

Study S2A

January 31, 2025

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Read Data

```
# Set this to TRUE if you have API access, FALSE if using CSV
USE_API <- T

if(USE_API) {
  ## Pull directly from Qualtrics API
  qual_data <- fetch_survey(surveyID='SV_3sK5vJ1hXsDPKom',
    label = T,
    convert = F,
    start_date = "2022-12-01",
    force_request = T)
} else {
  # Read the processed data directly from CSV
  d0 <- read.csv('StudyS2A.csv', check.names = F)
  num_excluded <- unique(d0$num_excluded_total)
}

# Define the categories
females <- c('Mary Barra (CEO of General Motors)', 'Oprah Winfrey (CEO of Oprah Winfrey
↳ Network)',
  'Janet Yellen (U.S. Secretary Treasury)', 'Jane Fraser (CEO of Citigroup)',
  'Rosalind Brewer (CEO of Walgreens)')

ceos <- c("Tim Cook (CEO of Apple)", "Elon Musk (CEO of Tesla)", "Oprah Winfrey (CEO of
↳ Oprah Winfrey Network)",
  "Mary Barra (CEO of General Motors)", "Jane Fraser (CEO of Citigroup)", "Marvin
↳ Ellison (CEO of Lowe's)",
  "Warren Buffet (CEO of Berkshire Hathaway)", "Charles Koch (CEO of Koch
↳ Industries)",
  "Stewart Butterfield (CEO of Slack)", "Jack Ma (CEO of Alibaba)", "Rosalind
↳ Brewer (CEO of Walgreens)",
  "Jeff Weiner (CEO of LinkedIn)")

techs <- c("Bill Gates (Co-founder of Microsoft)", "Mark Zuckerberg (Co-founder of
↳ Facebook)",
  "Tim Cook (CEO of Apple)", "Elon Musk (CEO of Tesla)", "Larry Page (Co-founder
↳ of Google)",
  "Sergey Brin (Co-founder of Google)", "Jeff Bezos (Founder of Amazon)",
  "Stewart Butterfield (CEO of Slack)", "Jack Ma (CEO of Alibaba)",
  "Jeff Weiner (CEO of LinkedIn)")

founders <- c("Bill Gates (Co-founder of Microsoft)", "Mark Zuckerberg (Co-founder of
↳ Facebook)",
  "Larry Page (Co-founder of Google)", "Sergey Brin (Co-founder of Google)",
  "Sean Combs (Founder of Bad Boy Entertainment)", "Daymond John (Founder of
↳ FUBU)",
  "Jeff Bezos (Founder of Amazon)", "Michael Bloomberg (Co-founder of
↳ Bloomberg LP)",
  "Phil Knight (Co-founder of Nike)")

if(USE_API) {
```

```

d0 <- qual_data |>
mutate(ec_2 = tolower(ec_2)) |>
filter(workerId!="", selection_6!="", ec_2 %in% c("one one", "\"one one\""),
  ↪ Finished==1) |>
mutate(fem_choice = across(c(bonus_ctrl2_7, bonus_ctrl1_7, bonus_trt_7),
  ~ case_when(. %in% females ~ 1,
    TRUE ~ 0)),
  ceo_choice = across(c(bonus_ctrl2_7, bonus_ctrl1_7, bonus_trt_7),
  ~ case_when(. %in% ceos ~ 1,
    TRUE ~ 0)),
