

Study 4 Pilot

Context (Nursing vs Surgeon) \times Base Representation (High vs Low) \times Gender Feedback

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Variable Names

Variable	Description
context	Context condition: nursing (women overrepresented) or surgeon (women underrepresented).
base	Representation in pool: low (women underrepresented) or high (women overrepresented).
cond	Feedback condition: control (no feedback) or treat (gender feedback).
surgeon_context	Binary indicator (1 = surgeon context, 0 = nursing context).
high_base	Binary indicator (1 = women overrepresented in pool, 0 = underrepresented).
gender_feedback	Binary indicator (1 = gender feedback provided, 0 = control).
female_pick	Binary indicator of whether participant selected a woman for their final selection.
base_gender	Number of women selected in initial 6 choices (0-6).
choice-1 to choice-7	The selected candidates.
gender	Self-selected gender.
race	Self-selected race.
age	Self-entered age.

```
## === THREE-WAY INTERACTION MODEL ===
```

```
##
## Call:
## lm(formula = female_pick ~ gender_feedback * low_base * surgeon_context,
##     data = d0)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.7500 -0.3617 -0.2447  0.3617  0.7553
##
## Coefficients:
##                                Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   0.65217    0.05020  12.991 < 2e-16
## gender_feedback                -0.01388    0.07092  -0.196  0.8449
## low_base                      -0.33638    0.06959 -4.834 1.63e-06
## surgeon_context                0.09783    0.06785   1.442  0.1498
## gender_feedback:low_base       0.10234    0.09985   1.025  0.3057
## gender_feedback:surgeon_context -0.16623    0.09902  -1.679  0.0936
## low_base:surgeon_context      -0.16893    0.09452  -1.787  0.0743
## gender_feedback:low_base:surgeon_context 0.19479    0.13879   1.403  0.1609
##
## (Intercept)                    ***
## gender_feedback
## low_base                       ***
## surgeon_context
## gender_feedback:low_base
## gender_feedback:surgeon_context .
## low_base:surgeon_context       .
## gender_feedback:low_base:surgeon_context
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.472 on 740 degrees of freedom
## Multiple R-squared:  0.1181, Adjusted R-squared:  0.1098
## F-statistic: 14.16 on 7 and 740 DF,  p-value: < 2.2e-16

##
##                2.5 %      97.5 %
## (Intercept)      0.55361990  0.75072792
## gender_feedback -0.15310073  0.12534865
## low_base        -0.47300797 -0.19976090
## surgeon_context -0.03537003  0.23102221
## gender_feedback:low_base -0.09367954  0.29836331
## gender_feedback:surgeon_context -0.36063256  0.02816959
## low_base:surgeon_context -0.35450287  0.01663345
## gender_feedback:low_base:surgeon_context -0.07769156  0.46726540
```

Separate Models by Representation Level

Women Underrepresented in Pool (Low Base)

```
## === WOMEN UNDERREPRESENTED IN POOL ===

## Model: female_pick ~ gender_feedback * surgeon_context

##
## Call:
## lm(formula = female_pick ~ gender_feedback * surgeon_context,
##     data = d0 %>% filter(base == "low"))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.4043 -0.3617 -0.2447  0.5957  0.7553
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.31579    0.04820   6.552 1.89e-10 ***
## gender_feedback    0.08847    0.07029   1.259   0.209
## surgeon_context  -0.07111    0.06582  -1.080   0.281
## gender_feedback:surgeon_context  0.02856    0.09725   0.294   0.769
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4696 on 373 degrees of freedom
## Multiple R-squared:  0.01574,    Adjusted R-squared:  0.007825
## F-statistic: 1.989 on 3 and 373 DF,  p-value: 0.1153

##              2.5 %      97.5 %
## (Intercept)    0.22101591 0.41056304
## gender_feedback -0.04974563 0.22667732
## surgeon_context -0.20052378 0.05830653
## gender_feedback:surgeon_context -0.16267882 0.21978968

##
##
## Cell Means - Women Underrepresented:

## # A tibble: 4 x 5
##   context cond      n mean_female_pick    se
##   <chr>   <chr> <int>          <dbl> <dbl>
## 1 nursing control    95          31.6  4.79
## 2 nursing treat     94          40.4  5.09
## 3 surgeon control    94          24.5  4.46
## 4 surgeon treat     94          36.2  4.98
```

Women Overrepresented in Pool (High Base)

```
## === WOMEN OVERREPRESENTED IN POOL ===

## Model: female_pick ~ gender_feedback * surgeon_context

##
## Call:
## lm(formula = female_pick ~ gender_feedback * surgeon_context,
##     data = d0 %>% filter(base == "high"))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.7500 -0.5699  0.2500  0.3617  0.4301
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.65217    0.05020   12.991  <2e-16 ***
## gender_feedback    -0.01388    0.07092   -0.196   0.8450
## surgeon_context     0.09783    0.06785    1.442   0.1502
## gender_feedback:surgeon_context -0.16623    0.09902   -1.679   0.0941 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4745 on 367 degrees of freedom
## Multiple R-squared:  0.01816,    Adjusted R-squared:  0.01013
## F-statistic: 2.263 on 3 and 367 DF,  p-value: 0.08082

##              2.5 %    97.5 %
## (Intercept)      0.55345554 0.7508923
## gender_feedback    -0.15333292 0.1255808
## surgeon_context     -0.03559217 0.2312443
## gender_feedback:surgeon_context -0.36095677 0.0284938

##
##
## Cell Means - Women Overrepresented:

## # A tibble: 4 x 5
##   context cond      n mean_female_pick    se
##   <chr>   <chr> <int>          <dbl> <dbl>
## 1 nursing control    92          65.2  4.99
## 2 nursing treat     94          63.8  4.98
## 3 surgeon control    92          75   4.54
## 4 surgeon treat     93          57.0  5.16
```

