

Strategic Voting and Race - EDA

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Setup

```
# Load Libraries -----
box::use(
  haven = haven[read_dta],
  ggeffects = ggeffects[ggpredict],
  ggplot2 = ggplot2[ggplot, geom_bar, theme_bw, geom_hline, aes, geom_density],
  magrittr = magrittr[...],
  patchwork = patchwork[wrap_plots]
)
```

```
# Set wd ----
here::here()
```

```
## [1] "C:/Users/damon/Dropbox/viability-and-race"
```

```
# Load Data ----
nes84 = read_dta("C:/Users/damon/Dropbox/viability-and-race/Data/anes_1984_1988/nes_1984_updated_2021-01-01.dta")
nes88 = read_dta("C:/Users/damon/Dropbox/viability-and-race/Data/anes_1984_1988/nes_1988_updated_2021-01-01.dta")
annen = read_csv("C:/Users/damon/Dropbox/viability-and-race/Data/annenbergs_2008_wave2/annenbergs_2008_wave2.csv")
abc19 = read_dta("C:/Users/damon/Dropbox/viability-and-race/Data/2019_abc_poll/2019_abc_poll_updated_2021-01-01.dta")
```

EDA

Primary Voting

1984

```
askewPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = askewSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()
```

```

cranstonPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = cranstonSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

glennPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = glennSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

hartPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = hartSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

hollingsPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = hollingsSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

jacksonPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = jacksonSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

mcgovernPlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = mcgovernSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

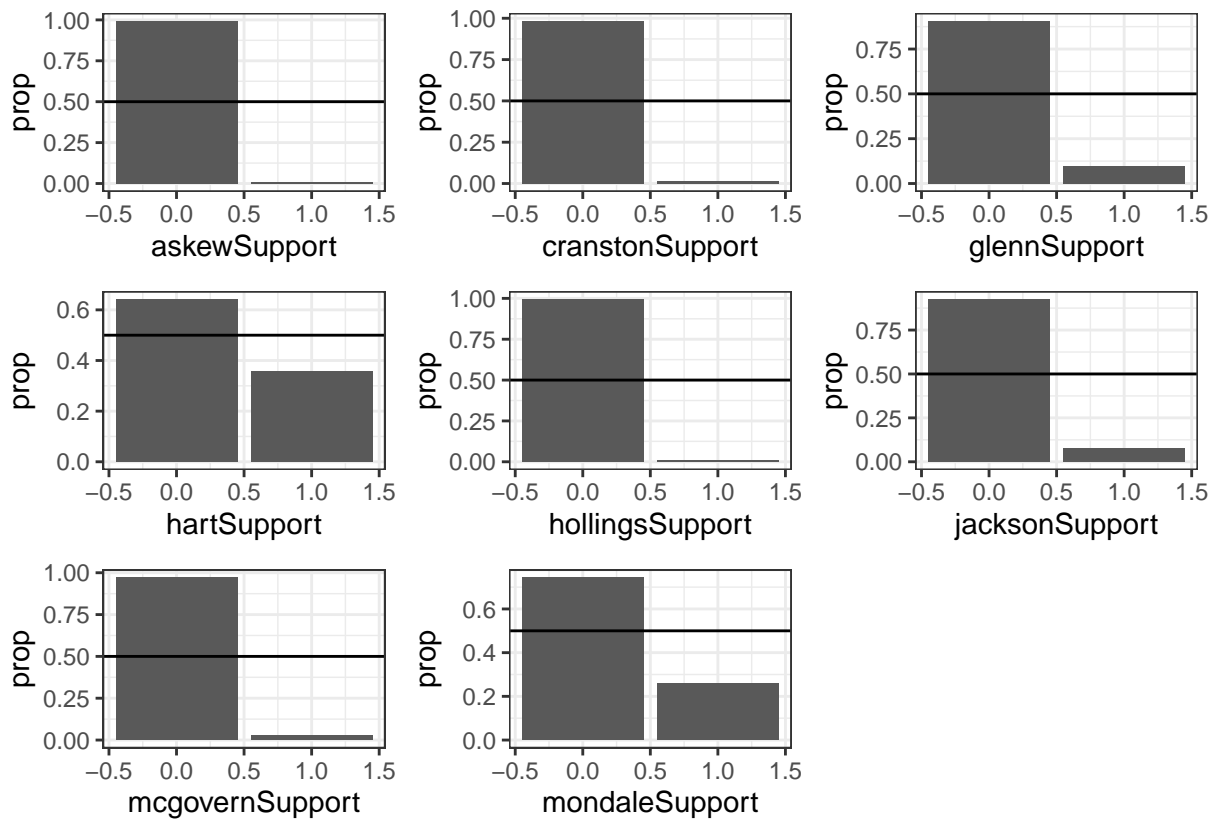
```

```

mondalePlot = nes84 %>%
  ggplot() +
  geom_bar(aes(x = mondaleSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

wrap_plots(askewPlot,
            cranstonPlot,
            glennPlot,
            hartPlot,
            hollingsPlot,
            jacksonPlot,
            mcgovernPlot,
            mondalePlot)

```



1988

```

dukakisPlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = dukakisSupport,

```

```

        y = ..prop..,
        group = 1),
        stat = "count") +
    geom_hline(yintercept = 0.5) +
    theme_bw()

babbittPlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = babbittSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

bidenPlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = bidenSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

gephardPlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = gephardtSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

gorePlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = goreSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

hartPlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = hartSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

jacksonPlot88 = nes88 %>%
  ggplot() +
  geom_bar(aes(x = jacksonSupport,

```

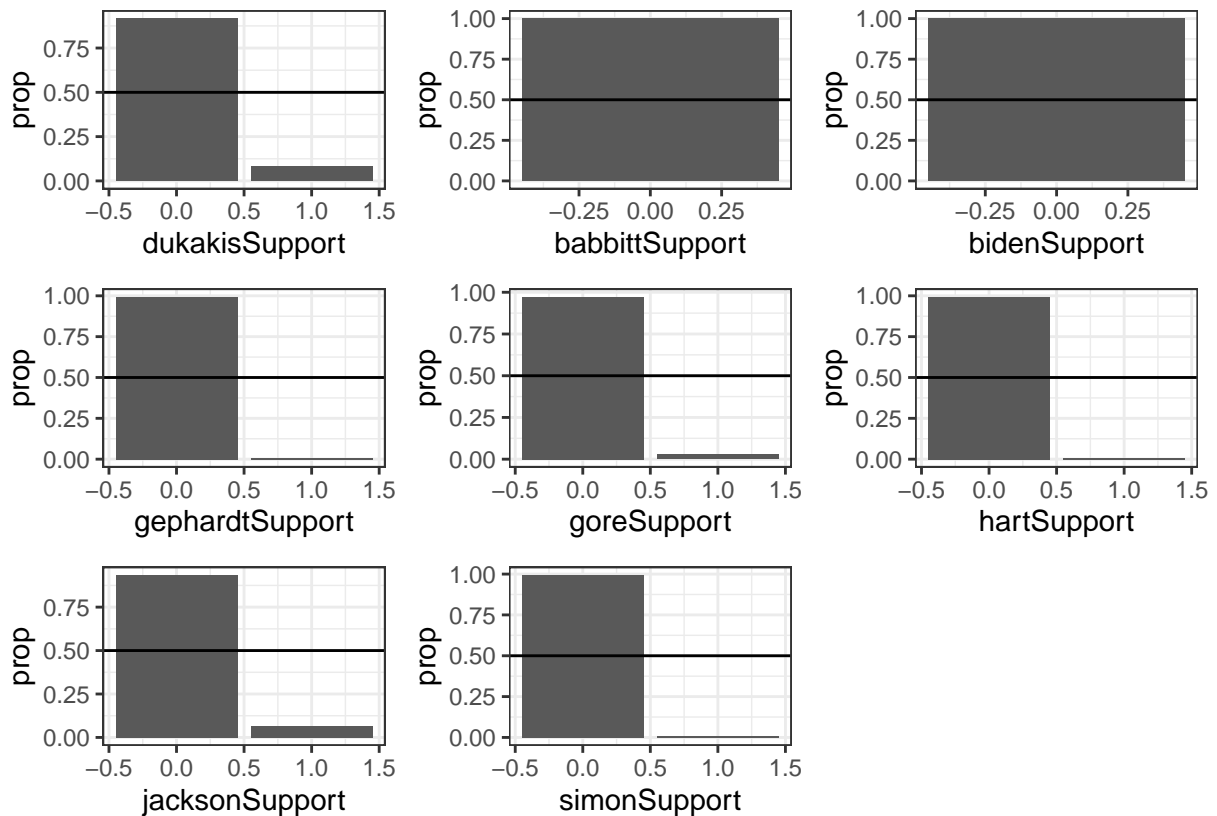
```

      y = ..prop..,
      group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

simonPlot = nes88 %>%
  ggplot() +
  geom_bar(aes(x = simonSupport,
    y = ..prop..,
    group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

wrap_plots(dukakisPlot,
  babbittPlot,
  bidenPlot,
  gephardtPlot,
  gorePlot,
  hartPlot,
  jacksonPlot88,
  simonPlot)

```



```

bidenPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = bidenSupport,
               y = ..prop..,
               group = 1),
            stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

clintonPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = clintonSupport,
               y = ..prop..,
               group = 1),
            stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

doddPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = doddSupport,
               y = ..prop..,
               group = 1),
            stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

edwardsPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = edwardsSupport,
               y = ..prop..,
               group = 1),
            stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

gravelPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = gravelSupport,
               y = ..prop..,
               group = 1),
            stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

kucinichPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = kucinichSupport,
               y = ..prop..,
               group = 1),
            stat = "count") +

```

```

geom_hline(yintercept = 0.5) +
theme_bw()

obamaPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = obamaSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

richardsonPlot = annen %>%
  ggplot() +
  geom_bar(aes(x = richardsonSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

wrap_plots(bidenPlot,
           clintonPlot,
           doddPlot,
           edwardsPlot,
           gravelPlot,
           kucinichPlot,
           obamaPlot,
           richardsonPlot)