  tech_choice = across(c(bonus_ctrl2_7, bonus_ctrl1_7, bonus_trt_7),
  ~ case_when(. %in% techs ~ 1,
    TRUE ~ 0)),
  founder_choice = across(c(bonus_ctrl2_7, bonus_ctrl1_7, bonus_trt_7),
  ~ case_when(. %in% founders ~ 1,
    TRUE ~ 0)),
  condition = case_when(group %in% c("control1", "control2") ~ "Control",
    TRUE ~ "Treatment")) |>
mutate(fem_score = case_when(`female_count_type-1` == "are female" ~ female_count_1,
  `female_count_type-2` == "are female" ~ female_count_2,
  `female_count_type-3` == "are female" ~ female_count_3),
  gender_feedback = case_when(condition=="Control" ~ 0, condition=="Treatment" ~
  ↪ 1),
  founder = case_when((group == "control1" & (`count_type-1` == "are founders" |
  ↪ `count_type-2` == "are founders")) | (group=="control2") |
  ↪ (group=="treatment" & (`female_count_type-1` == "are founders" |
  ↪ `female_count_type-2` == "are founders" | `female_count_type-3` == "are
  ↪ founders"))) ~ 1, TRUE ~ 0),
  tech = case_when((group == "control1" & (`count_type-1` == "are in the
  ↪ technology industry" | `count_type-2` == "are in the technology
  ↪ industry")) | (group=="control2") | (group=="treatment" &
  ↪ (`female_count_type-1` == "are in the technology industry" |
  ↪ `female_count_type-2` == "are in the technology industry" |
  ↪ `female_count_type-3` == "are in the technology industry"))) ~ 1, TRUE ~
  ↪ 0),
  ceo = case_when((group == "control1" & (`count_type-1` == "are CEOs" |
  ↪ `count_type-2` == "are CEOs")) | (group=="control2") | (group=="treatment"
  ↪ & (`female_count_type-1` == "are CEOs" | `female_count_type-2` == "are
  ↪ CEOs" | `female_count_type-3` == "are CEOs"))) ~ 1, TRUE ~ 0),
  list_two = case_when(group=="control1" ~ 1, group=="control2" ~ 0, TRUE ~
  ↪ NA_real_)) |>
mutate(female = case_when(fem_choice$bonus_ctrl2_7==1 | fem_choice$bonus_ctrl1_7==1 |
  ↪ fem_choice$bonus_trt_7==1 ~ 1, TRUE ~ 0),
  ceo_pick = case_when(ceo_choice$bonus_ctrl2_7==1 | ceo_choice$bonus_ctrl1_7==1
  ↪ | ceo_choice$bonus_trt_7==1 ~ 1, TRUE ~ 0),
  founder_pick = case_when(founder_choice$bonus_ctrl2_7==1 |
  ↪ founder_choice$bonus_ctrl1_7==1 | founder_choice$bonus_trt_7==1 ~ 1, TRUE
  ↪ ~ 0),
  tech_pick = case_when(tech_choice$bonus_ctrl2_7==1 |
  ↪ tech_choice$bonus_ctrl1_7==1 | tech_choice$bonus_trt_7==1 ~ 1, TRUE ~ 0),
  gender_code = case_when(gender=="Man" ~ 1, TRUE ~ 0),
  race_code = case_when(race=="White / Caucasian" ~ 1, TRUE ~ 0),
  age = as.numeric(age),

