# Tidyverse Assignment - Masculinity Data

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### The Data: What Do Men Think It Means to be a Man?

For this assignment, I decided to use the dataset that corresponds to the What Do Men Think It Means To Be A Man? article on FiveThirtyEight.com. The article can be found here: https://fivethirtyeight.com/features/what-do-men-think-it-means-to-be-a-man/

It contains the results of a survey of 1,615 adult men conducted by SurveyMonkey in partnership with FiveThirtyEight and WNYC Studios from May 10-22, 2018.

```
library(tidyverse)
dat <- as_tibble(read.csv('https://raw.githubusercontent.com/amberferger/DATA607_Masculinity/master/raw</pre>
```

We have quite a bit of questions in this survey, so we will focus on just a few. For the purpose of this vignette, let's see what role demographics play in the answer to the question **How important is it to you that others see you as masculine?** We'll use the **select** command (from the tidyverse dependency dplyr) to return only the columns we are interested in looking at (race and orientation). We'll also use the **filter()** command to subset our data to only individuals that provided a response to these question.

```
dat <- dat %>%
  select(race2, orientation, q0002) %>%
  filter(q0002 != 'No answer' & race2 != 'No answer' & orientation != 'No answer')
```

#### **Data Aggregation**

Our final data set has 1 response variable (the answer to the question) and 2 explanatory variables (our demographic data). We'll use the **group\_by** function with the **count()** function to summarize our data. We will then transform our values by creating a percent for each of the groupings.

```
raceCount <- dat %>%
  group_by(race2, q0002) %>%
  count()

raceCount <- raceCount %>%
  group_by(race2) %>%
  mutate(RACE_PCT = n/sum(n))

raceCount
```

```
## # A tibble: 8 x 4
## # Groups:
               race2 [2]
##
               q0002
                                         n RACE PCT
     race2
     <fct>
               <fct>
                                      <int>
                                               <dbl>
## 1 Non-white Not at all important
                                         46
                                               0.178
## 2 Non-white Not too important
                                         68
                                               0.264
## 3 Non-white Somewhat important
                                         99
                                               0.384
```

```
## 4 Non-white Very important
                                    45
                                          0.174
## 5 White Not at all important
                                   193
                                          0.144
                                          0.353
## 6 White Not too important
                                   471
## 7 White Somewhat important
                                   523
                                          0.391
## 8 White
             Very important
                                   149
                                          0.112
```

We'll do the same thing for the **orientation** variable.

```
orientationCount <- dat %>%
  group_by(orientation, q0002) %>%
  count()

orientationCount <- orientationCount %>%
  group_by(orientation) %>%
  mutate(ORIENTATION_PCT = n/sum(n))

orientationCount
```

```
## # A tibble: 12 x 4
## # Groups: orientation [3]
##
     orientation q0002
                                          n ORIENTATION_PCT
##
     <fct>
                  <fct>
                                      <int>
                                                      <dbl>
## 1 Gay/Bisexual Not at all important
                                                     0.206
                                         33
## 2 Gay/Bisexual Not too important
                                         58
                                                     0.362
                                         54
## 3 Gay/Bisexual Somewhat important
                                                     0.338
## 4 Gay/Bisexual Very important
                                         15
                                                     0.0938
## 5 Other
                Not at all important
                                         10
                                                     0.323
## 6 Other
                Not too important
                                         8
                                                     0.258
## 7 Other
                Somewhat important
                                         5
                                                     0.161
## 8 Other
                 Very important
                                         8
                                                     0.258
## 9 Straight
                 Not at all important
                                        196
                                                     0.140
## 10 Straight
                 Not too important
                                        473
                                                     0.337
## 11 Straight
                  Somewhat important
                                        563
                                                     0.401
## 12 Straight
                  Very important
                                        171
                                                     0.122
```

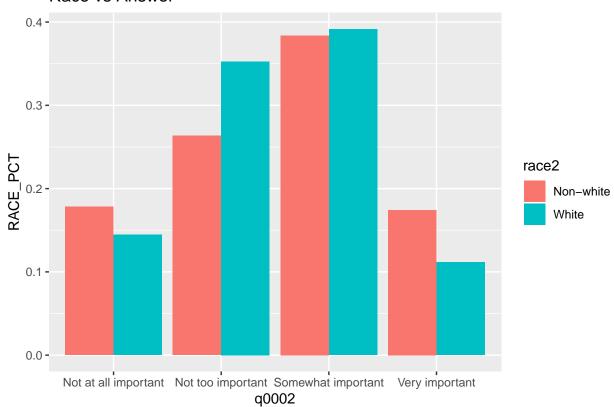
#### Visualization

Now let's visualize our data! We'll use the **ggplot** library to take a look:

```
library(ggplot2)

ggplot(raceCount, aes(fill=race2, y=RACE_PCT, x=q0002)) +
    geom_bar(position="dodge", stat="identity") +
    ggtitle("Race vs Answer")
```

## Race vs Answer



```
ggplot(orientationCount, aes(fill=orientation, y=ORIENTATION_PCT, x=q0002)) +
    geom_bar(position="dodge", stat="identity") +
    ggtitle("Orientation vs Answer")
```

