

Sources of Misperception - Preliminary Analyses

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Load data, basic sociodemographics

```
### Packages
library(here)
library(readr)
library(tidyverse)

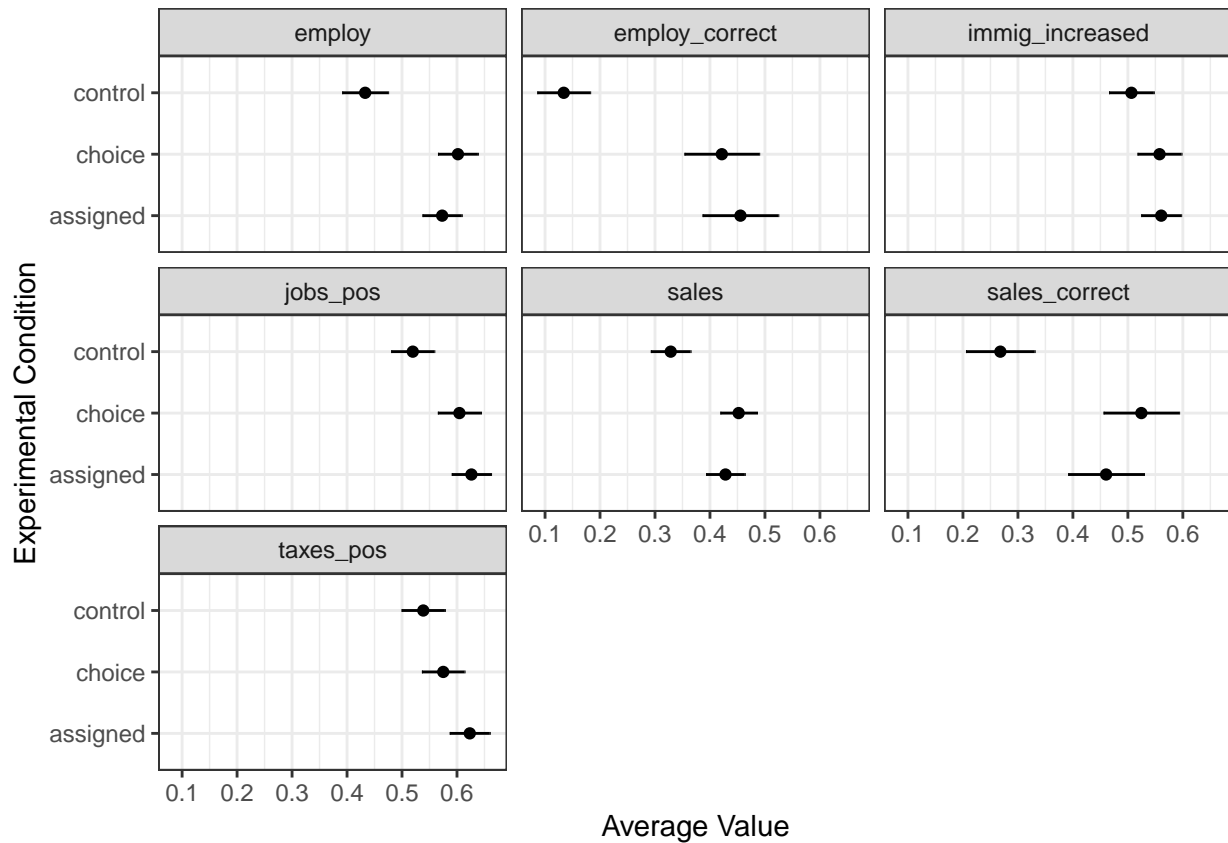
### Functions
se <- function(x, na.rm = T){
  sd(x, na.rm = na.rm)/sqrt(length(na.omit(x)))
}
cilo <- function(x, na.rm = T){
  mean(x, na.rm = na.rm) - qnorm(.975) * se(x, na.rm)
}
cihi <- function(x, na.rm = T){
  mean(x, na.rm = na.rm) + qnorm(.975) * se(x, na.rm)
}

### Load cleaned data
dat <- read_csv(here("data/immigration_20191219_clean.csv"))
```

Main analysis

H1a: control vs. forced exposure vs. free choice

```
dat %>%
  select(condition, employ, employ_correct, sales, sales_correct,
         immig_increased, taxes_pos, jobs_pos) %>%
  gather(variable, value, -condition) %>%
  group_by(condition, variable) %>%
  summarize_all(list(mean = ~mean, cilo = ~cilo, cihi = ~cihi), na.rm = T) %>%
  ggplot(aes(x = mean, xmin = cilo, xmax = cihi, y = condition)) +
  theme_bw() + labs(y = "Experimental Condition", x = "Average Value") +
  geom_point() + geom_errorbarh(height = 0) + facet_wrap(~variable)
```



Additional outcomes not measured in control condition

```
dat %>%
  filter(condition != "control") %>%
  select(condition, tweet_click, tweet_time, story_time,
         actions_discuss, actions_forward, actions_post, actions_seek) %>%
  gather(variable, value, -condition) %>%
  group_by(condition, variable) %>%
  summarize_all(list(mean = ~mean, cilo = ~cilo, cihi = ~cihi), na.rm = T) %>%
  ggplot(aes(x = mean, xmin = cilo, xmax = cihi, y = condition)) +
  theme_bw() + labs(y = "Experimental Condition", x = "Average Value") +
  geom_point() + geom_errorbarh(height = 0) + facet_wrap(~variable, scales = "free_x")
```