```

```

gender = case_when(gender==" " ~ "N/A",
  TRUE ~ gender),
race = case_when(race==" " ~ "N/A",
  TRUE ~ race),
encouragement = case_when(vignette=="demand" ~ 1,
  vignette=="base" ~ 0,
  TRUE ~ NA),
base_gender = rowSums(across(selection_1:selection_6, ~ . %in% females))) |>
select(
  list_two, encouragement, gender_feedback, female, ceo, ceo_pick, founder,
  ↪ founder_pick, tech, tech_pick, base_gender, gender, race, age, gender_code,
  ↪ race_code) |>
  slice(1:1000) # pre-registered sample size

# Calculate the number of excluded participants
num_excluded <- nrow(qual_data) - nrow(d0)

# Save num_excluded in d0
d0$num_excluded_total <- num_excluded # As a column

# Write the API-pulled data into a CSV file
write.csv(d0, 'StudyS2A.csv', row.names = FALSE, quote = TRUE)
}

# Create the encouragement-specific dataframes
d0_w_encouragement <- d0 |>
  filter(encouragement == 1)

d0_no_encouragement <- d0 |>
  filter(encouragement == 0)

```

Variable Names

Variable	Description
list_two	Binary indicator of whether the control received a list of two attributes (list_two=1) or not (list_two=0).
encouragement	Binary indicator of whether a participant was randomly assigned to the encouragement condition.
gender_feedback	Binary indicator of whether a participant was randomly assigned to gender feedback condition.
female	Binary indicator of whether a participant selected a female business leader for their seventh selection.
ceo	Binary indicator of whether a participant was randomly assigned to receive CEO feedback.
ceo_pick	Binary indicator of whether a participant selected a CEO business leader for their seventh selection.
founder	Binary indicator of whether a participant was randomly assigned to receive founder feedback.
founder_pick	Binary indicator of whether a participant selected a founder business leader for their seventh selection.
tech	Binary indicator of whether a participant was randomly assigned to receive technologist feedback.
tech_pick	Binary indicator of whether a participant selected a technologist business leader for their seventh selection.
base_gender	Count of the number of female panelists selected in the initial six selections.
gender	Self-selected gender.
race	Self-selected race.
age	Self-entered age.
gender_code	Dummy code for gender (male = 1).
race_code	Dummy code for race (white = 1).

