Predicting Trust in Media and the Importance of Freedom

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#Loading Packages and Data

```
library(broom)
library(inspectdf)
library(foreign)
library(tidyverse)
library(patchwork)
```

```
hkwave1 <- read.spss("data/Hong Kong v4.2.sav", to.data.frame=TRUE)
japanwave1 <- read.spss("data/Japan v4.2.sav", to.data.frame=TRUE)
```

These are the packages we will be using for data analysis as well as the datasets we will be working with from various Asian Barometer Survey waves.

Data Cleaning

```
japanwave1 %>% inspect_types()
```

```
## # A tibble: 2 x 4
##   type      cnt  pcnt col_name
##   <chr>   <int> <dbl> <named list>
## 1 factor    259 93.5  <chr [259]>
## 2 numeric    18  6.50 <chr [18]>
```

```
hkwave1 %>% inspect_types()
```

```
## # A tibble: 2 x 4
##   type      cnt  pcnt col_name
##   <chr>   <int> <dbl> <named list>
## 1 factor    282 92.5  <chr [282]>
## 2 numeric    23  7.54 <chr [23]>
```

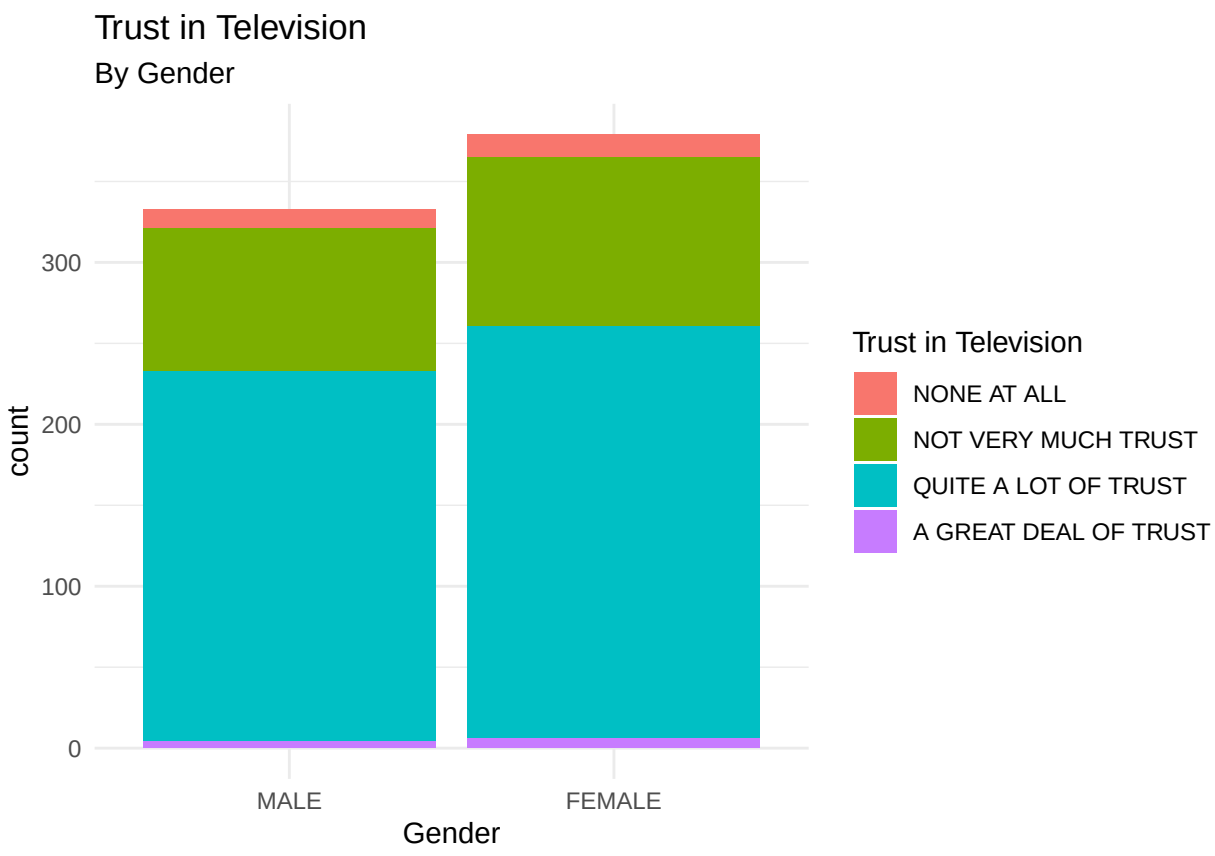
Most of our categorical data is already in factor form so we can continue.

```
hkwave1 <- hkwave1 %>%
  drop_na(q016) %>%
  mutate(TV_Trust = as.factor(case_when(
    q016 == "QUITE A LOT OF TRUST" | q016 == "A GREAT DEAL OF TRUST" ~ 1,
    q016 == "NONE AT ALL" | q016 == "NOT VERY MUCH TRUST" ~ 0
  ))) %>%
  drop_na(level3) %>%
  mutate(urban = as.factor(case_when(
    level3 == "urban" ~ 1,
    level3 == "rural" ~ 0
  ))) %>%
  mutate(age = as.numeric(se003a)) %>%
```

