
                                    -0.758
                                            0.44889
                                    -0.069 0.94477
## educ_12
              -0.001164
                           0.016799
## faminc_12
               0.001264
                           0.000891
                                     1.419 0.15671
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Residual standard error: 0.4988 on 463 degrees of freedom
     (1 observation deleted due to missingness)
## Multiple R-squared: 0.00852,
                                    Adjusted R-squared: -0.002187
## F-statistic: 0.7957 on 5 and 463 DF, p-value: 0.5531
##
## Call:
## lm(formula = cbind(house12_vars$housevote10 == 1) ~ guncontrol12 +
       climate12 + immg.status12 + immg.borderpatrol12 + immg.policeqs12 +
##
       immg.finebiz12 + immg.pubgoods12 + immg.citzdenial12 + abortion12 +
       jobs.envir12 + gaymarriage12 + affirmact12 + balbudget1.12 +
##
##
       balbudget2.12, data = house12_vars)
##
## Residuals:
                1Q Median
                                3Q
## -0.7279 -0.4477 -0.3000 0.5136 0.7791
## Coefficients:
##
                         Estimate Std. Error t value Pr(>|t|)
## (Intercept)
                       -0.0014931 0.2796535 -0.005
                                                       0.9957
## guncontrol12
                       -0.0305756 0.0269121 -1.136
                                                       0.2565
## climate12
                       -0.0133712 0.0268146 -0.499
                                                       0.6183
```

```
## immg.status12
                       0.0573803 0.0562189
                                             1.021
                                                     0.3080
## immg.borderpatrol12 0.0380340 0.0543630 0.700
                                                     0.4845
## immg.policeqs12
                       0.0717641 0.0574148 1.250
                                                    0.2120
## immg.finebiz12
                       0.0780664 0.0584913
                                             1.335
                                                     0.1827
## immg.pubgoods12
                      -0.1115749 0.0571484 -1.952
                                                     0.0515
## immg.citzdenial12 0.0962707 0.0607429
                                            1.585
                                                    0.1137
                                            0.495
## abortion12
                       0.0131956 0.0266816
                                                     0.6212
                       0.0105571 0.0214600
## jobs.envir12
                                            0.492
                                                     0.6230
## gaymarriage12
                      -0.0180192 0.0580658 -0.310
                                                     0.7565
## affirmact12
                      0.0254488 0.0317017
                                            0.803
                                                     0.4225
## balbudget1.12
                       0.0570529 0.0331561
                                            1.721
                                                     0.0860
                      -0.0007952 0.0337554 -0.024
## balbudget2.12
                                                     0.9812
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4969 on 438 degrees of freedom
     (17 observations deleted due to missingness)
## Multiple R-squared: 0.03779,
                                  Adjusted R-squared: 0.007032
## F-statistic: 1.229 on 14 and 438 DF, p-value: 0.2508
##
## Call:
## lm(formula = cbind(house12_vars$housevote10 == 1) ~ docvisit12 +
      newchild12 + moveoutchild12 + newmarriage12 + newdivorce12,
##
      data = house12_vars)
##
## Residuals:
               1Q Median
                               3Q
                                     Max
## -0.6029 -0.4630 -0.3561 0.5370 0.6439
##
## Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
## (Intercept)
                  0.909525 0.624854
                                      1.456 0.146
## docvisit12
                 -0.106840
                           0.077651 -1.376
                                                0.170
## newchild12
                  0.070143
                           0.101007
                                      0.694
                                                0.488
## moveoutchild12 0.008985
                             0.093148
                                      0.096
                                                0.923
                             0.227882 -0.478
## newmarriage12 -0.109034
                                                0.633
## newdivorce12 -0.139948
                             0.194752 -0.719