Demographics

Excluded Participants: 265

##		Percentage	gender
## 1	Another gender not listed here:	0.2	
## 2		Man	47.2
## 3		Non-binary	1.1
## 4		Woman	51.5

##		Percentage	Race
## 1	American Indian or Alaskan Native	0.5	
## 2	Asian / Pacific Islander	8.5	
## 3	Black or African American	11.2	
## 4	Hispanic / Latinx	5.7	
## 5	White / Caucasian	74.1	

##	#	A tibble:	1	x	2
##		mean_age	sd_age		
##		<dbl>	<dbl>		
## 1		40.4	12.0		

Pooled Analysis

```
## no gender feedback
r0_0 <- lm(female ~ list_two, data=d0_no_encouragement)

# Calculate robust standard errors
robust_summary(r0_0)

##
## Call:
## lm(formula = female ~ list_two, data = d0_no_encouragement)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.2845 -0.2845 -0.2823  0.7155  0.7177
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.282258   0.040749   6.927 3.99e-11 ***
## list_two      0.002225   0.058701   0.038    0.97
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4525 on 238 degrees of freedom
## (256 observations deleted due to missingness)
## Multiple R-squared:  6.087e-06, Adjusted R-squared:  -0.004196
## F-statistic: 0.001449 on 1 and 238 DF, p-value: 0.9697

## no diversity encouragement
r0_1 <- lm(female ~ list_two, data=d0_w_encouragement)

# Calculate robust standard errors
robust_summary(r0_1)

##
## Call:
## lm(formula = female ~ list_two, data = d0_w_encouragement)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.3621 -0.3621 -0.2707  0.6379  0.7293
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.36207    0.04501   8.044 3.63e-14 ***
## list_two     -0.09139    0.05944  -1.538   0.125
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4634 on 247 degrees of freedom
## (255 observations deleted due to missingness)
```

Multiple R-squared: 0.009661, Adjusted R-squared: 0.005652
F-statistic: 2.41 on 1 and 247 DF, p-value: 0.1219

Primary Analysis

```
# primary model, no encouragement
r1 <- lm(female ~ gender_feedback*encouragement, data=d0)

robust_summary(r1)

##
## Call:
## lm(formula = female ~ gender_feedback * encouragement, data = d0)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.5020 -0.4766 -0.2833  0.5234  0.7167
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.283333   0.029209   9.700 < 2e-16 ***
## gender_feedback    0.193229   0.042840   4.511 7.24e-06 ***
## encouragement     0.029920   0.041522   0.721  0.471
## gender_feedback:encouragement -0.004521  0.060781  -0.074  0.941
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4804 on 996 degrees of freedom
## Multiple R-squared:  0.03878,    Adjusted R-squared:  0.03589
## F-statistic: 13.4 on 3 and 996 DF,  p-value: 1.417e-08

robust_confint(r1)
```

```
##              2.5 %    97.5 %
## (Intercept)    0.2260153 0.3406514
## gender_feedback 0.1091629 0.2772955
## encouragement -0.0515615 0.1114009
## gender_feedback:encouragement -0.1237942 0.1147514
```