```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

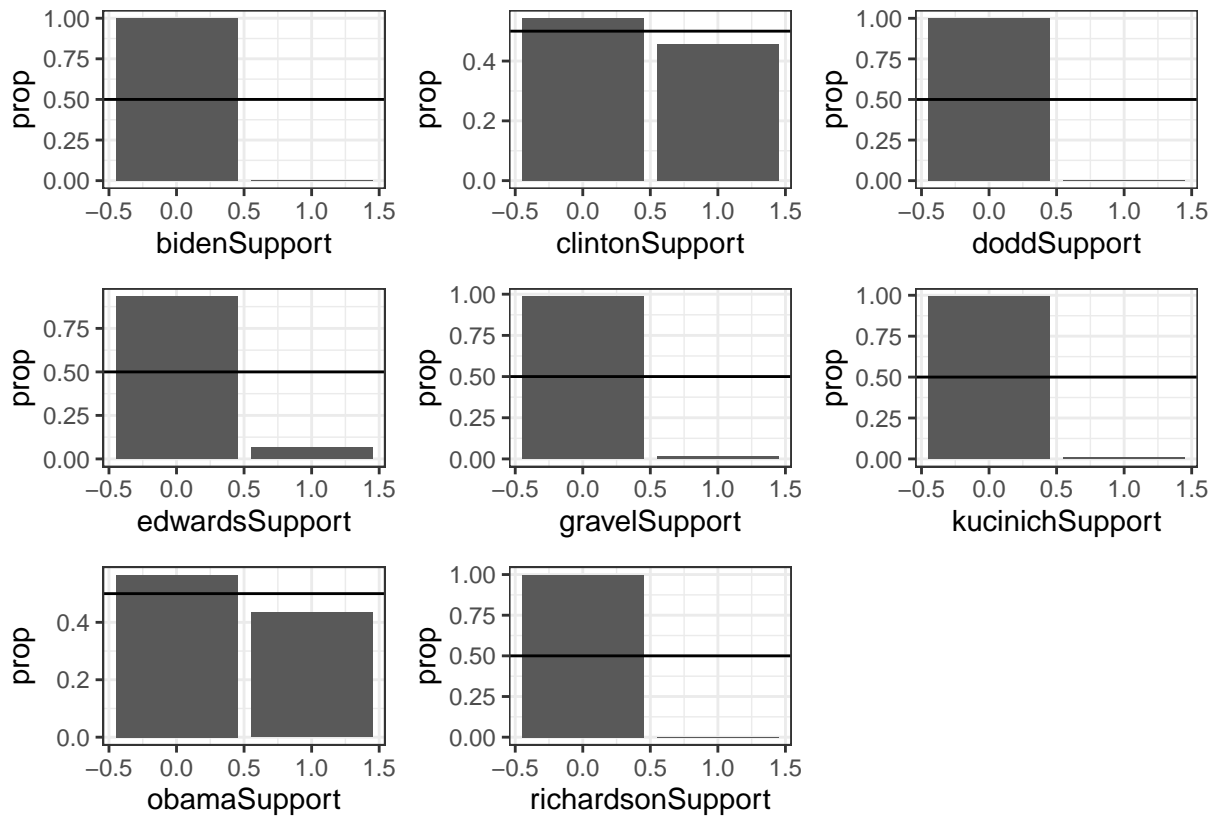
```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```

```
## Warning: Removed 6989 rows containing non-finite values (stat_count).
```



2019

```
bennetPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = bennetSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

bidenPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = bidenSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

bookerPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = bookerSupport,
               y = ..prop..,
```



```

        group = 1),
        stat = "count") +
geom_hline(yintercept = 0.5) +
theme_bw()

bullockPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = bullockSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

buttigiegPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = buttigiegSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

castroPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = castroSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

deblasioPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = deblasioSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

delaneyPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = delaneySupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

gabbardPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = gabbardSupport,

```

```

        y = ..prop..,
        group = 1),
        stat = "count") +
    geom_hline(yintercept = 0.5) +
    theme_bw()

gillibrandPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = gillibrandSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

harrisPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = harrisSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

klobucharPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = klobucharSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

orourkePlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = orourkeSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

ryanPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = ryanSupport,
               y = ..prop..,
               group = 1),
           stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

sandersPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = sandersSupport,

```

```

        y = ..prop..,
        group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

steyerPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = steyerSupport,
    y = ..prop..,
    group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

warrenPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = warrenSupport,
    y = ..prop..,
    group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

williamsonPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = williamsonSupport,
    y = ..prop..,
    group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

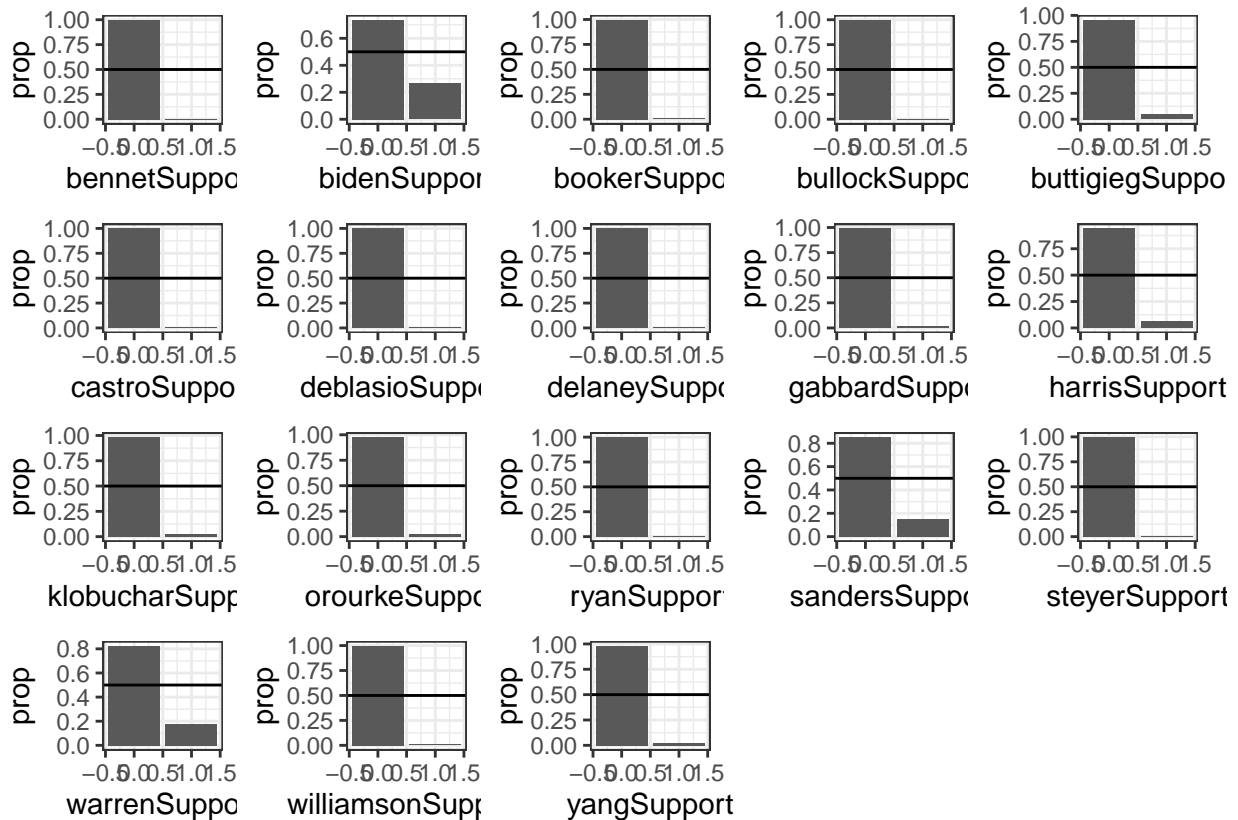
yangPlot = abc19 %>%
  ggplot() +
  geom_bar(aes(x = yangSupport,
    y = ..prop..,
    group = 1),
    stat = "count") +
  geom_hline(yintercept = 0.5) +
  theme_bw()

wrap_plots(bennetPlot,
  bidenPlot,
  bookerPlot,
  bullockPlot,
  buttigiegPlot,
  castroPlot,
  deblasioPlot,
  delaneyPlot,
  gabbardPlot,
  harrisPlot,
  klobucharPlot,
  orourkePlot,

```

```
ryanPlot,  
sandersPlot,  
steyerPlot,  
warrenPlot,  
williamsonPlot,  
yangPlot)
```

```
## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).  
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## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).  
## Warning: Removed 566 rows containing non-finite values (stat_count).
```



Feeling Thermometer

1984

```
glennPlot = nes84 %>%
  ggplot() +
  geom_density(aes(x = glennFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

hartPlot = nes84 %>%
  ggplot() +
  geom_density(aes(x = hartFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

jacksonPlot = nes84 %>%
  ggplot() +
  geom_density(aes(x = jacksonFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()
```

```

mcgovernPlot = nes84 %>%
  ggplot() +
  geom_density(aes(x = mcgovernFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

mondalePlot = nes84 %>%
  ggplot() +
  geom_density(aes(x = mondaleFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

wrap_plots(glennPlot,
            hartPlot,
            jacksonPlot,
            mcgovernPlot,
            mondalePlot)

```

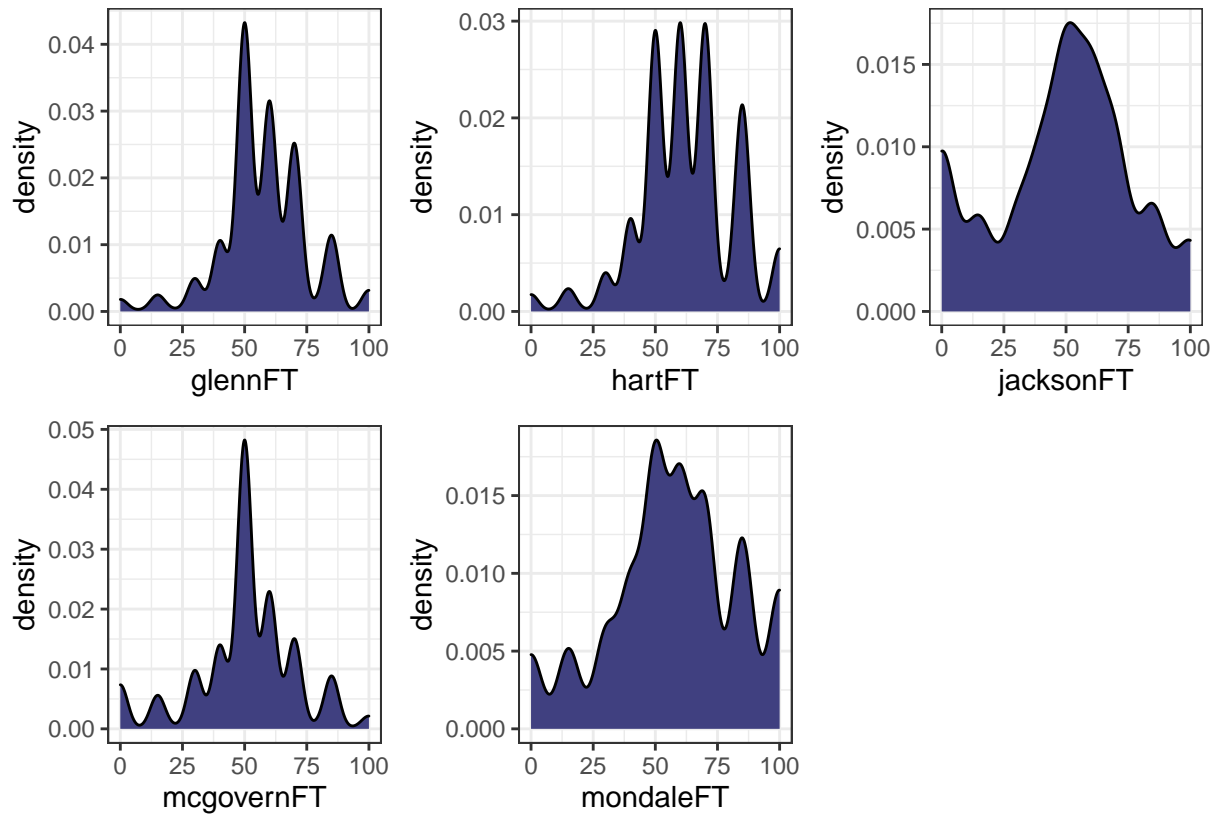
```
## Warning: Removed 288 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 242 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 123 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 329 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 80 rows containing non-finite values (stat_density).
```



1988