                                                0.473
##
## Residual standard error: 0.4991 on 464 degrees of freedom
## Multiple R-squared: 0.006607,
                                  Adjusted R-squared:
## F-statistic: 0.6172 on 5 and 464 DF, p-value: 0.6868
##
## Call:
## lm(formula = cbind(house12_vars$housevote10 == 1) ~ AAraceresentA12 +
##
      AAraceresentB12 + Hispraceresent12, data = house12_vars)
##
## Residuals:
               1Q Median
##
      Min
                               3Q
                                     Max
## -0.5672 -0.4477 -0.4149 0.5471 0.6553
##
## Coefficients:
##
                    Estimate Std. Error t value Pr(>|t|)
```

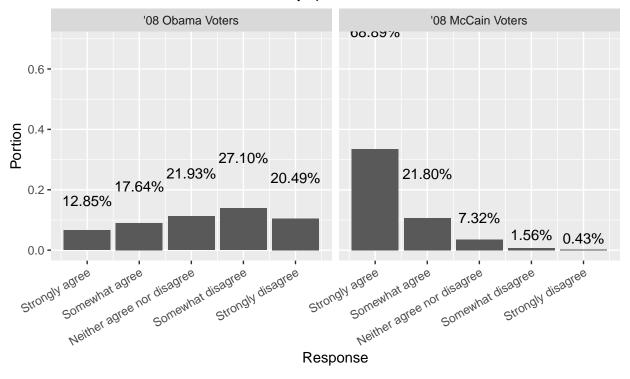
```
## (Intercept)
                   0.589536
                              0.120297
                                        4.901 0.00000132 ***
                              0.034841
## AAraceresentA12
                   0.006056
                                        0.174
                                                   0.862
## AAraceresentB12 -0.032015
                              0.021791
                                      -1.469
                                                   0.142
                                       -0.620
                                                   0.535
## Hispraceresent12 -0.020584
                              0.033175
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Residual standard error: 0.4981 on 464 degrees of freedom
     (2 observations deleted due to missingness)
## Multiple R-squared: 0.006341,
                                  Adjusted R-squared:
                                                     -8.333e-05
## F-statistic: 0.987 on 3 and 464 DF, p-value: 0.3986
##
## Call:
## lm(formula = cbind(pres12_vars$presvote12 == 2) ~ race_12 + gender_12 +
      Age + educ_12 + faminc_12, data = pres12_vars)
##
## Residuals:
      Min
               1Q Median
                              30
                                     Max
## -0.7191 -0.5548 0.3244 0.3978 0.5193
##
## Coefficients:
##
                 Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.67930728 0.20068839
                                     3.385 0.000805 ***
              ## race_12
## gender_12
              -0.11690062 0.05648317
                                     -2.070 0.039321 *
              0.00207184 0.00235082
                                     0.881 0.378831
## Age
## educ 12
              -0.00302322 0.01995892 -0.151 0.879703
              ## faminc_12
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Residual standard error: 0.4886 on 307 degrees of freedom
## Multiple R-squared: 0.01828,
                                  Adjusted R-squared:
## F-statistic: 1.143 on 5 and 307 DF, p-value: 0.3375
##
## Call:
## lm(formula = cbind(pres12_vars$presvote12 == 2) ~ guncontrol12 +
##
      climate12 + immg.status12 + immg.borderpatrol12 + immg.policeqs12 +
##
      immg.finebiz12 + immg.pubgoods12 + immg.citzdenial12 + abortion12 +
##
      jobs.envir12 + gaymarriage12 + affirmact12 + balbudget1.12 +
      balbudget2.12, data = pres12_vars)
##
##
## Residuals:
##
       Min
                 1Q
                     Median
                                  3Q
                                          Max
  -0.97216 -0.39369 0.08641 0.38107 0.73181
##
## Coefficients:
##
                      Estimate Std. Error t value Pr(>|t|)
## (Intercept)
                      0.417563 0.306012
                                           1.365
                                                    0.1735
## guncontrol12
                      0.026292 0.028737
                                           0.915
                                                    0.3610
## climate12
                      0.113367 0.027125
                                           4.179 0.0000389 ***
## immg.status12
                      0.030626 0.060366 0.507
                                                    0.6123
```

```
## immg.borderpatrol12 -0.041743 0.064266 -0.650
                                                     0.5165
                                                     0.1708
## immg.policeqs12
                      -0.084390 0.061455 -1.373
## immg.finebiz12
                      -0.021028 0.075169 -0.280
                                                     0.7799
## immg.pubgoods12
                      -0.007692 0.058994 -0.130
                                                     0.8964
## immg.citzdenial12
                      -0.037574 0.058547
                                           -0.642
                                                     0.5215
## abortion12
                      -0.047152 0.028553 -1.651
                                                     0.0998 .