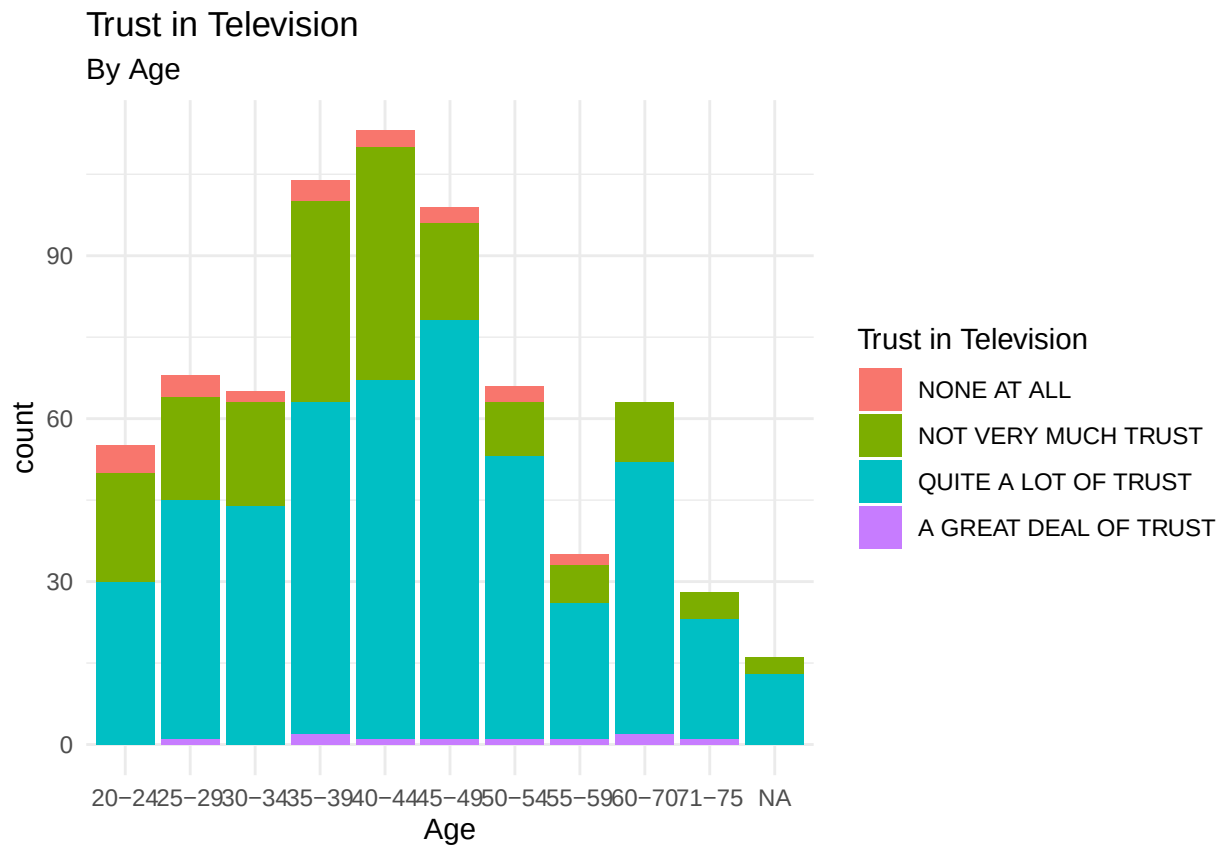
```
  drop_na(se005b) %>%
  mutate(educated = as.factor(case_when(
    se005b == "tertiary education" | se005b == "secondary education" ~ 1,
    se005b == "primary education" | se005b == "illiterate" ~ 0
  ))) %>%
  mutate(male = as.factor(case_when(
    se002 == "MALE" ~ 1,
    se002 == "FEMALE" ~ 0
  ))) %>%
  mutate(married = as.factor(case_when(
    se004a == "Yes" ~ 1,
    TRUE ~ 0
  ))) %>%
  mutate(trusting = as.factor(case_when(
    q024 == "MOST PEOPLE CAN BE TRUSTED" ~ 1,
    TRUE ~ 0
  ))) %>%
  mutate(income = as.factor(se009))
```