```
dukakisPlot = nes88 %>%
  ggplot() +
  geom_density(aes(x = dukakisFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

babbitPlot = nes88 %>%
  ggplot() +
  geom_density(aes(x = babbitFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

jacksonPlot88 = nes88 %>%
  ggplot() +
  geom_density(aes(x = jacksonFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

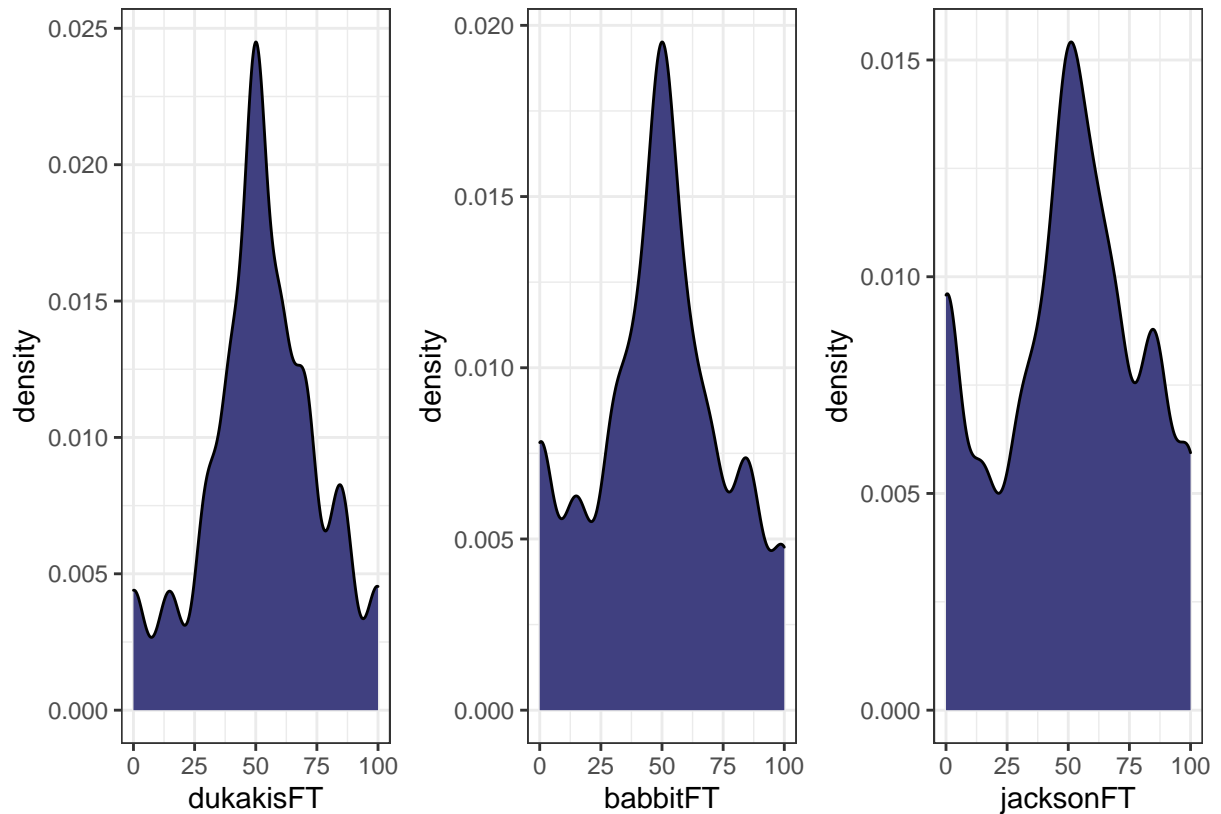
wrap_plots(dukakisPlot,
```

```
babbitPlot,  
jacksonPlot88)
```

```
## Warning: Removed 306 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 311 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 89 rows containing non-finite values (stat_density).
```



2008

```
clintonPlot = annen %>%  
  ggplot() +  
  geom_density(aes(x = clintonFT,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
  
edwardsPlot = annen %>%  
  ggplot() +  
  geom_density(aes(x = edwardsFT,  
                   y = ..density..),
```



```

    fill = "#404080") +
  theme_bw()

obamaPlot = annen %>%
  ggplot() +
  geom_density(aes(x = obamaFT,
                  y = ..density..),
              fill = "#404080") +
  theme_bw()

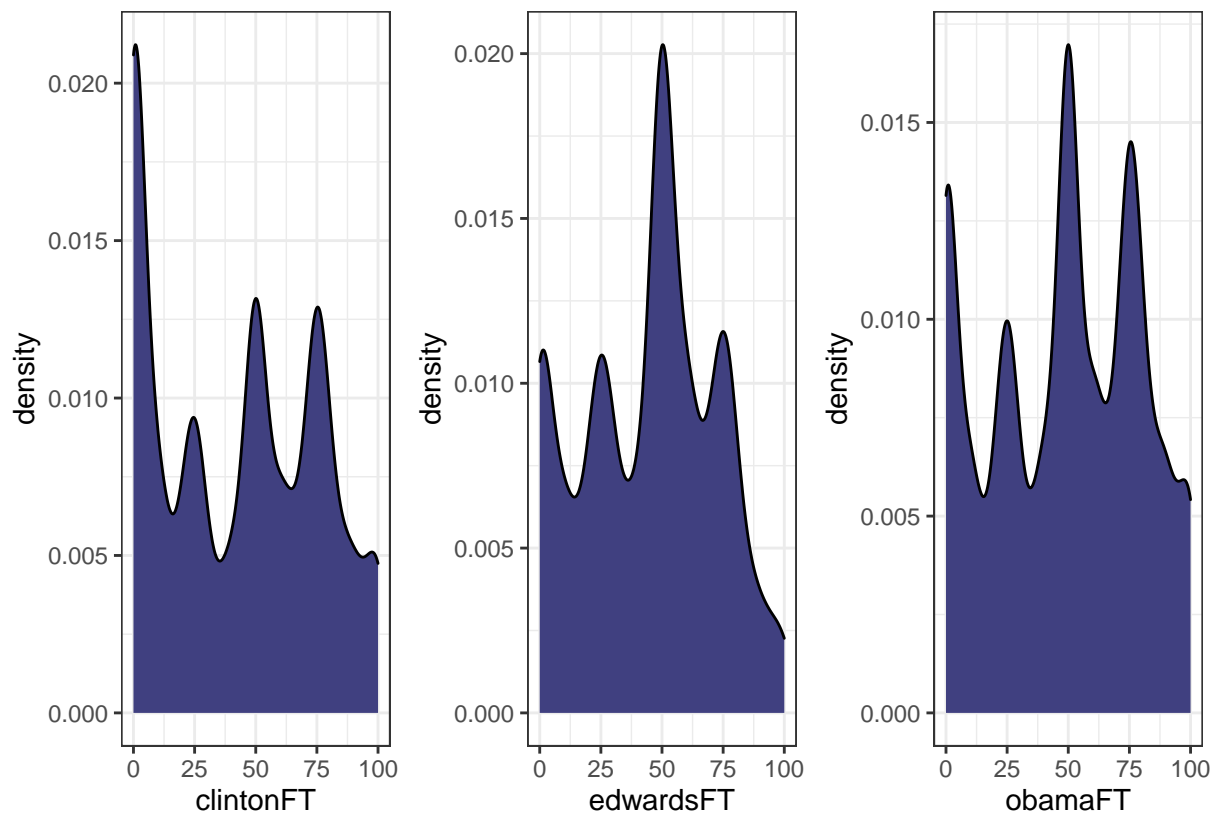
wrap_plots(clintonPlot,
           edwardsPlot,
           obamaPlot)

```

```
## Warning: Removed 343 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 10649 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 945 rows containing non-finite values (stat_density).
```



2019

```

bidenPlot = abc19 %>%
  ggplot() +
  geom_density(aes(x = bidenFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

sandersPlot = abc19 %>%
  ggplot() +
  geom_density(aes(x = sandersFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

warrenPlot = abc19 %>%
  ggplot() +
  geom_density(aes(x = warrenFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

harrisPlot = abc19 %>%
  ggplot() +
  geom_density(aes(x = harrisFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

buttigiegPlot = abc19 %>%
  ggplot() +
  geom_density(aes(x = buttigiegFT,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

wrap_plots(bidenPlot,
            warrenPlot,
            harrisPlot,
            buttigiegPlot)

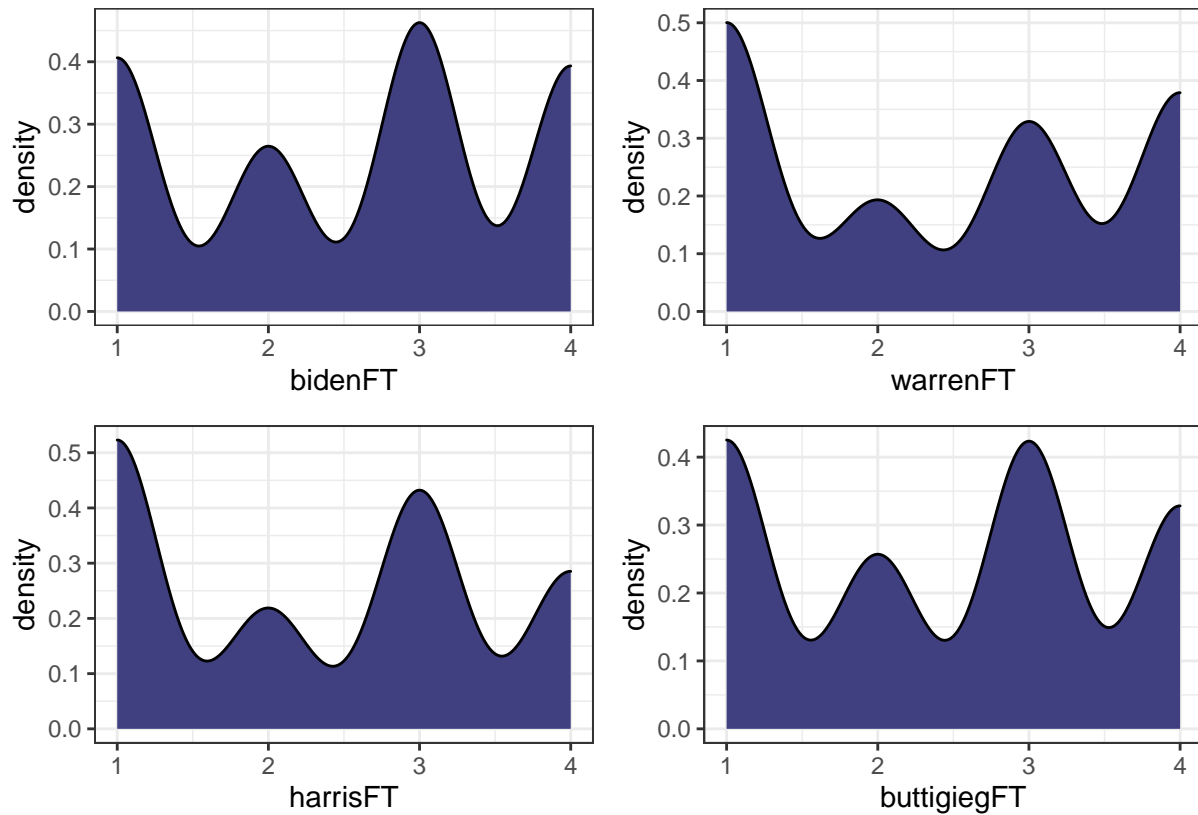
```

```
## Warning: Removed 79 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 142 rows containing non-finite values (stat_density).
```