Secondary Analysis

```
## ceo feedback
r_ceo <- lm(ceo_pick ~ ceo*encouragement, data=d0)

# Display the robust_summary with robust standard errors
robust_summary(r_ceo)

##
## Call:
## lm(formula = ceo_pick ~ ceo * encouragement, data = d0)
##
```

```
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.5134 -0.4744 -0.4394  0.5255  0.5606
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.47445    0.04298  11.040  <2e-16 ***
## ceo            -0.03156    0.05038  -0.626    0.531
## encouragement -0.03506    0.06117  -0.573    0.567
## ceo:encouragement 0.10560    0.07147   1.478    0.140
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4992 on 996 degrees of freedom
## Multiple R-squared:  0.004345, Adjusted R-squared:  0.001346
## F-statistic: 1.449 on 3 and 996 DF, p-value: 0.2271
```

```
robust_confint(r_ceo)
```

```
##              2.5 %    97.5 %
## (Intercept)    0.39011910 0.55878601
## ceo            -0.13041707 0.06730583
## encouragement -0.15509324 0.08497601
## ceo:encouragement -0.03464641 0.24585148
```

```
## founder feedback
r_founder <- lm(founder_pick ~ founder*encouragement, data=d0)

# Display the robust_summary with robust standard errors
robust_summary(r_founder)
```

```
##
## Call:
## lm(formula = founder_pick ~ founder * encouragement, data = d0)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.3692 -0.3351 -0.3019  0.6308  0.7266
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.301887    0.045014   6.706 3.34e-11 ***
## founder        0.067344    0.051250   1.314    0.189
## encouragement -0.028449    0.060024  -0.474    0.636
## founder:encouragement -0.005675    0.069274  -0.082    0.935
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4725 on 996 degrees of freedom
## Multiple R-squared:  0.004719, Adjusted R-squared:  0.001721
## F-statistic: 1.574 on 3 and 996 DF, p-value: 0.194
```

```
robust_confint(r_founder)
```

```
##              2.5 %      97.5 %
## (Intercept)      0.21355343 0.39022016
## founder          -0.03322561 0.16791357
## encouragement    -0.14623784 0.08933926
## founder:encouragement -0.14161516 0.13026497
```

```
## tech feedback
```

```
r_tech <- lm(tech_pick ~ tech*encouragement, data=d0)
```

```
# Display the robust_summary with robust standard errors
```

```
robust_summary(r_tech)
```

```
##
## Call:
## lm(formula = tech_pick ~ tech * encouragement, data = d0)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.3488 -0.3488 -0.3191  0.6512  0.7344
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    3.488e-01  4.229e-02   8.249 5.03e-16 ***
## tech           -6.337e-05  4.910e-02  -0.001   0.999
## encouragement -8.321e-02  5.776e-02  -1.441   0.150
## tech:encouragement 5.359e-02  6.738e-02   0.795   0.427
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4693 on 996 degrees of freedom
## Multiple R-squared:  0.003366, Adjusted R-squared:  0.0003645
## F-statistic: 1.121 on 3 and 996 DF, p-value: 0.3393
```

```
robust_confint(r_tech)
```

```
##              2.5 %      97.5 %
## (Intercept)      0.26584884 0.43182558
## tech             -0.09641335 0.09628661
## encouragement    -0.19656290 0.03013848
## tech:encouragement -0.07863192 0.18580653
```

```
## interaction of base gender
```

```
# primary model
```

```
r_interaction <- lm(female ~ gender_feedback*base_gender, data=d0)
```

```
# Display the summary with robust standard errors
```

```
robust_summary(r_interaction)
```

```
##
## Call:
## lm(formula = female ~ gender_feedback * base_gender, data = d0)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.6618 -0.3351 -0.2810  0.4634  0.7461
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.33511    0.03439   9.743 < 2e-16 ***
## gender_feedback    0.32671    0.04896   6.673 4.14e-11 ***
## base_gender      -0.02707    0.01940  -1.395 0.163303
## gender_feedback:base_gender -0.09819    0.02605  -3.770 0.000173 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4703 on 996 degrees of freedom
## Multiple R-squared:  0.07907,    Adjusted R-squared:  0.0763
## F-statistic: 28.51 on 3 and 996 DF,  p-value: < 2.2e-16
```

