Lab 3: Individual 1

John Chandara <chandara@iastate.edu>

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```
library(tidyverse)
```

```
## -- Attaching packages -------------------------------------- tidyverse 1.3.0 --
```

```
## v ggplot2 3.2.1     v purrr   0.3.3
## v tibble  2.1.3     v dplyr   0.8.3
## v tidyr   1.0.0     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.4.0
```

```
## -- Conflicts ----------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
dat <- readxl::read_xls('GSS.xls')
```

```
## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in A64817 / R64817C1: got 'Source'
```

GSS Data Exploration

Data Cleaning

```
indx <- sapply(dat, is.character)
dat[indx] <- lapply(dat[indx], function(x) as.factor(as.character(x)))
names(dat) <- c('year', 'happiness', 'party', 'residence', 'sex', 'education', 'children', 'marriage',
str(dat)
```

```
## Classes 'tbl_df', 'tbl' and 'data.frame':    64816 obs. of  10 variables:
##  $ year     : num  1972 1972 1972 1972 1972 ...
##  $ happiness: Factor w/ 7 levels "Data collection: General Social Survey\nCase Selection: all cases"
##  $ party    : Factor w/ 10 levels "Don't know","Ind,near dem",..: 2 6 4 6 9 2 2 2 9 9 ...
##  $ residence: Factor w/ 10 levels "E. nor. central",..: 4 1 1 3 1 1 1 4 10 10 ...
##  $ sex      : Factor w/ 2 levels "Female","Male": 1 2 1 1 1 2 2 2 1 1 ...
##  $ education: Factor w/ 7 levels "Bachelor","Don't know",..: 1 6 4 1 4 4 4 1 4 4 ...
##  $ children : Factor w/ 10 levels "0","1","2","3",..: 1 6 5 1 3 1 3 1 3 5 ...
##  $ marriage : Factor w/ 6 levels "Divorced","Married",..: 3 2 2 2 2 3 1 3 3 2 ...
##  $ id       : num  1 2 3 4 5 6 7 8 9 10 ...
##  $ ballot   : Factor w/ 5 levels "Ballot a","Ballot b",..: 5 5 5 5 5 5 5 5 5 5 ...
```

Exploration

How does the happiness of a respondent relate to the political party affiliation?

Is political affiliation affected by education?

How does the political affiliation and the residence affect happiness?