```
## Warning: Removed 220 rows containing non-finite values (stat_density).
```

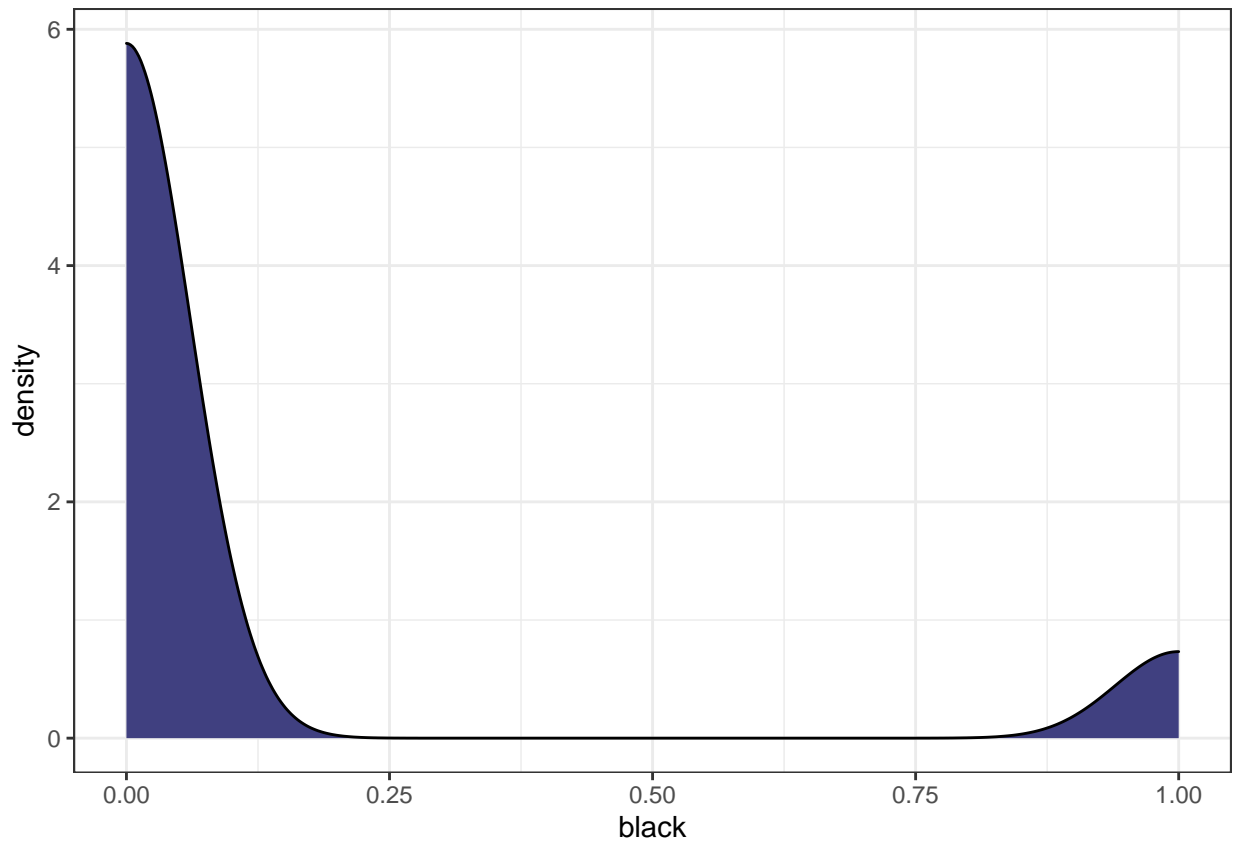
```
## Warning: Removed 326 rows containing non-finite values (stat_density).
```



Representativeness

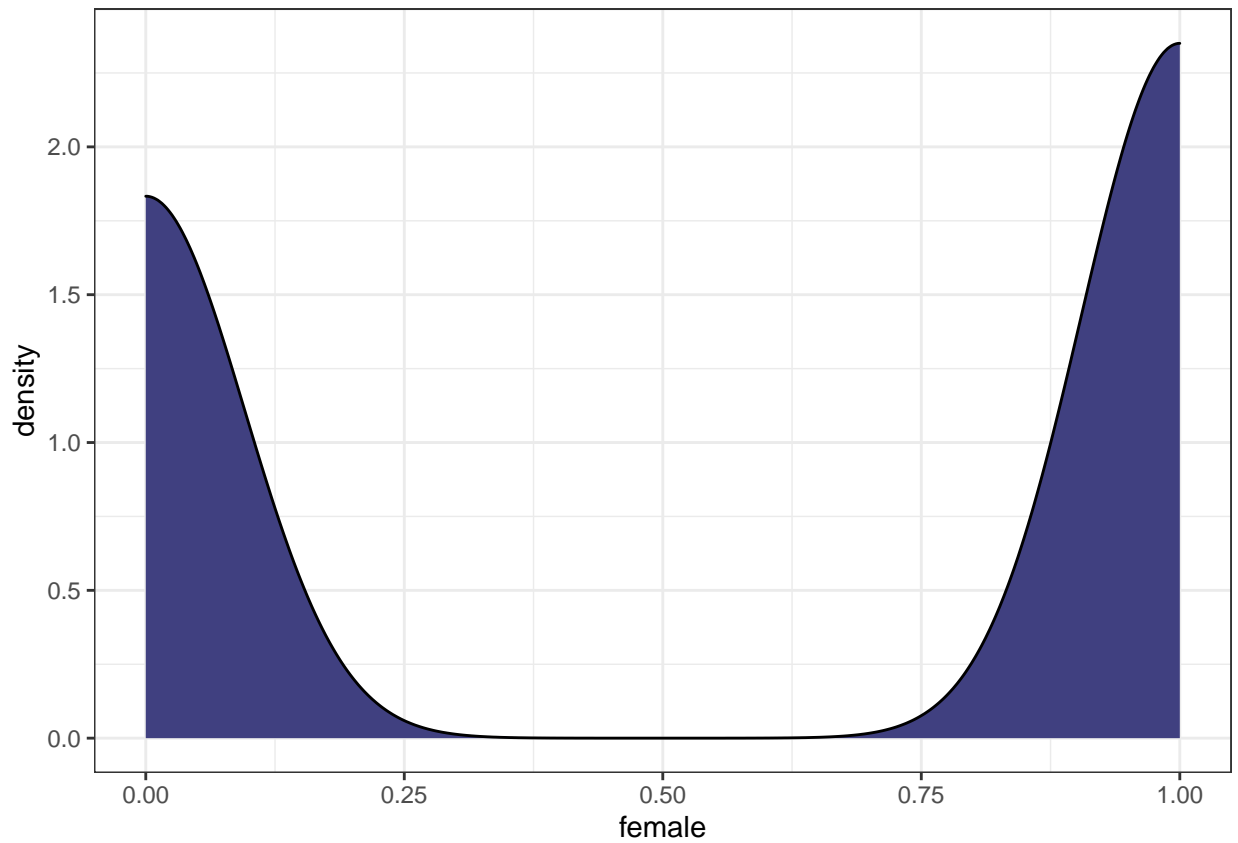
1984

```
racePlot = nes84 %>%
  ggplot() +
  geom_density(aes(x = black,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()
racePlot
```



Race

```
genderPlot = nes84 %>%  
  ggplot() +  
  geom_density(aes(x = female,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
genderPlot
```

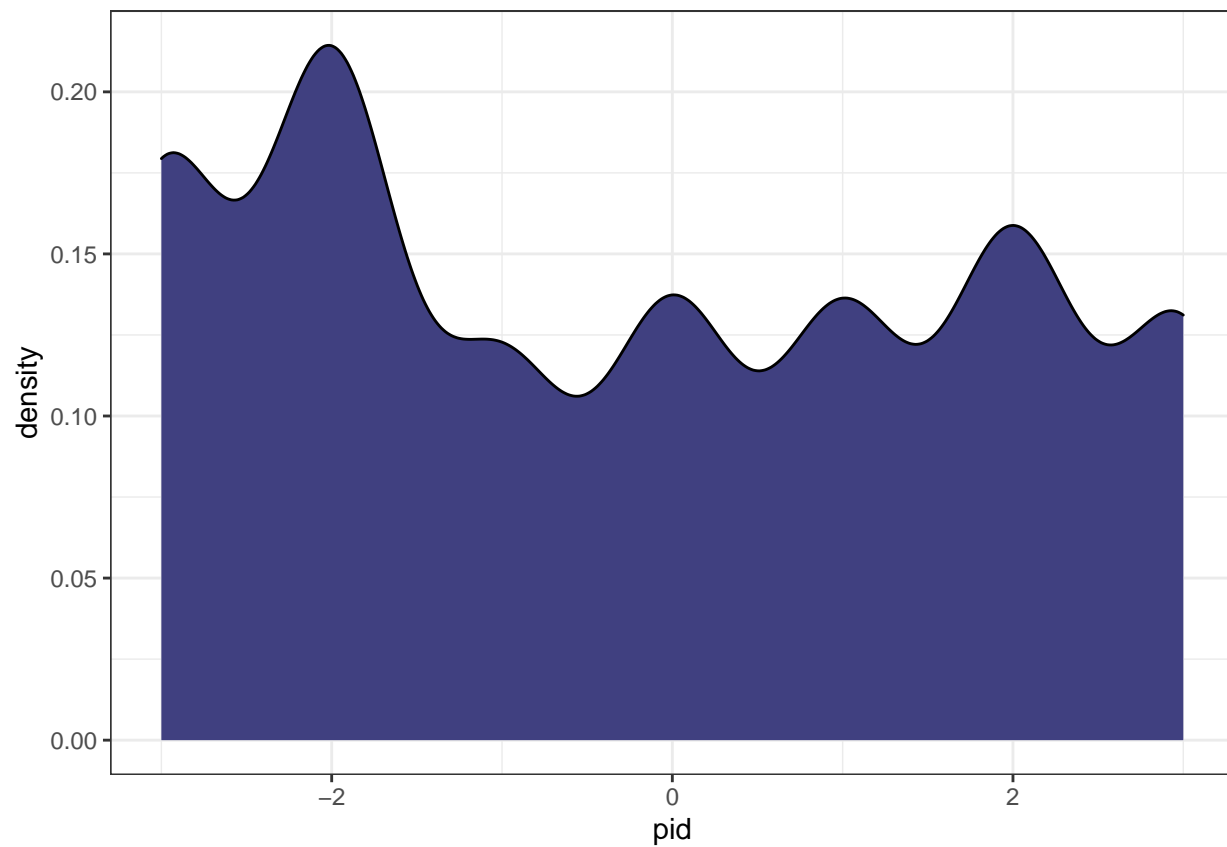


Gender