Figure S4A Code

```
dgender_plot <- d0_no_encouragement |>
  select(gender_feedback, female) |>
  group_by(gender_feedback, female) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(female == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(gender_feedback==0 ~ coef(summary(r1))[, "Std. Error"][1]*100,
                        TRUE ~ coef(robust_summary(r1))[, "Std. Error"][2]*100)) |>
  mutate(gender_feedback = case_when(gender_feedback==1 ~ "\"Treatment\"",
                                     TRUE ~ "\"Control\"")) |>
  rename(Condition = gender_feedback)

## dataframe for CEO information

dceo_plot <- d0_no_encouragement |>
  select(ceo, ceo_pick) |>
  group_by(ceo, ceo_pick) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(ceo_pick == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(ceo==0 ~ coef(robust_summary(r_ceo))[, "Std. Error"][1]*100,
                        TRUE ~ coef(robust_summary(r_ceo))[, "Std. Error"][2]*100)) |>
  mutate(ceo = case_when(ceo==1 ~ "\"Treatment\"",
                        TRUE ~ "\"Control\"")) |>
  rename(Condition = ceo)

## dataframe for Founder information
```

```

dfounder_plot <- d0_no_encouragement |>
  select(founder, founder_pick) |>
  group_by(founder, founder_pick) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(founder_pick == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(founder==0 ~ coef(robust_summary(r_founder))[, "Std.
           ↪ Error"][1]*100,
           TRUE ~ coef(robust_summary(r_founder))[, "Std. Error"][2]*100))
           ↪ |>
  mutate(founder = case_when(founder==1 ~ "\"Treatment\"",
                             TRUE ~ "\"Control\"")) |>
  rename(Condition = founder)

## dataframe for Tech information

dtech_plot <- d0_no_encouragement |>
  select(tech, tech_pick) |>
  group_by(tech, tech_pick) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(tech_pick == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(tech==0 ~ coef(robust_summary(r_tech))[, "Std. Error"][1]*100,
           TRUE ~ coef(robust_summary(r_tech))[, "Std. Error"][2]*100)) |>
  mutate(tech = case_when(tech==1 ~ "\"Treatment\"",
                          TRUE ~ "\"Control\"")) |>
  rename(Condition = tech)

df_combined <- bind_rows(
  dceo_plot %>% mutate(Category = "\nCCEOs"),
  dtech_plot %>% mutate(Category = "\nTechnologists"),
  dfounder_plot %>% mutate(Category = "\nFounders"),
  dgender_plot %>% mutate(Category = "\nFemale")
, .id = "id") %>%
  mutate(Category = factor(Category, levels = c("\nCCEOs", "\nTechnologists",
  ↪ "\nFounders", "\nFemale")))

p_combined_A <- ggplot(df_combined, aes(x = Condition, y = freq*100, fill = Condition)) +
  geom_bar(stat="identity", width = 0.85, position = position_dodge(width = 0.7)) +
  geom_text(aes(label=paste0(sprintf("%.1f", freq*100),"%"),
               position=position_dodge(width=0.7), vjust=5, size = 4, color = "white") +
  ↪ geom_errorbar(aes(ymin=freq*100-se, ymax=freq*100+se), width = .1, position =
  ↪ position_dodge(width = 0.7)) +
  facet_wrap(~factor(Category, c("\nCCEOs", "\nTechnologists", "\nFounders", "\nFemale")),
  ↪ nrow = 1, strip.position = "bottom") +
  geom_segment(data = df_combined %>% filter(Condition == "\"Treatment\""),
               aes(x = 1, xend = 2, y = freq*100 + se + 5, yend = freq*100 + se + 5),
               inherit.aes = FALSE) +
  geom_text(data = df_combined %>% filter(Category %in% c("\nCCEOs", "\nTechnologists") &
  ↪ Condition == "\"Treatment\""),

```

```

    aes(x = 1.5, xend = 1.5, y = freq*100 + se + 7, yend = freq*100 + se + 7,
    ↪ label = "n.s."),
    inherit.aes = FALSE, vjust = 0) +
geom_text(data = df_combined %>% filter(Category %in% c('\nFounders') & Condition ==
    ↪ "\"Treatment\""),
    aes(x = 1.5, xend = 1.5, y = freq*100 + se + 5, yend = freq*100 + se + 5,
    ↪ label = "*"),
    inherit.aes = FALSE, vjust = 0) +
geom_text(data = df_combined %>% filter(Category == '\nFemale' & Condition ==
    ↪ "\"Treatment\""),
    aes(x = 1.5, xend = 1.5, y = freq*100 + se + 5, yend = freq*100 + se + 5,
    ↪ label = "***"),
    inherit.aes = FALSE, vjust = 0) +
theme_bw() +
scale_fill_manual(values = c("#990000", "#011F5B"), labels = c("No feedback", "Feedback
    ↪ provided"), "Feedback") +
scale_y_continuous(labels = function(x) paste0(x,"%"), limits = c(0,80)) +
scale_x_discrete(labels = c("\"Control\"" = "Not\nShown", "\"Treatment\"" = "Shown")) +
labs(x = "Feedback on % of panelists who were...", y = "% of New Panelists with the
    ↪ Target Identity",
    caption = 'Note: Error Bars are SEs', title = "The Effect of Getting Feedback on
    ↪ Your Panel's Composition") +
theme(plot.caption = element_text(face = "italic"),
    legend.position = c(0.5, 0.85),
    legend.title = element_blank(),
    legend.direction = "horizontal",
    legend.text = element_text(size = 12),
    legend.key.size = unit(7, 'mm'),
    legend.background = element_rect(fill = "white"),
    panel.grid.minor = element_blank(),
    panel.grid = element_blank(),
    panel.border = element_rect(fill= NA, color = "white"),
    plot.background = element_rect(fill = "white"),
    panel.background = element_rect(fill = "white"),
    axis.title.x = element_text(face="bold", size = 13, vjust = 19),
    plot.title = element_blank(),
    axis.title.y = element_text(size = 12, color = "black"),
    axis.text.x = element_blank(),
    axis.ticks = element_blank(),
    axis.text.y = element_text(size = 12, color = "black"),
    strip.text = element_text(size = 12, color = "black"),
    strip.background = element_rect(color = "white", fill = "white"))
#p_combined_A