## jobs.envir12
                      0.053345 0.023454
                                           2.274
                                                     0.0237 *
                      ## gaymarriage12
                                                     0.7913
## affirmact12
                       0.043730 0.034582
                                           1.265
                                                     0.2071
## balbudget1.12
                      -0.046707
                                  0.037513 -1.245
                                                     0.2141
## balbudget2.12
                       0.006703 0.036386
                                           0.184
                                                     0.8540
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.44 on 286 degrees of freedom
     (12 observations deleted due to missingness)
## Multiple R-squared: 0.2327, Adjusted R-squared: 0.1952
## F-statistic: 6.197 on 14 and 286 DF, p-value: 0.00000000008872
##
## Call:
## lm(formula = cbind(pres12 vars$presvote12 == 2) ~ docvisit12 +
##
      newchild12 + moveoutchild12 + newmarriage12 + newdivorce12,
##
      data = pres12_vars)
##
## Residuals:
##
               1Q Median
                               3Q
      Min
                                      Max
## -0.7837 -0.6112 0.3888 0.3888
##
## Coefficients:
##
                 Estimate Std. Error t value Pr(>|t|)
## (Intercept)
                 1.18045
                            0.72663
                                      1.625
                                               0.105
## docvisit12
                 -0.05677
                             0.08371 -0.678
                                               0.498
## newchild12
                  0.08887
                             0.11003
                                      0.808
                                               0.420
## moveoutchild12 -0.09300
                             0.11688 -0.796
                                               0.427
## newmarriage12 -0.22926
                             0.22353 -1.026
                                               0.306
## newdivorce12
                 -0.02284
                             0.22518 -0.101
                                               0.919
## Residual standard error: 0.4913 on 307 degrees of freedom
## Multiple R-squared: 0.007528,
                                   Adjusted R-squared:
                                                       -0.008636
## F-statistic: 0.4657 on 5 and 307 DF, p-value: 0.8017
##
## Call:
  lm(formula = cbind(pres12_vars$presvote12 == 2) ~ AAraceresentA12 +
      AAraceresentB12 + Hispraceresent12, data = pres12_vars)
##
##
## Residuals:
               10 Median
                               3Q
                                      Max
## -0.7428 -0.5214 0.2572 0.3760 0.7865
## Coefficients:
                   Estimate Std. Error t value
                               0.13008 4.978 0.00000107 ***
## (Intercept)
                    0.64755
```

```
## AAraceresentA12 -0.02345
                             0.04427 -0.530
                                                  0.5966
## AAraceresentB12 0.03958
                            0.02424 1.633
                                                  0.1035
## Hispraceresent12 -0.07920
                            0.04570 - 1.733
                                                  0.0841 .
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Residual standard error: 0.4742 on 308 degrees of freedom
    (1 observation deleted due to missingness)
## Multiple R-squared: 0.07055, Adjusted R-squared: 0.06149
## F-statistic: 7.792 on 3 and 308 DF, p-value: 0.00004967
##
## Call:
## lm(formula = cbind(CCES_Panel_Full3waves_VV_V4$CC10_317 == 2) ~
      CC10_422a + CC10_422b, data = CCES_Panel_Full3waves_VV_V4)
##
## Residuals:
##
               1Q Median
                              ЗQ
      Min
                                     Max
## -0.8039 -0.3311 0.1416 0.1961 1.1416
##
## Coefficients:
##
               Estimate Std. Error t value
                                                     Pr(>|t|)
## (Intercept) 0.440054
                         0.021665
                                   20.31 < 0.00000000000000000 ***
                          0.004295 -31.75 < 0.0000000000000000 ***
## CC10_422a
             -0.136342
## CC10 422b
              0.100032
                        0.003990
                                   25.07 < 0.0000000000000000 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.3944 on 8859 degrees of freedom
    (638 observations deleted due to missingness)
## Multiple R-squared: 0.376, Adjusted R-squared: 0.3759
## F-statistic: 2669 on 2 and 8859 DF, p-value: < 0.00000000000000022
```

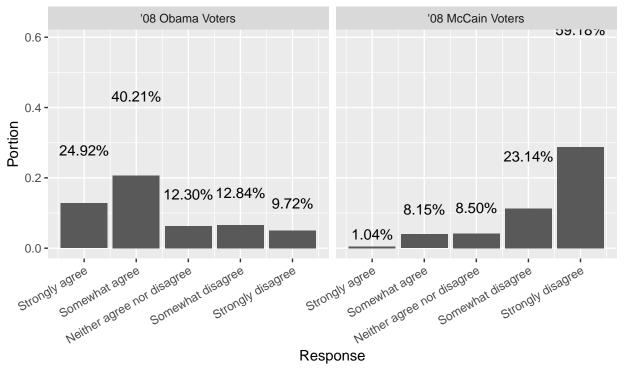
#### Racial Resentment of Blacks - 1

The Irish, Italians, Jews and many other minorities overcame prejudice and worked their values blacks should do the same without any special favors.