```
pidPlot = nes84 %>%  
  ggplot() +  
  geom_density(aes(x = pid,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
  
pidPlot
```

PID

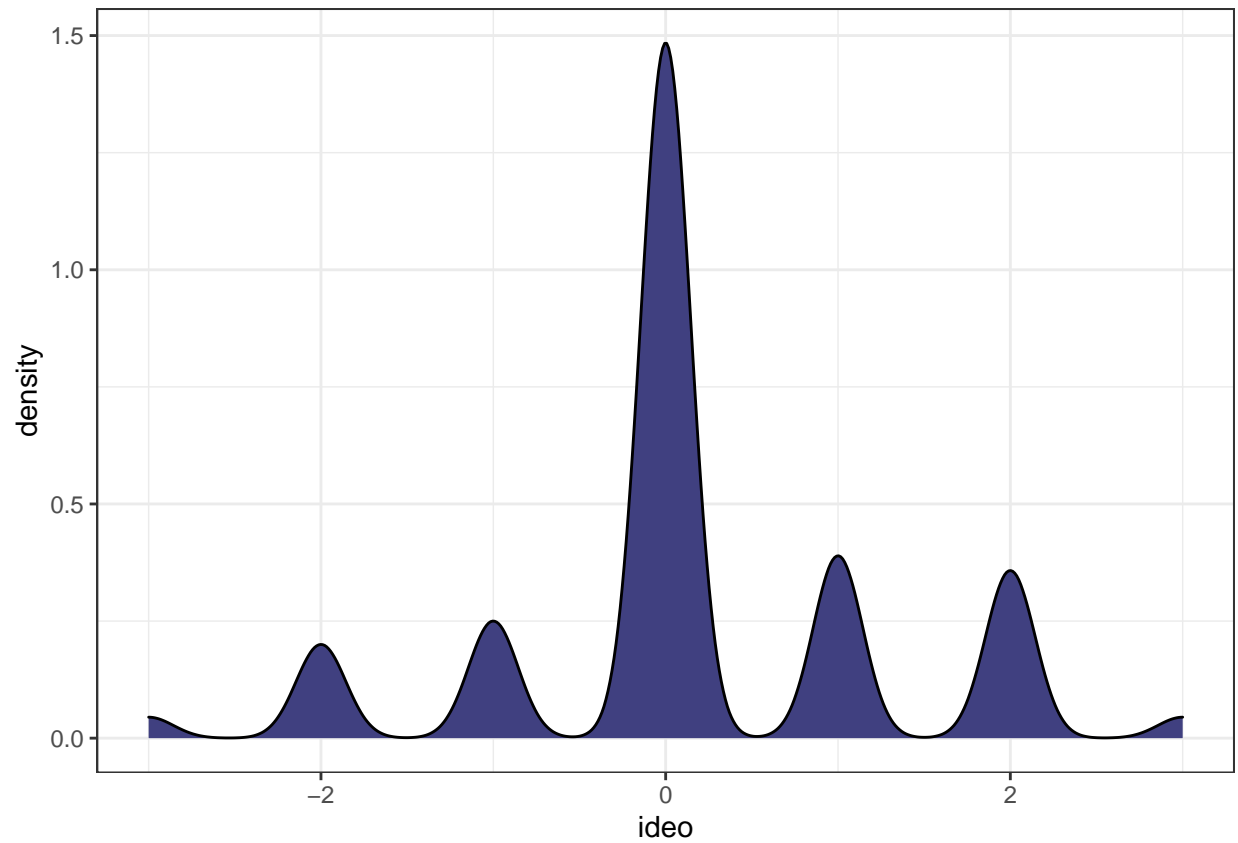
```
## Warning: Removed 21 rows containing non-finite values (stat_density).
```



```
ideoPlot = nes84 %>%  
  ggplot() +  
  geom_density(aes(x = ideo,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
ideoPlot
```

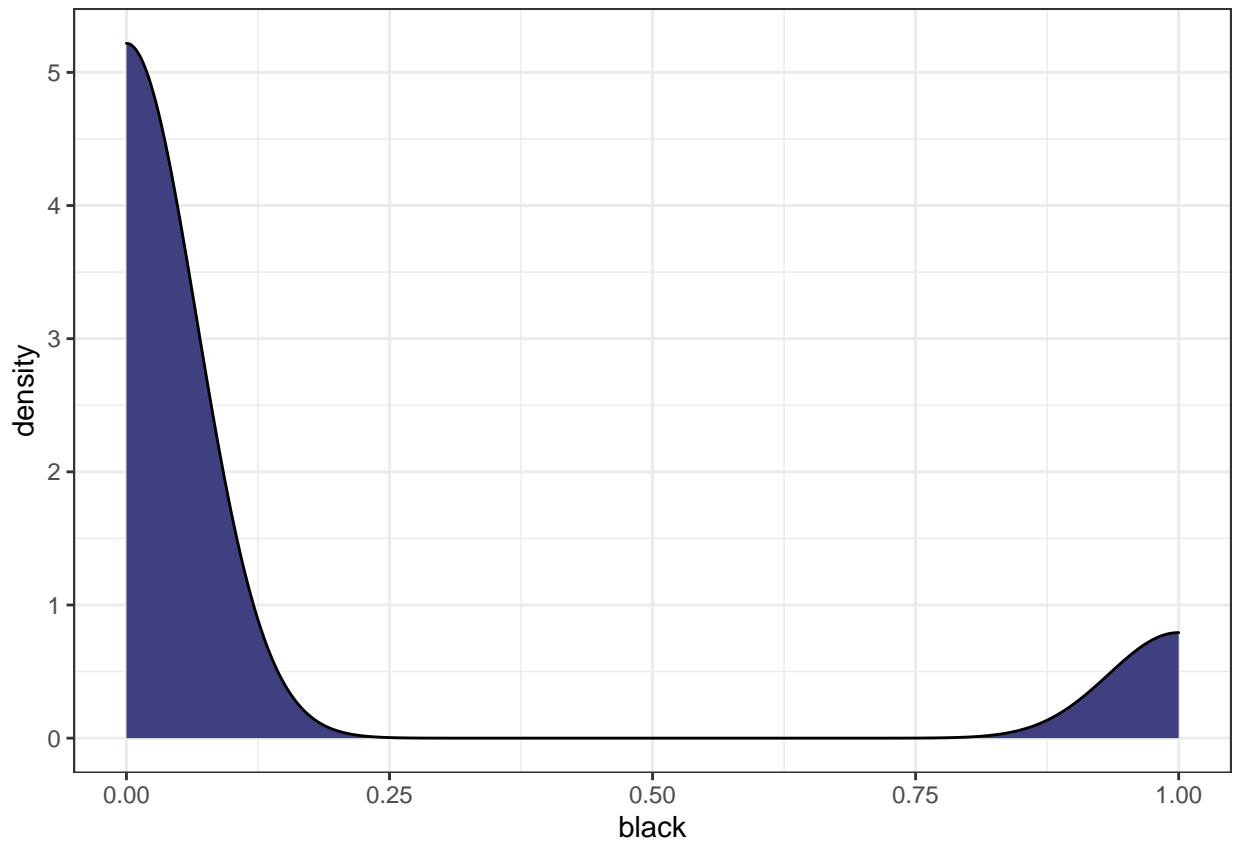
Ideology

```
## Warning: Removed 28 rows containing non-finite values (stat_density).
```



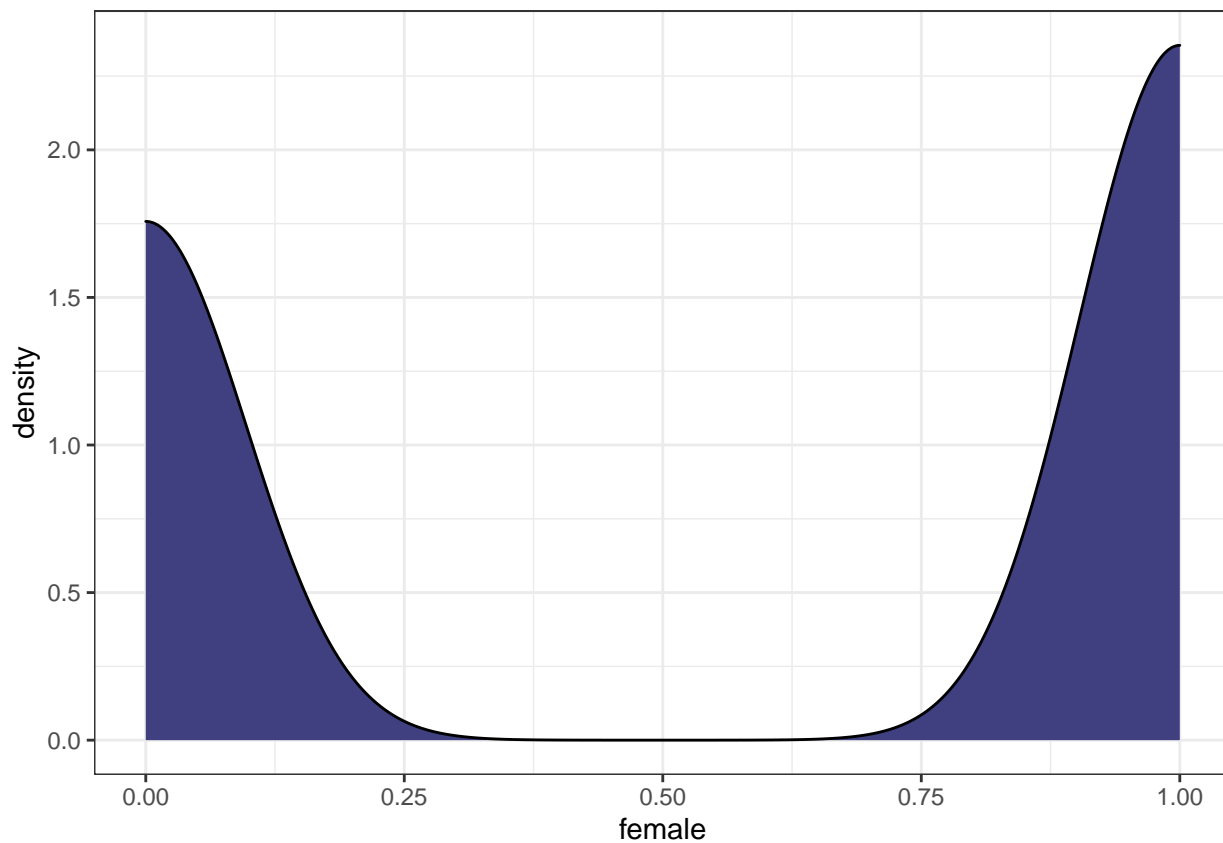
1988