Exploratory Data Analysis

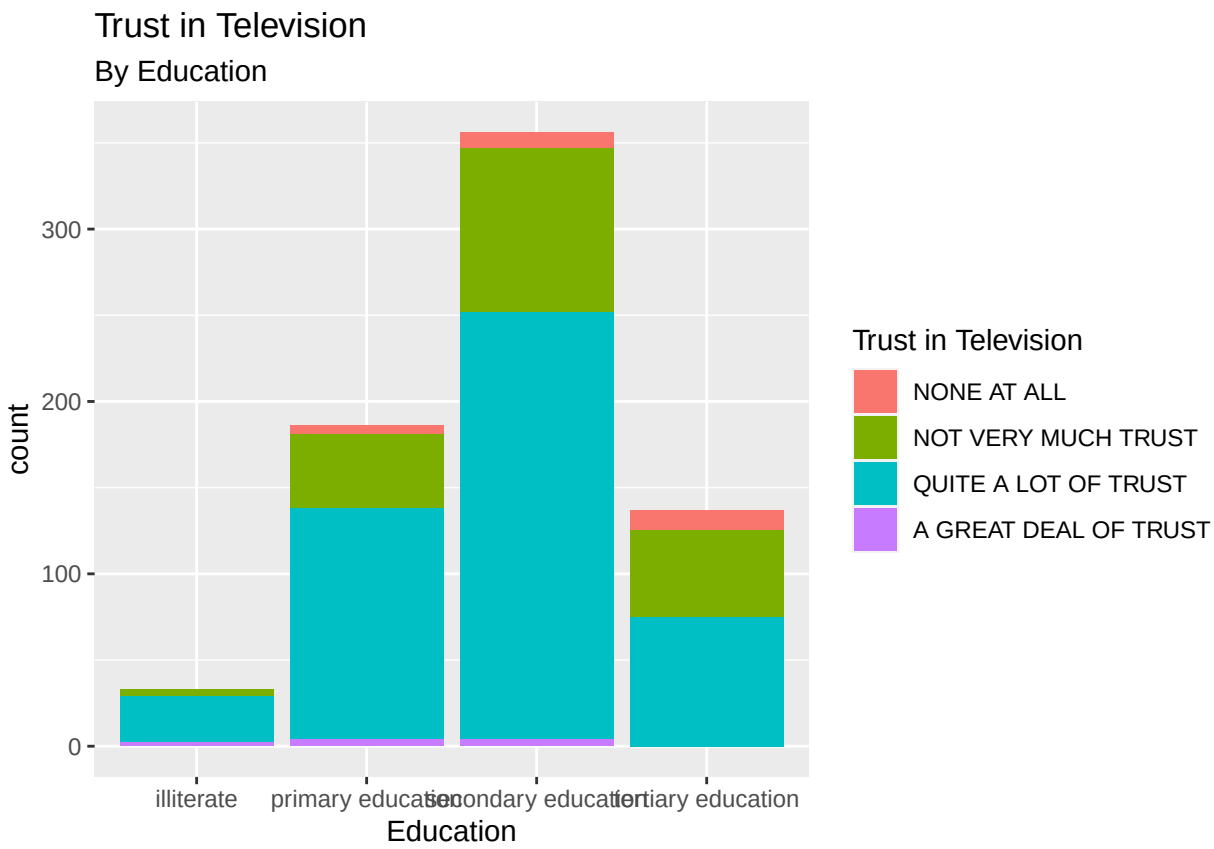
```
ggplot(data = hkwave1, aes(x = se002, fill = q016)) + geom_bar() +
  labs(title = "Trust in Television", subtitle = "By Gender", x = "Gender") +
  guides(fill=guide_legend(title="Trust in Television")) + theme_minimal()
```