```

Figure S4B Code

```
dgender_plot <- d0_w_encouragement |>
  select(gender_feedback, female) |>
  group_by(gender_feedback, female) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(female == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(gender_feedback==0 ~ coef(summary(r1))[, "Std. Error"][1]*100,
                        TRUE ~ coef(robust_summary(r1))[, "Std. Error"][2]*100)) |>
  mutate(gender_feedback = case_when(gender_feedback==1 ~ "\"Treatment\"",
                                     TRUE ~ "\"Control\"")) |>
  rename(Condition = gender_feedback)

## dataframe for CEO information

dceo_plot <- d0_w_encouragement |>
  select(ceo, ceo_pick) |>
  group_by(ceo, ceo_pick) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(ceo_pick == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(ceo==0 ~ coef(robust_summary(r_ceo))[, "Std. Error"][1]*100,
                        TRUE ~ coef(robust_summary(r_ceo))[, "Std. Error"][2]*100)) |>
  mutate(ceo = case_when(ceo==1 ~ "\"Treatment\"",
                        TRUE ~ "\"Control\"")) |>
  rename(Condition = ceo)

## dataframe for Founder information

dfounder_plot <- d0_w_encouragement |>
  select(founder, founder_pick) |>
  group_by(founder, founder_pick) |>
  summarise(n = n()) |>
  mutate(freq = n / sum(n)) |>
  filter(founder_pick == 1) |>
  mutate(sd = sqrt((freq*(1-freq))/n)*100,
         se = case_when(founder==0 ~ coef(robust_summary(r_founder))[, "Std.
↵ Error"][1]*100,
                        TRUE ~ coef(robust_summary(r_founder))[, "Std. Error"][2]*100))
↵ |>
  mutate(founder = case_when(founder==1 ~ "\"Treatment\"",
                            TRUE ~ "\"Control\"")) |>
  rename(Condition = founder)

## dataframe for Tech information

dttech_plot <- d0_w_encouragement |>
  select(tech, tech_pick) |>
  group_by(tech, tech_pick) |>
  summarise(n = n()) |>
```

```

mutate(freq = n / sum(n)) |>
filter(tech_pick == 1) |>
mutate(sd = sqrt((freq*(1-freq))/n)*100,
       se = case_when(tech==0 ~ coef(robust_summary(r_tech))[, "Std. Error"][1]*100,
                       TRUE ~ coef(robust_summary(r_tech))[, "Std. Error"][2]*100)) |>
mutate(tech = case_when(tech==1 ~ "\"Treatment\"",
                       TRUE ~ "\"Control\"")) |>
rename(Condition = tech)

df_combined <- bind_rows(
  dceo_plot %>% mutate(Category = "\nCEOs"),
  dttech_plot %>% mutate(Category = "\nTechnologists"),
  dfounder_plot %>% mutate(Category = "\nFounders"),
  dgender_plot %>% mutate(Category = "\nFemale")
, .id = "id") %>%
mutate(Category = factor(Category, levels = c("\nCEOs", "\nTechnologists",
  ↪ "\nFounders", "\nFemale")))

p_combined_B <- ggplot(df_combined, aes(x = Condition, y = freq*100, fill = Condition)) +
  geom_bar(stat="identity", width = 0.85, position = position_dodge(width = 0.7)) +
  geom_text(aes(label=paste0(sprintf("%.1f", freq*100), "%"),
               position=position_dodge(width=0.7), vjust=5, size = 4, color = "white") +
  geom_errorbar(aes(ymin=freq*100-se, ymax=freq*100+se), width = .1, position =
  ↪ position_dodge(width = 0.7)) +
  facet_wrap(~factor(Category, c("\nCEOs", "\nTechnologists", "\nFounders", "\nFemale")),
  ↪ nrow = 1, strip.position = "bottom") +
  geom_segment(data = df_combined %>% filter(Condition == "\"Treatment\""),
               aes(x = 1, xend = 2, y = freq*100 + se + 5, yend = freq*100 + se + 5),
               inherit.aes = FALSE) +
  geom_text(data = df_combined %>% filter(Category %in% c("\nCEOs", "\nTechnologists") &
  ↪ Condition == "\"Treatment\""),
               aes(x = 1.5, xend = 1.5, y = freq*100 + se + 7, yend = freq*100 + se + 7,
               ↪ label = "n.s."),
               inherit.aes = FALSE, vjust = 0) +
  geom_text(data = df_combined %>% filter(Category %in% c("\nFounders") & Condition ==
  ↪ "\"Treatment\""),
               aes(x = 1.5, xend = 1.5, y = freq*100 + se + 5, yend = freq*100 + se + 5,
               ↪ label = "*"),
               inherit.aes = FALSE, vjust = 0) +
  geom_text(data = df_combined %>% filter(Category == "\nFemale" & Condition ==
  ↪ "\"Treatment\""),
               aes(x = 1.5, xend = 1.5, y = freq*100 + se + 5, yend = freq*100 + se + 5,
               ↪ label = "***"),
               inherit.aes = FALSE, vjust = 0) +
  theme_bw() +
  scale_fill_manual(values = c("#990000", "#011F5B"), labels = c("No feedback provided",
  ↪ "Feedback provided"), "Feedback") +
  scale_y_continuous(labels = function(x) paste0(x, "%"), limits = c(0,80)) +
  scale_x_discrete(labels = c("\"Control\" = \"Not\nShown\"", "\"Treatment\" = \"Shown\"")) +
  labs(x = "Feedback on % of panelists who were...", y = "% of New Panelists with the
  ↪ Target Identity",
       caption = 'Note: Error Bars are SEs', title = "The Effect of Getting Feedback on
  ↪ Your Panel's Composition") +

