

# Whites and Blacks Political Affiliation

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## Getting the Data

GSS Data from <http://gss.norc.oregon.edu/>.

```
#Read and examine data
#rm(list = ls())
#getwd()
setwd("/Users/Advait/Desktop/New_School/Spring17/GSS_experiments/race_party_exp")
#
library(foreign)
library(dplyr)

#Use this to read original data, but I have written a csv
#with only the relevant variables for this poster
#data <- read.dta("GSS7216_R1a.dta")

#Import csv which was written inorder to avoid importing the giant GSS dataset every time
test <- read.csv("race_party.csv", header = T, sep = ",", row.names = 1)

#Check the original order of levels is in alphabetic order
#this does not make sense for plots
print(levels(test$data.partyid))
```

```
## [1] "ind,near dem"      "ind,near rep"      "independent"
## [4] "not str democrat"  "not str republican" "other party"
## [7] "strong democrat"   "strong republican"
```

```
#test$data.partyid[50:70]
#Reorder factor levels to match original data
test$data.partyid <- factor(test$data.partyid,
                             levels(test$data.partyid)[c(7,4,1,3,2,5,8,6)])
print(levels(test$data.partyid))
```

```
## [1] "strong democrat"   "not str democrat"   "ind,near dem"
## [4] "independent"       "ind,near rep"       "not str republican"
## [7] "strong republican" "other party"
```

```
#test$data.partyid[50:70]
#factor levels fixed.

#create the dataframe that I'm going to be working with