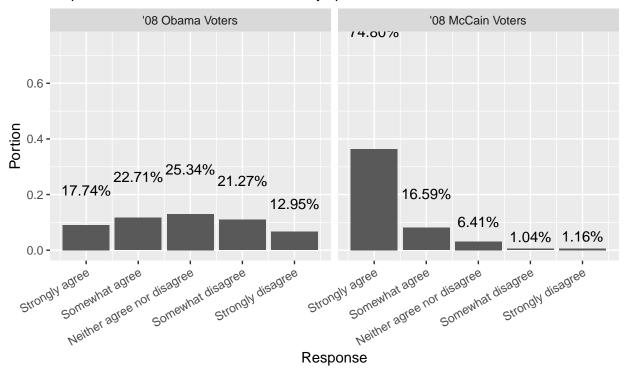
## Racial Resentment of Blacks - 2

Generations of slavery and discrimination have created conditions that make it difficult for to work their way out of the lower class.



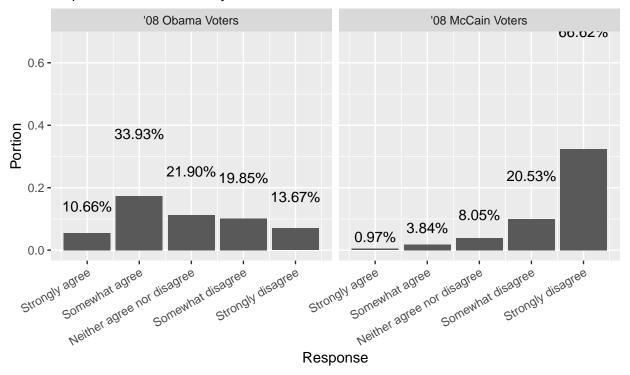
## Racial Resentment of Hispanics - 1

The Irish, Italians, Jews and many other minorities overcame prejudice and worked their v Hispanics should do the same without any special favors.

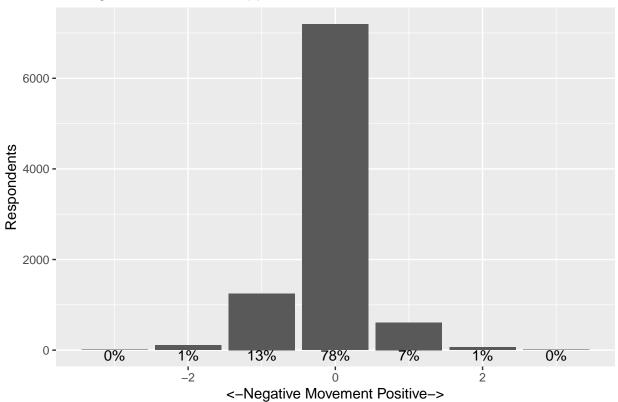


## Racial Resentment of Hispanics - 2

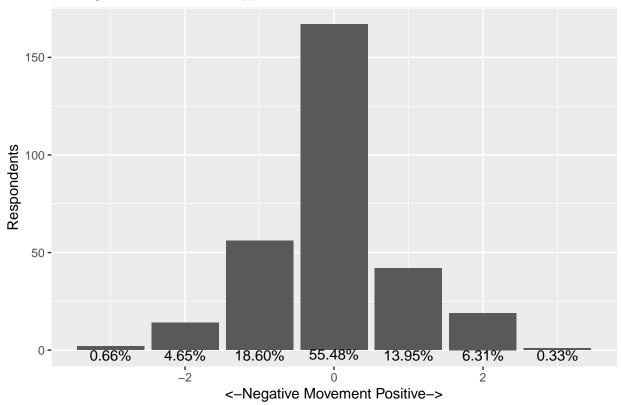
Generations of slavery and discrimination have created conditions that make it difficult for Hispanics to work their way out of the lower class.