```
racePlot = nes88 %>%  
  ggplot() +  
  geom_density(aes(x = black,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
racePlot
```



Race

```
genderPlot = nes88 %>%  
  ggplot() +  
  geom_density(aes(x = female,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
genderPlot
```

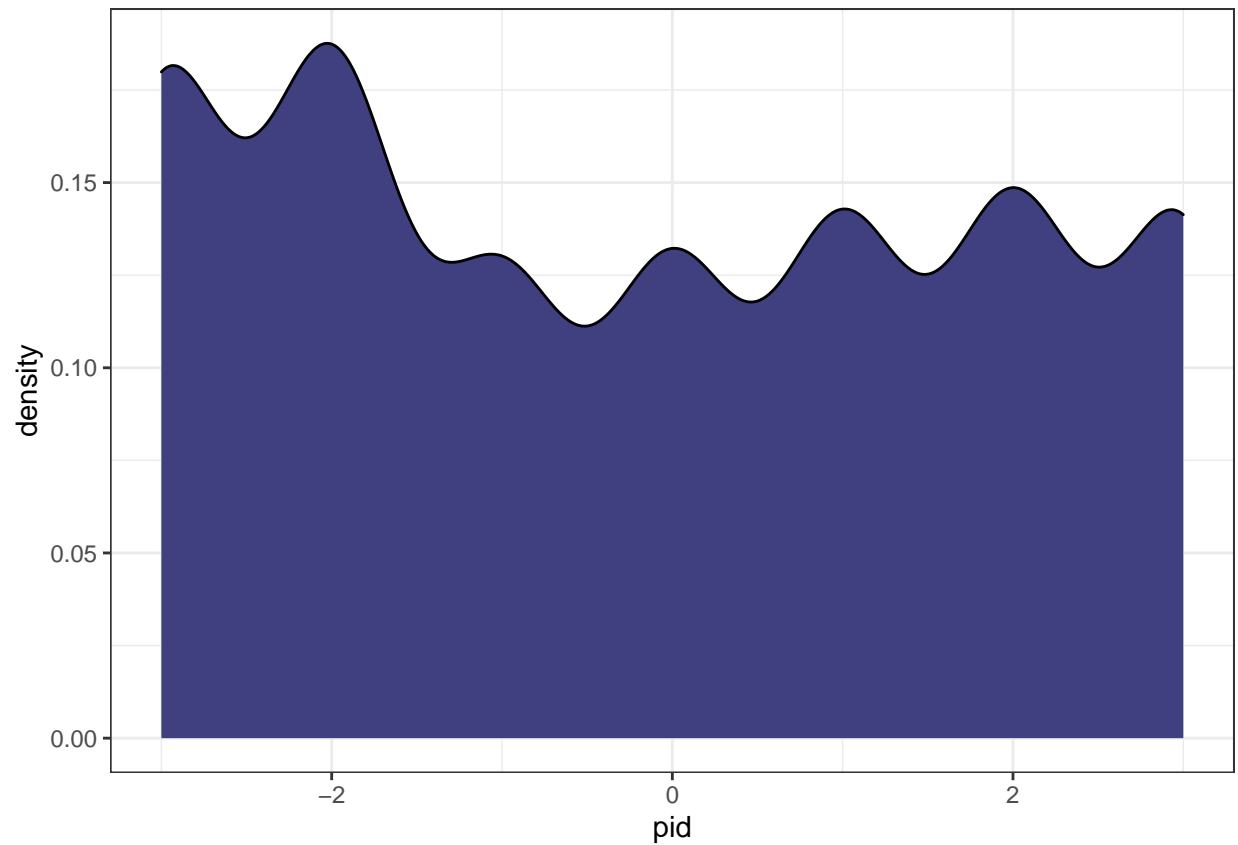



Gender

```
pidPlot = nes88 %>%  
  ggplot() +  
  geom_density(aes(x = pid,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
  
pidPlot
```

PID

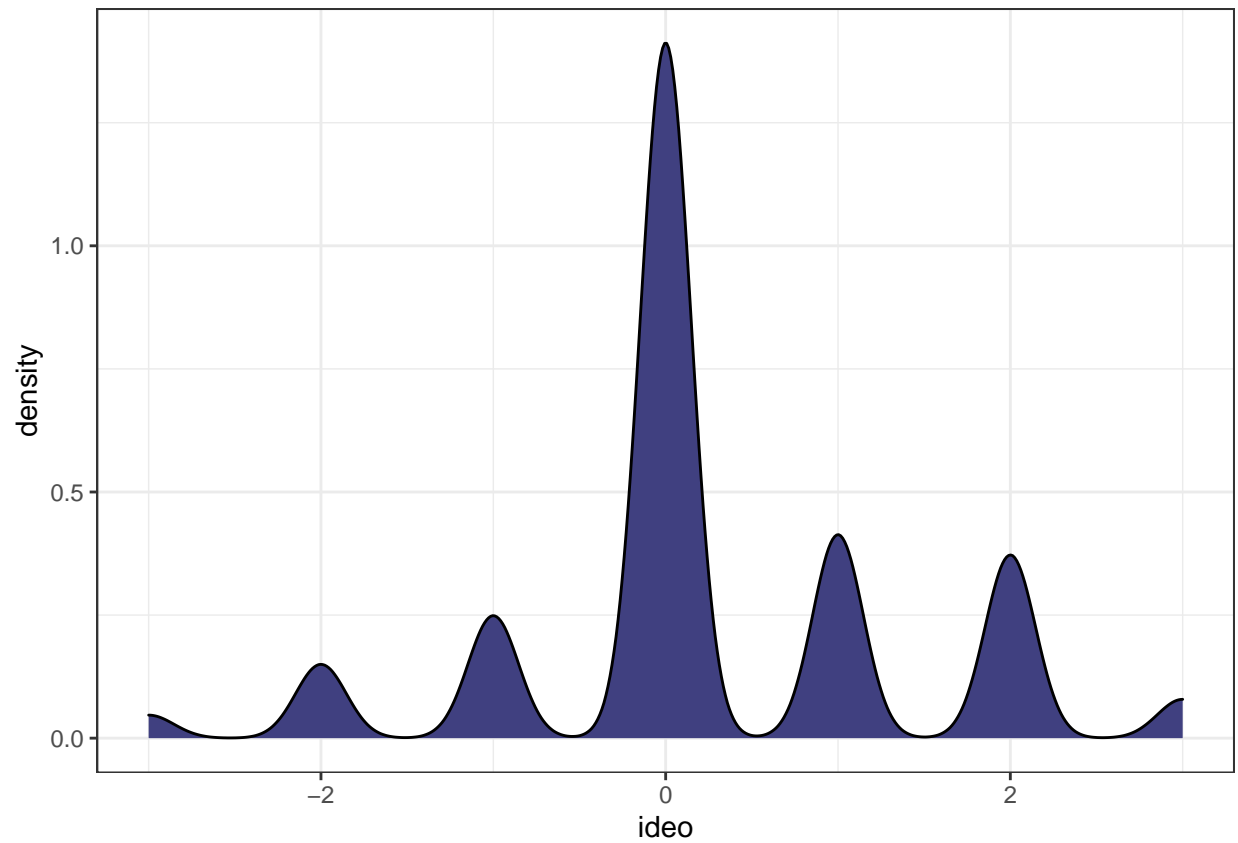
```
## Warning: Removed 7 rows containing non-finite values (stat_density).
```



```
ideoPlot = nes88 %>%  
  ggplot() +  
  geom_density(aes(x = ideo,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
ideoPlot
```

Ideology

```
## Warning: Removed 5 rows containing non-finite values (stat_density).
```

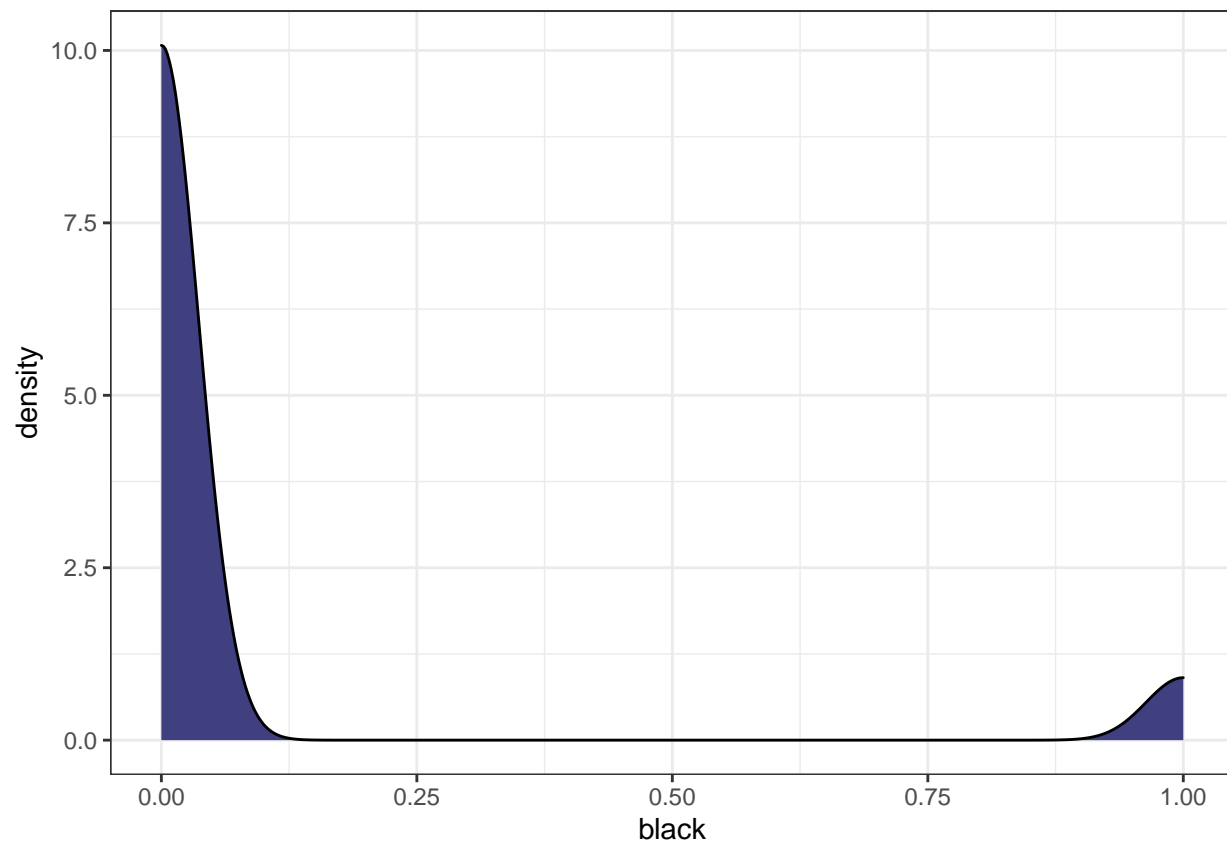


2008