df_race_party <- test
```

```

#filter white people
#calculate proportion of white voters of each type
df_white <- df_race_party %>%
  filter(data.race == "white") %>%
  group_by(data.partyid) %>%
  summarize(prop_white = (n()/50085))

#filter black people
#calculate proportion of black voters of each type
df_black <- df_race_party %>%
  filter(data.race == "black") %>%
  group_by(data.partyid) %>%
  summarize(prop_black = (n()/8711))

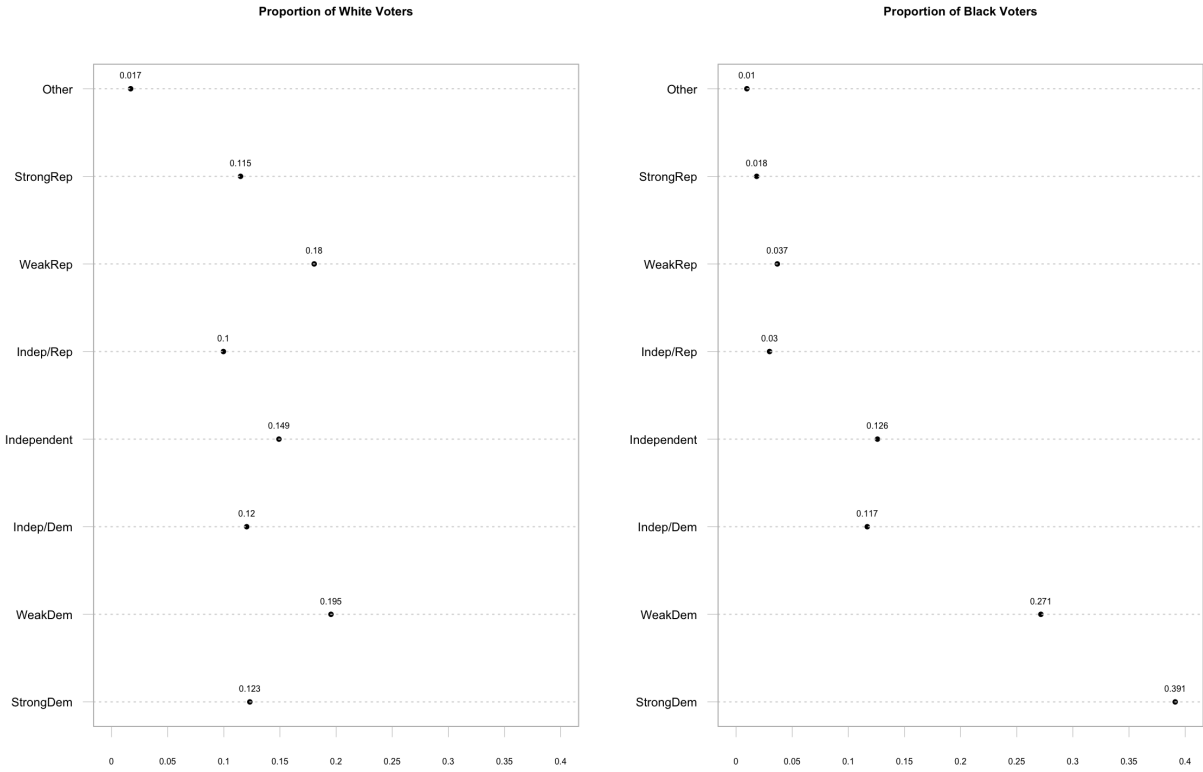
#Create dataframe with necessary info
df_plot_raceparty <- data.frame(party = df_black$data.partyid,
  prop_white = df_white$prop_white,
  lower_white =
    df_white$prop_white -
    (2*sqrt((df_white$prop_white)*
      (1 - df_white$prop_white)))/50085,
  upper_white = df_white$prop_white +
    (2*sqrt((df_white$prop_white)*
      (1 - df_white$prop_white)))/50085,
  prop_black = df_black$prop_black,
  lower_black = df_black$prop_black -
    (2*sqrt((df_black$prop_black)*
      (1 - df_black$prop_black)))/8711,
  upper_black = df_black$prop_black +
    (2*sqrt((df_black$prop_black)*
      (1 - df_black$prop_black)))/8711)

#Create vector to aid plots
party <- c("StrongDem", "WeakDem", "Indep/Dem",
  "Independent",
  "Indep/Rep", "WeakRep", "StrongRep", "Other")

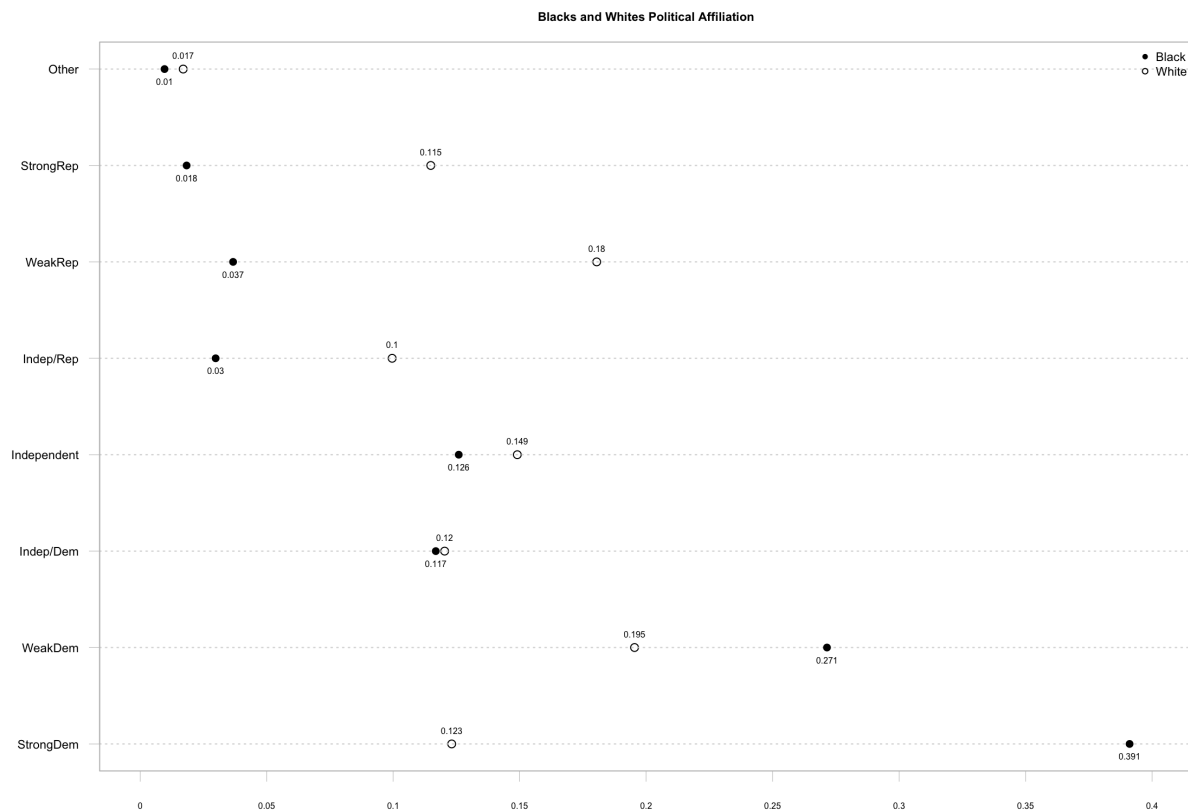
```

# Plots

Plot proportion of white and black voters in separate plots



Plot the proportions of voters on the same plot to facilitate comparison



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