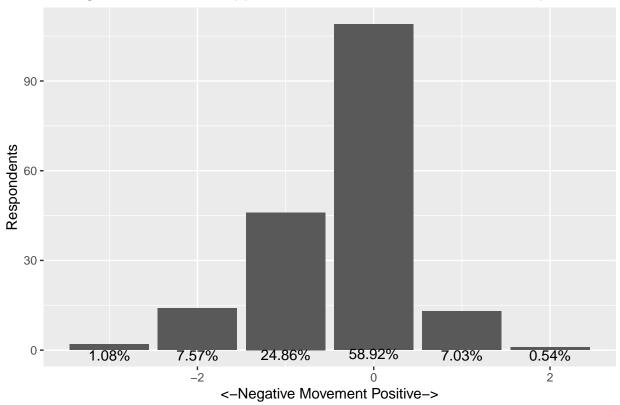
Change in Presidential Approval from 2010 to 2014: General Public



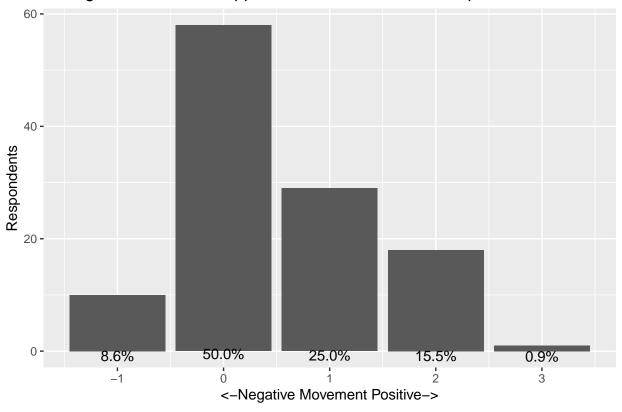
Change in Presidential Approval from 2010 to 2014: Switchers



# Change in Presidential Approval from 2010 to 2014: Dem-to-Rep Switchers



#### Change in Presidential Approval from 2010 to 2014: Rep-to-Dem Switchers



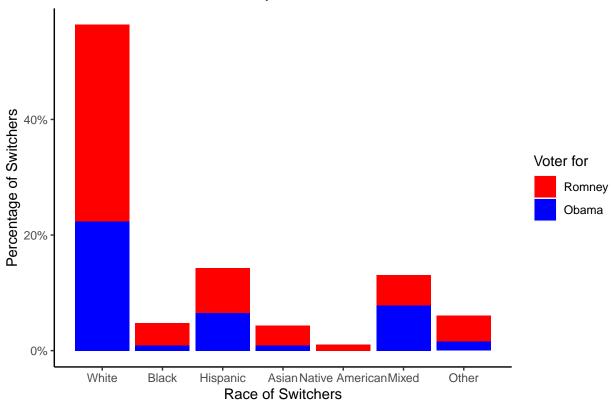
#### Milestone 5

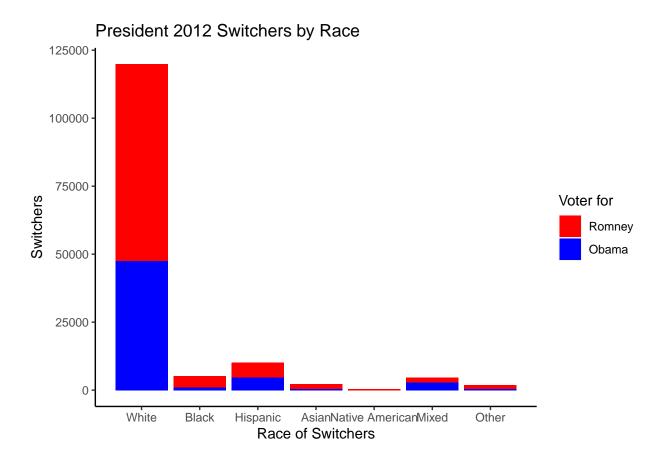
```
##
## Call:
## lm(formula = cbind(CCES_Panel.vars$pres.switch == 1) ~ race_12 +
       gender_12 + Age.12 + educ_12 + faminc_12 + guncontrol12 +
##
##
       climate12 + immg.status12 + immg.borderpatrol12 + immg.policeqs12 +
##
       immg.finebiz12 + immg.pubgoods12 + immg.citzdenial12 + abortion12 +
       jobs.envir12 + gaymarriage12 + affirmact12 + balbudget1.12 +
##
##
       balbudget2.12 + docvisit12 + newchild12 + moveoutchild12 +
##
       newmarriage12 + newdivorce12 + AAraceresentA12 + AAraceresentB12 +
##
       Hispraceresent12, data = CCES_Panel.vars)
##
  Coefficients:
##
##
           (Intercept)
                                     race_12
                                                        gender_12
            0.10285988
                                                        0.00600541
##
                                  0.00331345
##
                Age.12
                                     educ_12
                                                        faminc_12
##
           -0.00047997
                                 -0.00250672
                                                       -0.00002552
##
          guncontrol12
                                   climate12
                                                    immg.status12
                                 -0.01778270
                                                       0.00399880
##
            0.00401248
##
  immg.borderpatrol12
                             immg.policeqs12
                                                   immg.finebiz12
##
           -0.00063371
                                 -0.01619733
                                                      -0.01115589
```

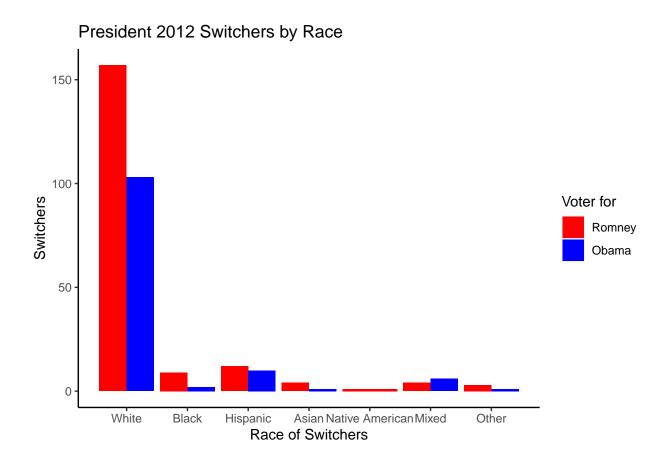
```
##
       immg.pubgoods12
                           immg.citzdenial12
                                                        abortion12
##
           -0.00012914
                                  0.01216344
                                                        0.00259913
##
          jobs.envir12
                               gaymarriage12
                                                       affirmact12