```
racePlot = annen %>%  
  ggplot() +  
  geom_density(aes(x = black,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
racePlot
```

Race

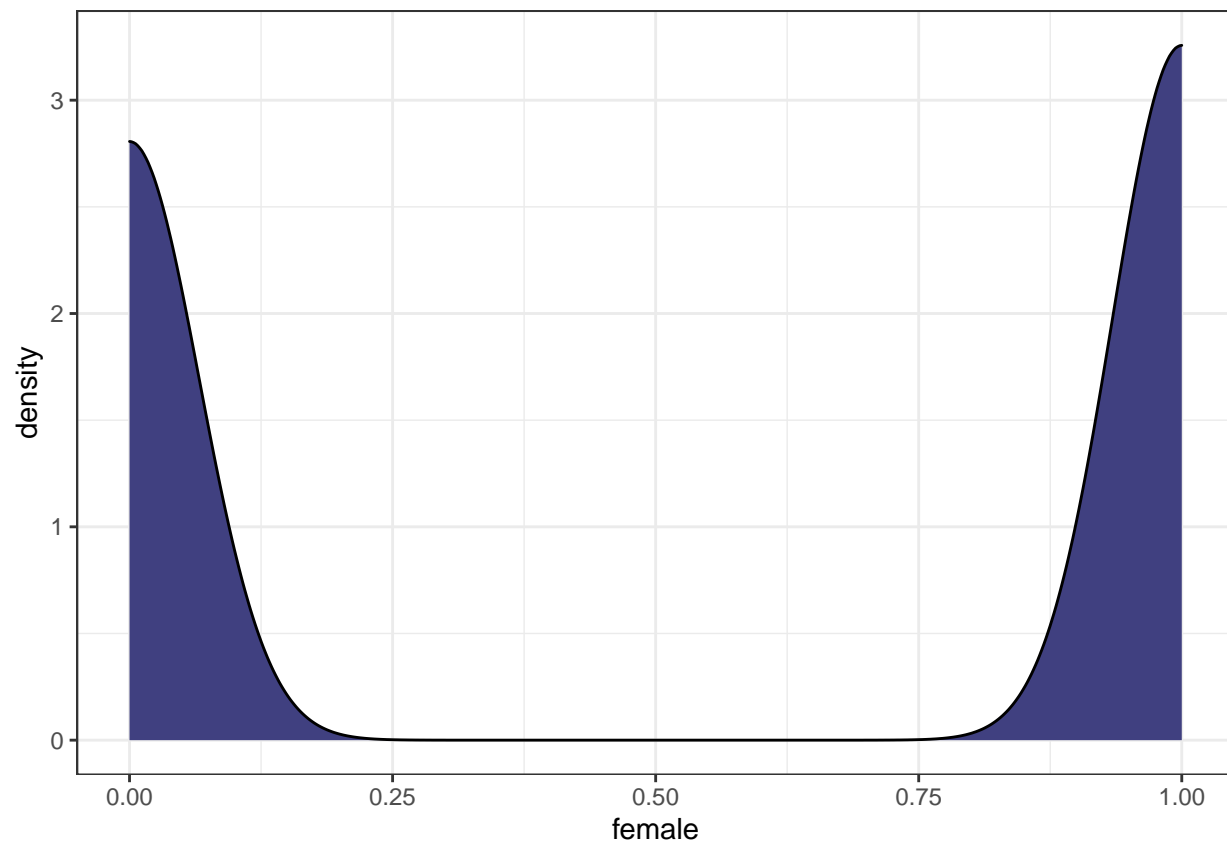
```
## Warning: Removed 7 rows containing non-finite values (stat_density).
```



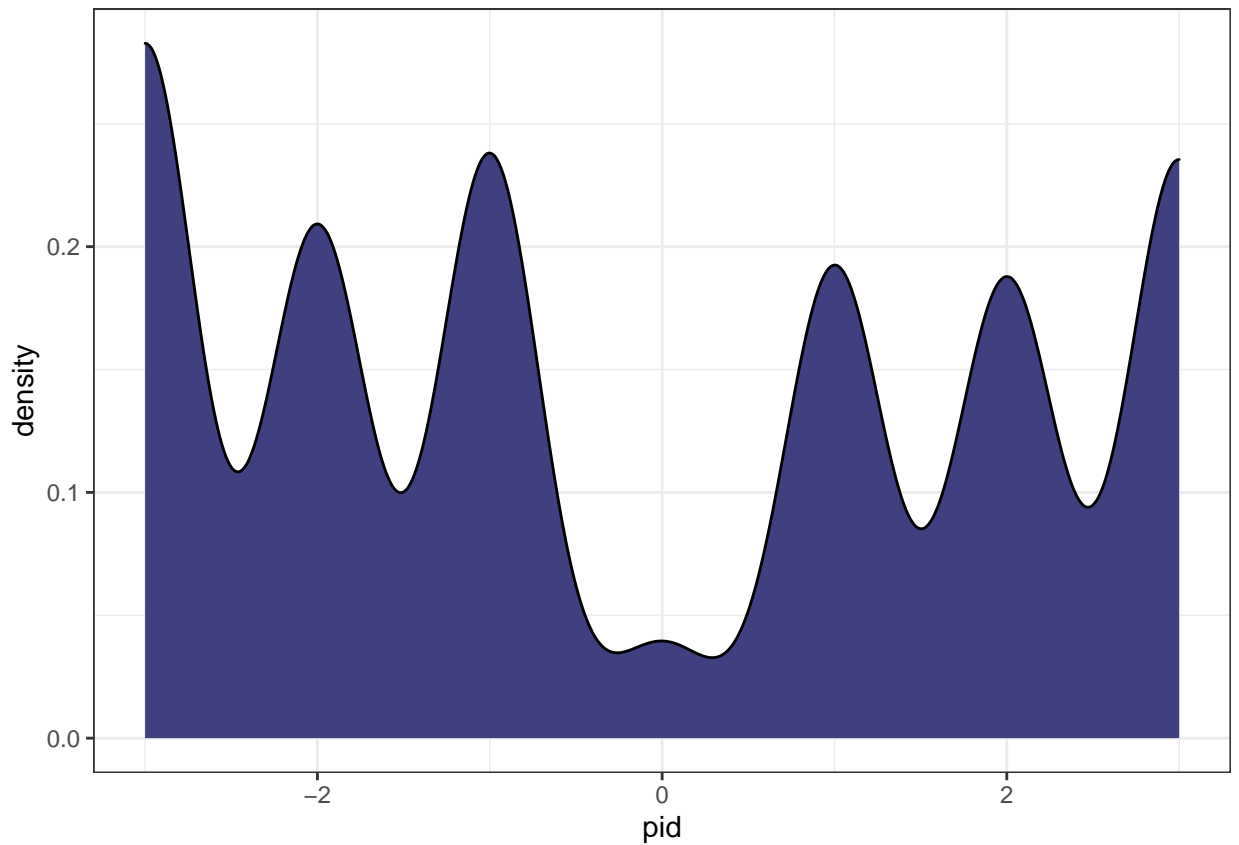
```
genderPlot = annen %>%  
  ggplot() +  
  geom_density(aes(x = female,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
genderPlot
```

Gender

```
## Warning: Removed 9 rows containing non-finite values (stat_density).
```



```
pidPlot = annen %>%  
  ggplot() +  
  geom_density(aes(x = pid,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
pidPlot
```



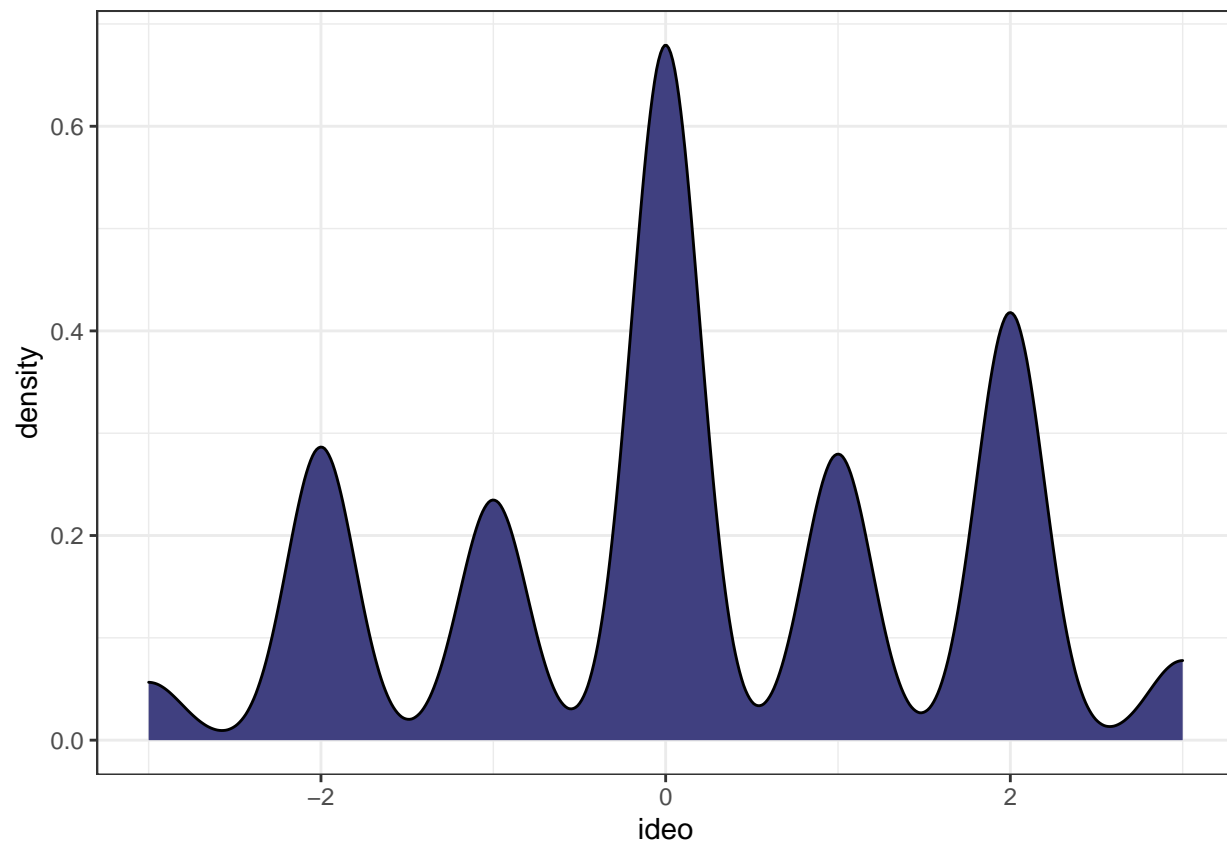
PID