Visualizations

Figure 1: Surgeon Context

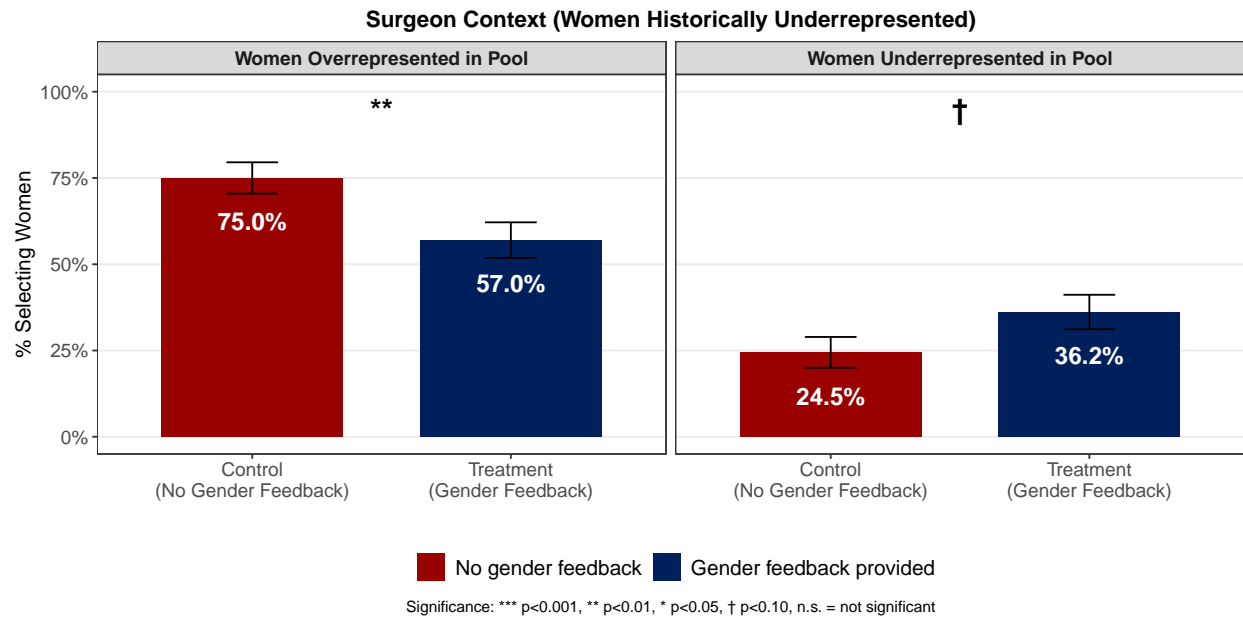


Figure 1: Surgeon Context: Women's Selection by Pool Composition and Feedback

Figure 2: Nursing Context

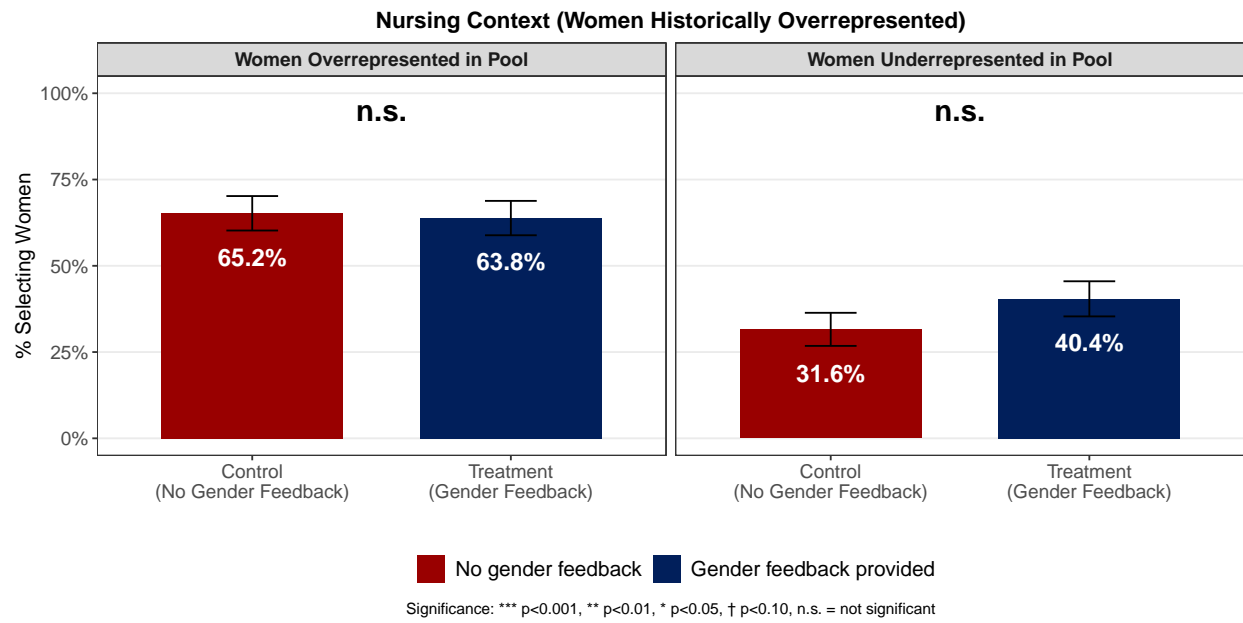


Figure 2: Nursing Context: Women's Selection by Pool Composition and Feedback