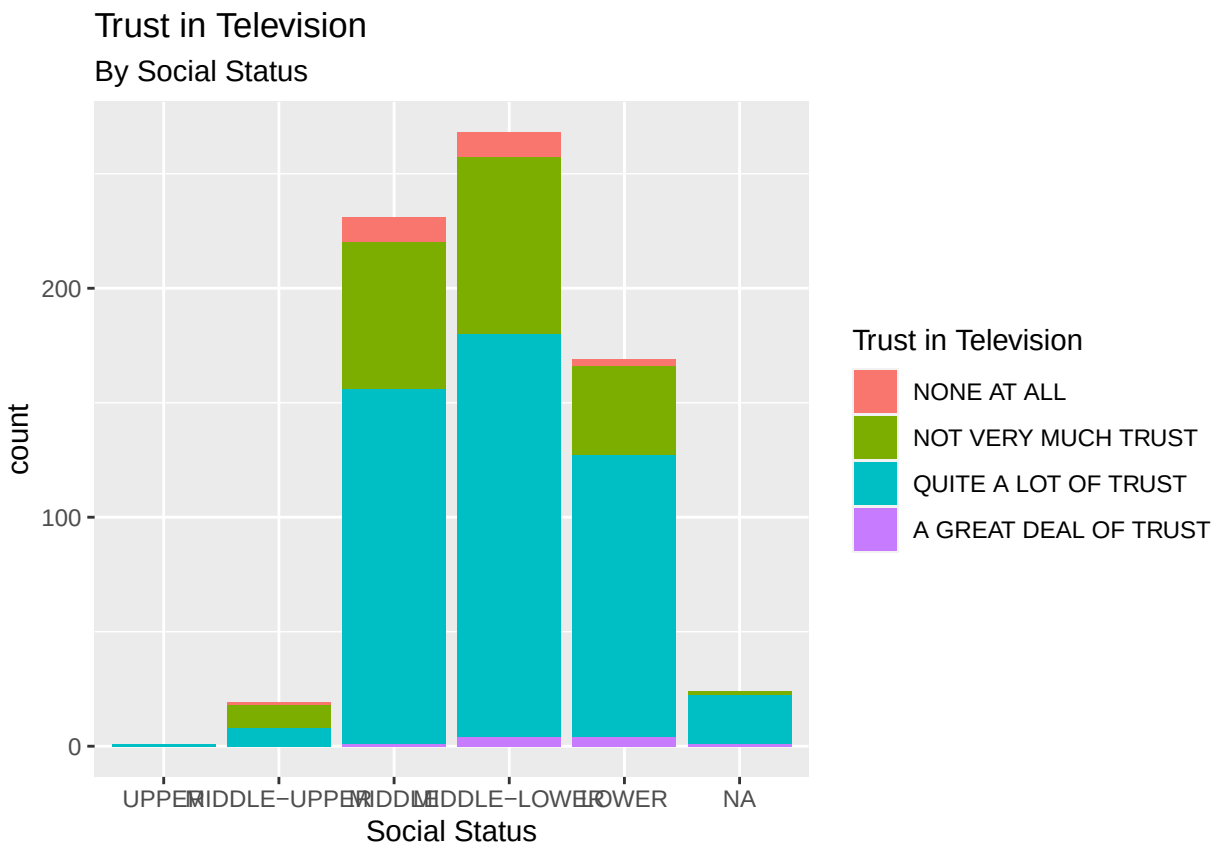
```
ggplot(data = hkwave1, aes(x = se003, fill = q016)) + geom_bar() +
  labs(title = "Trust in Television",subtitle = "By Age", x = "Age") +
  guides(fill=guide_legend(title="Trust in Television")) + theme_minimal()
```