            0.00554541
                                 -0.00309504
##
                                                        0.00241928
##
         balbudget1.12
                               balbudget2.12
                                                        docvisit12
           -0.00197432
                                  0.00092926
                                                        0.00803172
##
##
            newchild12
                              moveoutchild12
                                                     newmarriage12
                                                       -0.00160469
           -0.00824828
##
                                  0.00365670
##
          newdivorce12
                             AAraceresentA12
                                                   AAraceresentB12
##
                                                        0.00079688
            0.00364126
                                 -0.00792498
##
      Hispraceresent12
##
           -0.00168937
##
  Call:
   lm(formula = cbind(CCES_Panel.vars$presvote12 == 2 & CCES_Panel.vars$presvote08 ==
       1) ~ race_12 + gender_12 + Age.12 + educ_12 + faminc_12 +
##
       guncontrol12 + climate12 + immg.status12 + immg.borderpatrol12 +
##
       immg.policeqs12 + immg.finebiz12 + immg.pubgoods12 + immg.citzdenial12 +
##
       abortion12 + jobs.envir12 + gaymarriage12 + affirmact12 +
##
       balbudget1.12 + balbudget2.12 + docvisit12 + newchild12 +
       moveoutchild12 + newmarriage12 + newdivorce12 + AAraceresentA12 +
##
##
       AAraceresentB12 + Hispraceresent12, data = CCES_Panel.vars)
##
   Coefficients:
##
##
           (Intercept)
                                     race_12
                                                         gender_12
            0.05727681
                                  0.00159138
                                                        0.00048551
##
##
                Age.12
                                     educ 12
                                                         faminc 12
##
           -0.00017224
                                 -0.00066496
                                                       -0.00002317
          guncontrol12
##
                                   climate12
                                                     immg.status12
            0.00286797
##
                                 -0.00601014
                                                        0.00192058
   immg.borderpatrol12
                             immg.policeqs12
                                                    immg.finebiz12
