

Sources of Misperception - Preliminary Analyses

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Load data, basic sociodemographics

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

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

Main analysis

H1a: control vs. forced exposure

```
t.test(employ_correct~condition, data = dat[dat$condition != "assigned",])

##
## Welch Two Sample t-test
##
## data:  employ_correct by condition
## t = 6.7727, df = 361.76, p-value = 5.129e-11
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  0.2040552 0.3710408
## sample estimates:
## mean in group choice mean in group control
##      0.4215686      0.1340206

t.test(sales_correct~condition, data = dat[dat$condition != "assigned",])

##
## Welch Two Sample t-test
##
## data:  sales_correct by condition
## t = 5.4127, df = 394.11, p-value = 1.081e-07
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  0.1633141 0.3496231
## sample estimates:
## mean in group choice mean in group control
##      0.5245098      0.2680412

t.test(immig_increased~condition, data = dat[dat$condition != "assigned",])

##
## Welch Two Sample t-test
```

```
##
## data: immig_increased by condition
## t = 1.7557, df = 395.26, p-value = 0.07991
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.006126795 0.108436275
## sample estimates:
## mean in group choice mean in group control
## 0.5575980 0.5064433
t.test(taxes_pos~condition, data = dat[dat$condition != "assigned",])
```

```
##
## Welch Two Sample t-test
##
## data: taxes_pos by condition
## t = 1.2888, df = 395.37, p-value = 0.1982
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.01909303 0.09177345
## sample estimates:
## mean in group choice mean in group control
## 0.5750000 0.5386598
t.test(jobs_pos~condition, data = dat[dat$condition != "assigned",])
```

```
##
## Welch Two Sample t-test
##
## data: jobs_pos by condition
## t = 2.9995, df = 395.76, p-value = 0.002875
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.02922732 0.14042095
## sample estimates:
## mean in group choice mean in group control
## 0.6044118 0.5195876
```

H1b: control vs. free choice

```
t.test(employ_correct~condition, data = dat[dat$condition != "choice",])

##
## Welch Two Sample t-test
##
## data: employ_correct by condition
## t = 7.503, df = 356.48, p-value = 5.024e-13
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.2371744 0.4056754
## sample estimates:
## mean in group assigned mean in group control
## 0.4554455 0.1340206
```

```

t.test(sales_correct~condition, data = dat[dat$condition != "choice",])

##
## Welch Two Sample t-test
##
## data: sales_correct by condition
## t = 4.0529, df = 391.67, p-value = 6.103e-05
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.0990449 0.2856647
## sample estimates:
## mean in group assigned mean in group control
## 0.4603960 0.2680412

t.test(immig_increased~condition, data = dat[dat$condition != "choice",])

##
## Welch Two Sample t-test
##
## data: immig_increased by condition
## t = 1.9462, df = 386.98, p-value = 0.05235
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.0005540163 0.1089545470
## sample estimates:
## mean in group assigned mean in group control
## 0.5606436 0.5064433

t.test(taxes_pos~condition, data = dat[dat$condition != "choice",])

##
## Welch Two Sample t-test
##
## data: taxes_pos by condition
## t = 3.0923, df = 390.27, p-value = 0.002129
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.03081462 0.13840045
## sample estimates:
## mean in group assigned mean in group control
## 0.6232673 0.5386598

t.test(jobs_pos~condition, data = dat[dat$condition != "choice",])

##
## Welch Two Sample t-test
##
## data: jobs_pos by condition
## t = 3.9433, df = 389.02, p-value = 9.531e-05
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.05347559 0.15982440
## sample estimates:
## mean in group assigned mean in group control
## 0.6262376 0.5195876

```

H1c: forced exposure vs. free choice

```
t.test(employ_correct~condition, data = dat[dat$condition != "control",])
```

```
##
## Welch Two Sample t-test
##
## data: employ_correct by condition
## t = 0.6865, df = 403.86, p-value = 0.4928
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.0631322 0.1308860
## sample estimates:
## mean in group assigned mean in group choice
## 0.4554455 0.4215686
```

```
t.test(sales_correct~condition, data = dat[dat$condition != "control",])
```

```
##
## Welch Two Sample t-test
##
## data: sales_correct by condition
## t = -1.2915, df = 403.97, p-value = 0.1973
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.16170698 0.03347945
## sample estimates:
## mean in group assigned mean in group choice
## 0.4603960 0.5245098
```

```
t.test(immig_increased~condition, data = dat[dat$condition != "control",])
```

```
##
## Welch Two Sample t-test
##
## data: immig_increased by condition
## t = 0.11045, df = 400.64, p-value = 0.9121
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.05115964 0.05725069
## sample estimates:
## mean in group assigned mean in group choice
## 0.5606436 0.5575980
```

```
t.test(taxes_pos~condition, data = dat[dat$condition != "control",])
```

```
##
## Welch Two Sample t-test
##
## data: taxes_pos by condition
## t = 1.7779, df = 402.64, p-value = 0.07618
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.005103625 0.101638278
## sample estimates:
## mean in group assigned mean in group choice
```

```

##                0.6232673                0.5750000
t.test(jobs_pos~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  jobs_pos by condition
## t = 0.80681, df = 400.87, p-value = 0.4203
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.03135562  0.07500734
## sample estimates:
## mean in group assigned    mean in group choice
##           0.6262376           0.6044118

Additional outcomes not measured in control condition
t.test(tweet_click~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  tweet_click by condition
## t = 1.0196, df = 403.1, p-value = 0.3085
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.04414321  0.13927037
## sample estimates:
## mean in group assigned    mean in group choice
##           0.3514851           0.3039216

t.test(tweet_time~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  tweet_time by condition
## t = 0.76093, df = 403.96, p-value = 0.4471
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -12.46452  28.20759
## sample estimates:
## mean in group assigned    mean in group choice
##           38.29096           30.41942

t.test(story_time~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  story_time by condition
## t = -1.3666, df = 224.6, p-value = 0.1731
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -98.40270  17.81094
## sample estimates:

```

```

## mean in group assigned    mean in group choice
##                107.1903                147.4862
t.test(actions_discuss~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  actions_discuss by condition
## t = -0.91465, df = 397.52, p-value = 0.3609
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.08931384  0.03259575
## sample estimates:
## mean in group assigned    mean in group choice
##                0.3165829                0.3449420
t.test(actions_forward~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  actions_forward by condition
## t = -1.4318, df = 394.47, p-value = 0.153
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.10990375  0.01727749
## sample estimates:
## mean in group assigned    mean in group choice
##                0.2020202                0.2483333
t.test(actions_post~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  actions_post by condition
## t = -1.5935, df = 391.81, p-value = 0.1119
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.11657824  0.01220114
## sample estimates:
## mean in group assigned    mean in group choice
##                0.1936027                0.2457912
t.test(actions_seek~condition, data = dat[dat$condition != "control",])

##
##  Welch Two Sample t-test
##
## data:  actions_seek by condition
## t = -0.20176, df = 393.57, p-value = 0.8402
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -0.07235252  0.05888450
## sample estimates:
## mean in group assigned    mean in group choice

```

##

0.2929293

0.2996633