```
ideoPlot = annen %>%
  ggplot() +
  geom_density(aes(x = ideo,
                   y = ..density..),
               fill = "#404080") +
  theme_bw()

ideoPlot
```

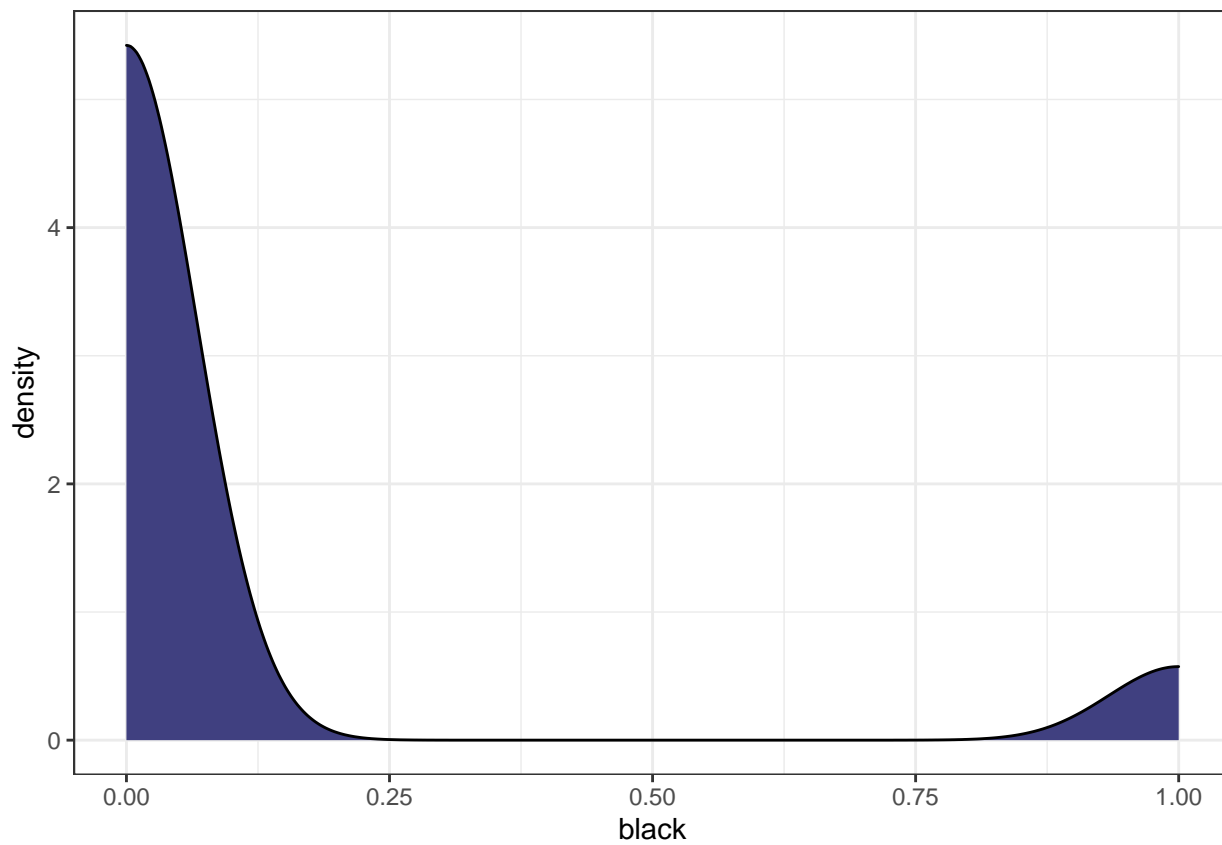
Ideology

```
## Warning: Removed 149 rows containing non-finite values (stat_density).
```



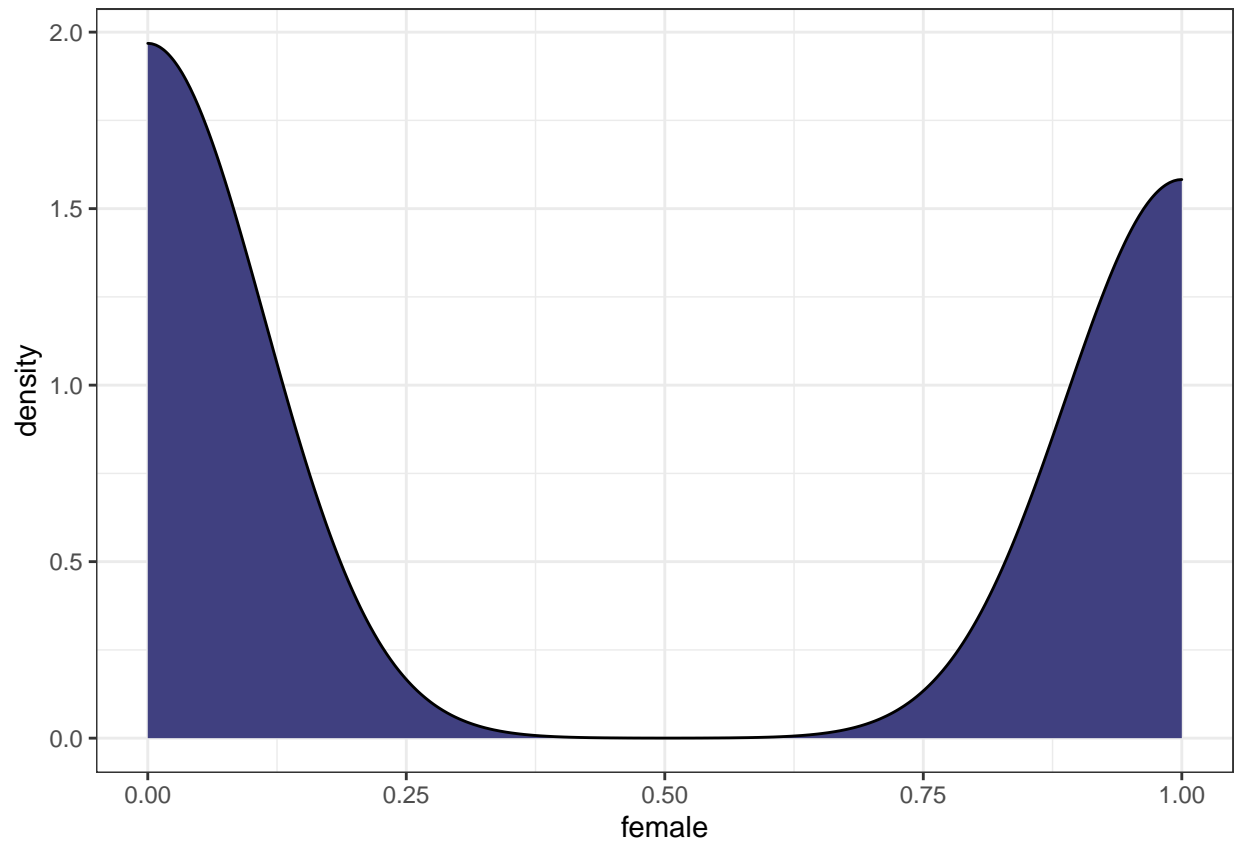
2019

```
racePlot = abc19 %>%  
  ggplot() +  
  geom_density(aes(x = black,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
racePlot
```



Race

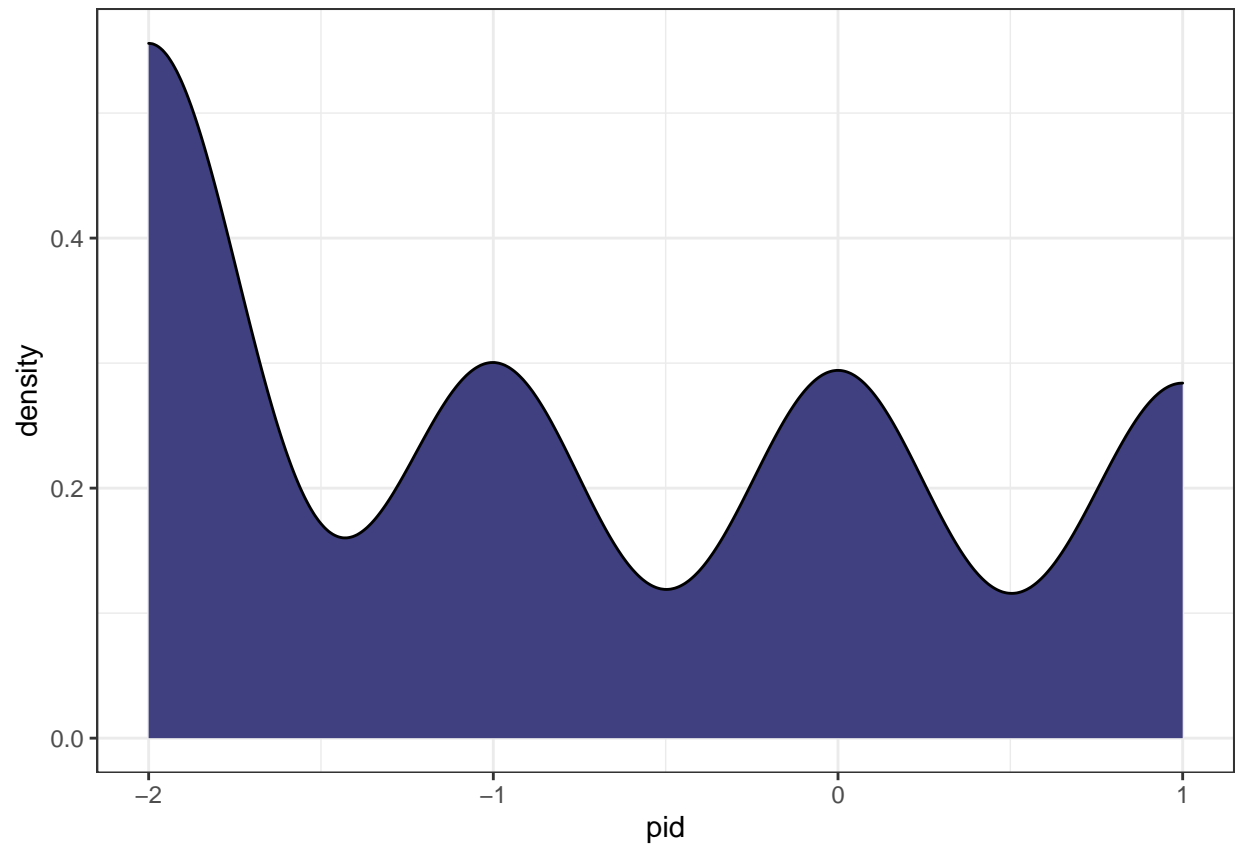
```
genderPlot = abc19 %>%  
  ggplot() +  
  geom_density(aes(x = female,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
genderPlot
```

```
pidPlot = abc19 %>%  
  ggplot() +  
  geom_density(aes(x = pid,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
pidPlot
```

PID

```
## Warning: Removed 271 rows containing non-finite values (stat_density).
```



```
ideoPlot = abc19 %>%  
  ggplot() +  
  geom_density(aes(x = ideo,  
                   y = ..density..),  
               fill = "#404080") +  
  theme_bw()  
ideoPlot
```

Ideology

```
## Warning: Removed 4 rows containing non-finite values (stat_density).
```