```



```

theme(plot.caption = element_text(face = "italic"),
      legend.position = c(0.5, 0.85),
      legend.title = element_blank(),
      legend.direction = "horizontal",
      legend.text = element_text(size = 12),
      legend.key.size = unit(7, 'mm'),
      legend.background = element_rect(fill = "white"),
      panel.grid.minor = element_blank(),
      panel.grid = element_blank(),
      panel.border = element_rect(fill= NA, color = "white"),
      plot.background = element_rect(fill = "white"),
      panel.background = element_rect(fill = "white"),
      axis.title.x = element_text(face="bold", size = 13, vjust = 19),
      plot.title = element_blank(),
      axis.title.y = element_blank(), # Remove y-axis title
      axis.text.x = element_blank(),
      axis.ticks = element_blank(),
      axis.text.y = element_blank(), # Remove y-axis text
      axis.ticks.y = element_blank(), # Remove y-axis ticks
      strip.text = element_text(size = 12, color = "black"),
      strip.background = element_rect(color = "white", fill = "white"))



#p_combined_B



# Create separate plots for the labels


label_A <- ggplot() +
  annotate("text", x = 0, y = 0, label = "A", size = 6, fontface = "bold") +
  theme_void()

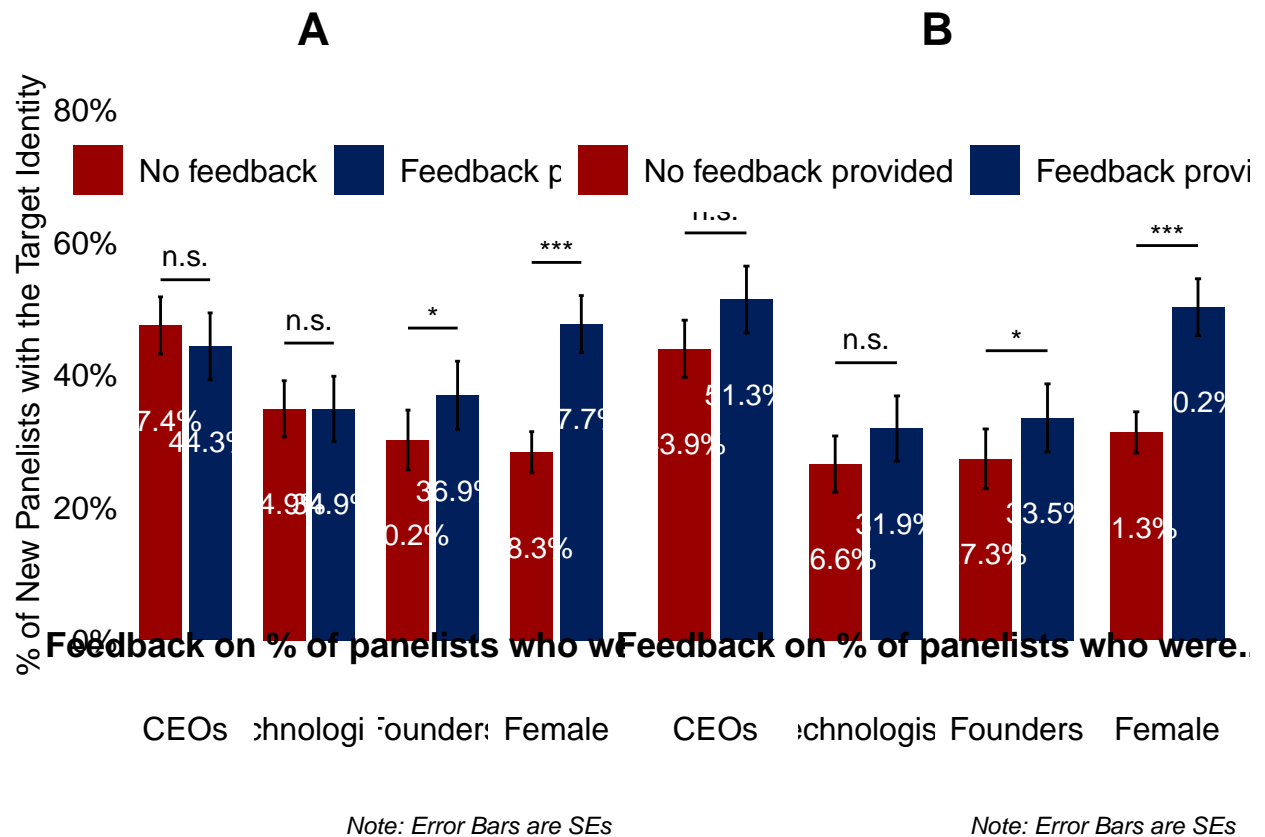
label_B <- ggplot() +
  annotate("text", x = 0, y = 0, label = "B", size = 6, fontface = "bold") +
  theme_void()



# Combine the main plots and labels using grid.arrange()


combined_plot <- grid.arrange(
  arrangeGrob(label_A, p_combined_A, ncol = 1, heights = c(0.1, 1)),
  arrangeGrob(label_B, p_combined_B, ncol = 1, heights = c(0.1, 1)),
  ncol = 2
)

```



```
# ggsave("../Supplemental_Figures/Figure-S4.pdf", combined_plot, width = 16, height = 7,
  ↪ units = "in", device = cairo_pdf, family = "Times New Roman")
```

System of Equations

```
##
## Call:
## lm(formula = as.numeric(founder_pick) ~ founder + tech + ceo +
##     gender_feedback - 1, data = d0_no_encouragement)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.4765 -0.3464 -0.2835  0.5235  0.7273
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## founder           0.18701    0.03808   4.911 1.24e-06 ***
## tech              0.11329    0.03728   3.039  0.0025 **
## ceo               0.17620    0.03633   4.849 1.66e-06 ***
## gender_feedback -0.01683    0.03846  -0.438  0.6619
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4777 on 492 degrees of freedom
## Multiple R-squared:  0.3622, Adjusted R-squared:  0.357
## F-statistic: 69.85 on 4 and 492 DF,  p-value: < 2.2e-16

##                                Wald.Coefficient      P_Value
## Gender Feedback - Founder Feedback           7.099297 0.0078378268
## Gender Feedback - Tech Feedback              10.457233 0.0012624375
## Gender Feedback - CEO Feedback               12.381159 0.0004535653
```