##
           -0.00106909
                                 -0.01489068
                                                       -0.00781855
##
       immg.pubgoods12
                           immg.citzdenial12
                                                        abortion12
                                                        0.00180336
##
           -0.00027128
                                  0.01084663
##
          jobs.envir12
                               gaymarriage12
                                                       affirmact12
            0.00468359
                                                        0.00013991
##
                                  0.00038447
##
         balbudget1.12
                               balbudget2.12
                                                        docvisit12
##
           -0.00395711
                                  0.00040308
                                                        0.00296617
##
            newchild12
                              moveoutchild12
                                                     newmarriage12
##
           -0.00041311
                                 -0.00048618
                                                       -0.00957048
##
          newdivorce12
                             AAraceresentA12
                                                   AAraceresentB12
##
            0.00594179
                                 -0.00316024
                                                        0.00038022
##
      Hispraceresent12
##
           -0.00220480
##
  Call:
##
   lm(formula = cbind(CCES_Panel.vars$presvote12 == 1 & CCES_Panel.vars$presvote08 ==
       2) ~ race_12 + gender_12 + Age.12 + educ_12 + faminc_12 +
##
##
       guncontrol12 + climate12 + immg.status12 + immg.borderpatrol12 +
##
       immg.policeqs12 + immg.finebiz12 + immg.pubgoods12 + immg.citzdenial12 +
##
       abortion12 + jobs.envir12 + gaymarriage12 + affirmact12 +
       balbudget1.12 + balbudget2.12 + docvisit12 + newchild12 +
##
```

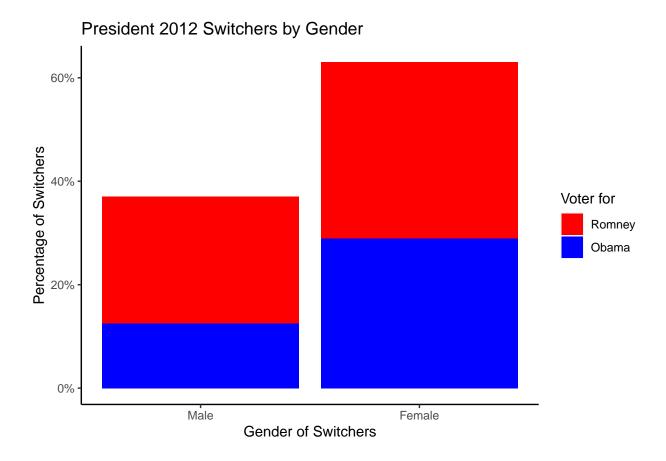
```
##
       moveoutchild12 + newmarriage12 + newdivorce12 + AAraceresentA12 +
##
       AAraceresentB12 + Hispraceresent12, data = CCES_Panel.vars)
##
##
   Coefficients:
                                                          gender_12
##
           (Intercept)
                                      race_12
           0.039921807
                                 0.001450671
                                                        0.004333229
##
                Age.12
##
                                      educ_12