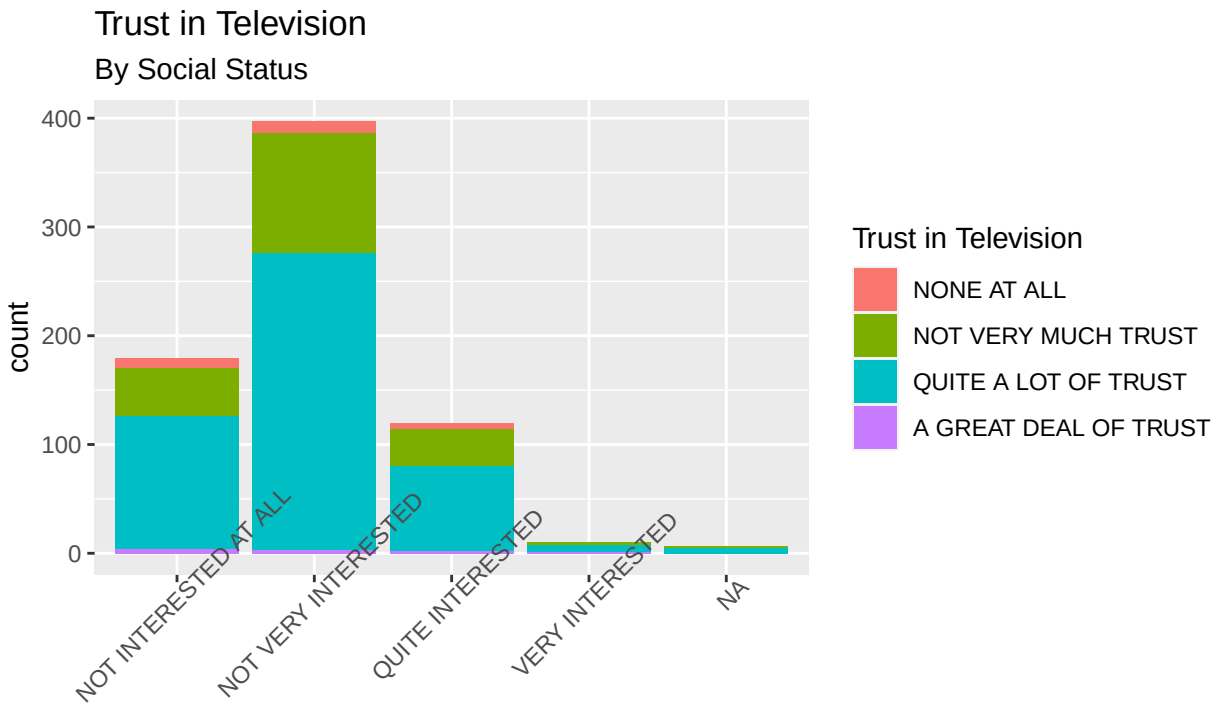

```
ggplot(data = hkwave1, aes(x = se005b, fill = q016)) + geom_bar() +
  labs(title = "Trust in Television", subtitle = "By Education",
       x = "Education") + guides(fill=guide_legend(title="Trust in Television"))
```




```
ggplot(data = hkwave1, aes(x = se017, fill = q016)) + geom_bar() +
  labs(title = "Trust in Television", subtitle = "By Social Status",
       x = "Social Status") +
  guides(fill=guide_legend(title="Trust in Television"))
```




```
ggplot(data = hkwave1, aes(x = q056, fill = q016)) + geom_bar() +
  labs(title = "Trust in Television", subtitle = "By Social Status",
       x = "Social Status") +
  guides(fill=guide_legend(title="Trust in Television")) +
  theme(axis.text.x = element_text(angle = 45))
```




```
model1 <- glm(TV_Trust ~ educated + age + male + married + trusting + income, data = hkwave1, family =
tidy(model1)
```

```
## # A tibble: 10 x 5
##    term                      estimate std.error statistic p.value
##    <chr>                        <dbl>     <dbl>     <dbl>   <dbl>
##  1 (Intercept)                 0.360    0.416       0.866 0.386
##  2 educated1                   0.0404   0.244       0.165 0.869
##  3 age                         0.0205   0.00932     2.20  0.0277
##  4 male1                       0.111    0.183       0.611 0.541
##  5 married1                    0.390    0.235       1.66  0.0970
##  6 trusting1                   0.465    0.206       2.26  0.0239
##  7 income8000-14999 HK        -0.488    0.311      -1.57  0.116
##  8 income15000-24999 HK       -0.470    0.323      -1.45  0.146
##  9 income25000-39999 HK       -0.670    0.347      -1.93  0.0539
## 10 income40000 HK AND ABOVE   -1.09     0.363      -3.01  0.00264
```