                                                          faminc 12
          -0.000244067
                                 -0.001412600
                                                        0.00001886
##
          guncontrol12
##
                                    climate12
                                                      immg.status12
##
           0.001107988
                                 -0.010496125
                                                        0.001876854
##
   immg.borderpatrol12
                             immg.policeqs12
                                                     immg.finebiz12
##
           0.000643220
                                 -0.000825109
                                                       -0.003505932
##
       immg.pubgoods12
                           immg.citzdenial12
                                                         abortion12
##
           0.000074885
                                                        0.000822181
                                  0.001277439
##
          jobs.envir12
                                                        affirmact12
                               {\tt gaymarriage12}
##
           0.000465327
                                 -0.003558943
                                                        0.002276884
##
         balbudget1.12
                               balbudget2.12
                                                         docvisit12
##
           0.002254485
                                  0.000326017
                                                        0.004726600
##
            newchild12
                              moveoutchild12
                                                      newmarriage12
##
          -0.007436042
                                  0.003603333
                                                        0.007742221
##
          newdivorce12
                             AAraceresentA12
                                                    AAraceresentB12
##
          -0.002438655
                                 -0.004425435
                                                        0.000133923
##
      Hispraceresent12
##
           0.000660610
```

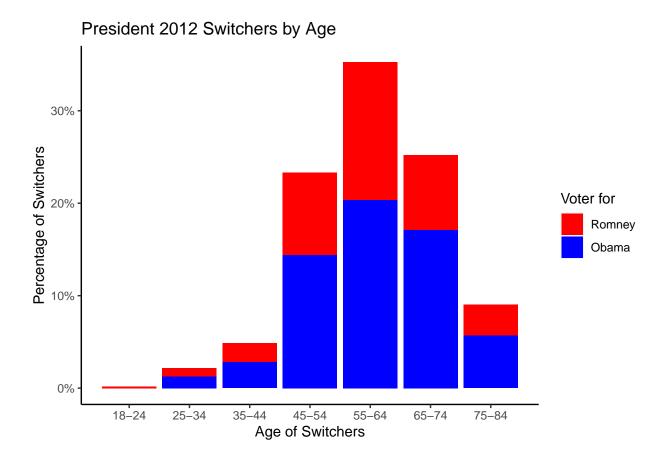
#### President 2012 Switchers by Race

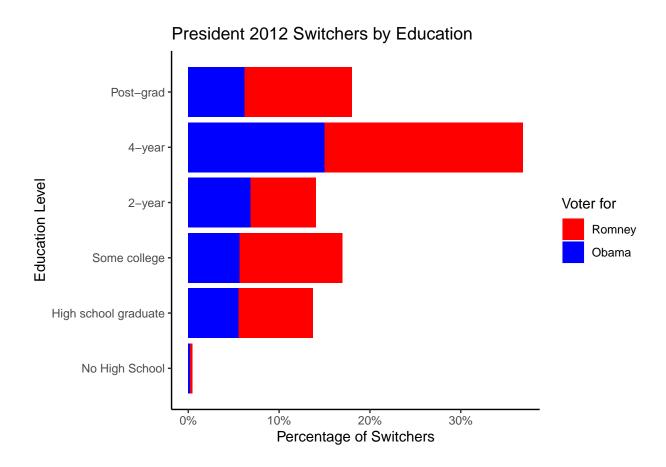


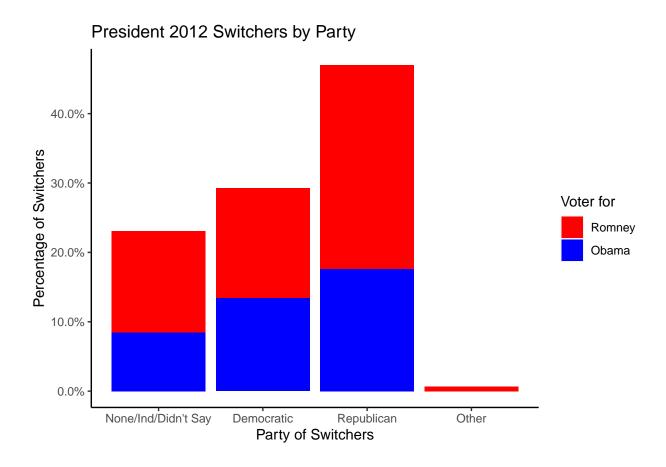


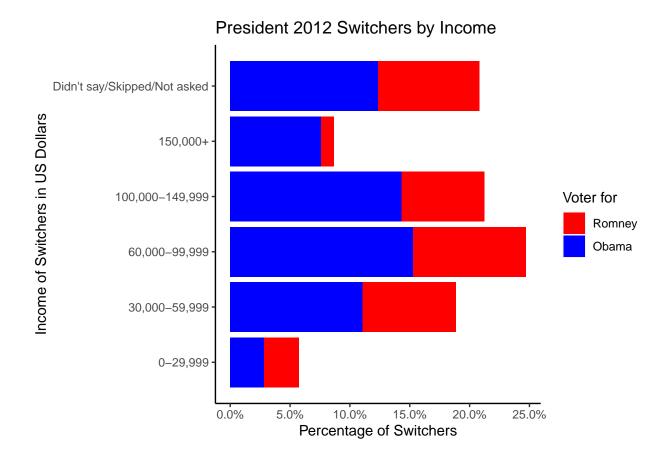












Descriptive stuff in one pane, and maybe a drop down panel to pick one, and maybe something that will allow the user to compare two or three demographic/policy groups groups