

Study 4 Pilot Analysis

Context (Nursing vs Surgeon) \times Representation \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 * high_base * surgeon_context,
##     data = d0)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.7500 -0.3656 -0.2447  0.3617  0.7553
##
## Coefficients:
##                                Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   0.31915    0.04860   6.567 9.67e-11
## gender_feedback                 0.08945    0.07083   1.263  0.2070
## high_base                     0.33302    0.06987   4.766 2.26e-06
## surgeon_context                -0.07447    0.06611  -1.126  0.2603
## gender_feedback:high_base      -0.10333    0.10023  -1.031  0.3029
## gender_feedback:surgeon_context  0.03146    0.09785   0.321  0.7479
## high_base:surgeon_context      0.17229    0.09473   1.819  0.0693
## gender_feedback:high_base:surgeon_context -0.19769    0.13921  -1.420  0.1560
##
## (Intercept)                    ***
## gender_feedback
## high_base                      ***
## surgeon_context
## gender_feedback:high_base
## gender_feedback:surgeon_context
## high_base:surgeon_context      .
## gender_feedback:high_base:surgeon_context
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4724 on 737 degrees of freedom
## Multiple R-squared:  0.1168, Adjusted R-squared:  0.1084
## F-statistic: 13.93 on 7 and 737 DF,  p-value: < 2.2e-16

##                2.5 %      97.5 %
## (Intercept)      0.22374515 0.41455273
## gender_feedback -0.04959744 0.22850387
## high_base        0.19585754 0.47019241
## surgeon_context -0.20424953 0.05531336
## gender_feedback:high_base -0.30010033 0.09344182
## gender_feedback:surgeon_context -0.16063207 0.22354673
## high_base:surgeon_context -0.01367536 0.35826371
## gender_feedback:high_base:surgeon_context -0.47098467 0.07560703
```

Separate Models by Context

Nursing Context

```
## === NURSING CONTEXT ===

##
## Call:
## lm(formula = female_pick ~ gender_feedback * high_base, data = d0 %>%
##   filter(context == "nursing"))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.6522 -0.4086  0.3478  0.3617  0.6808
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.31915    0.04860   6.567 1.74e-10 ***
## gender_feedback    0.08945    0.07083   1.263   0.207
## high_base         0.33302    0.06987   4.766 2.70e-06 ***
## gender_feedback:high_base -0.10333    0.10023  -1.031   0.303
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4813 on 369 degrees of freedom
## Multiple R-squared:  0.08337,    Adjusted R-squared:  0.07592
## F-statistic: 11.19 on 3 and 369 DF,  p-value: 4.832e-07

##              2.5 %    97.5 %
## (Intercept)      0.22358839 0.41470948
## gender_feedback   -0.04982591 0.22873234
## high_base         0.19563216 0.47041779
## gender_feedback:high_base -0.30042364 0.09376513

##
##
## Cell Means - Nursing Context:

## # A tibble: 4 x 5
##   base cond      n mean_female_pick      se
##   <chr> <chr> <int>          <dbl> <dbl>
## 1 high control   92          0.652 0.0499
## 2 high  treat   94          0.638 0.0498
## 3 low  control   94          0.319 0.0483
## 4 low  treat    93          0.409 0.0513
```

Surgeon Context

```
## === SURGEON CONTEXT ===

##
## Call:
## lm(formula = female_pick ~ gender_feedback * high_base, data = d0 %>%
##   filter(context == "surgeon"))
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.7500 -0.3656 -0.2447  0.4301  0.7553
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.24468    0.04482   5.460 8.80e-08 ***
## gender_feedback    0.12091    0.06751   1.791  0.07410 .
## high_base         0.50532    0.06397   7.900 3.26e-14 ***
## gender_feedback:high_base -0.30102    0.09661  -3.116  0.00198 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4633 on 368 degrees of freedom
## Multiple R-squared:  0.1495, Adjusted R-squared:  0.1425
## F-statistic: 21.56 on 3 and 368 DF,  p-value: 6.968e-13

##              2.5 %      97.5 %
## (Intercept)      0.15655060  0.3328111
## gender_feedback   -0.01183482  0.2536559
## high_base         0.37953398  0.6311043
## gender_feedback:high_base -0.49099364 -0.1110425
```

Visualizations

Figure 1: Surgeon Context

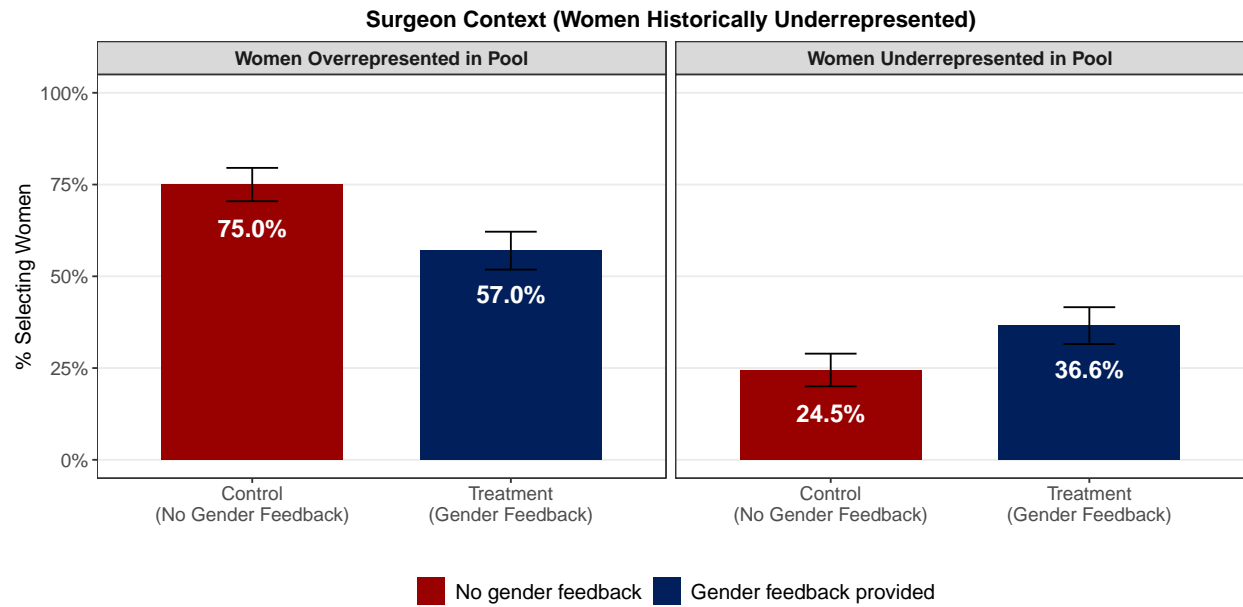


Figure 1: Surgeon Context: Women's Selection by Pool Composition and Feedback

Figure 2: Nursing Context

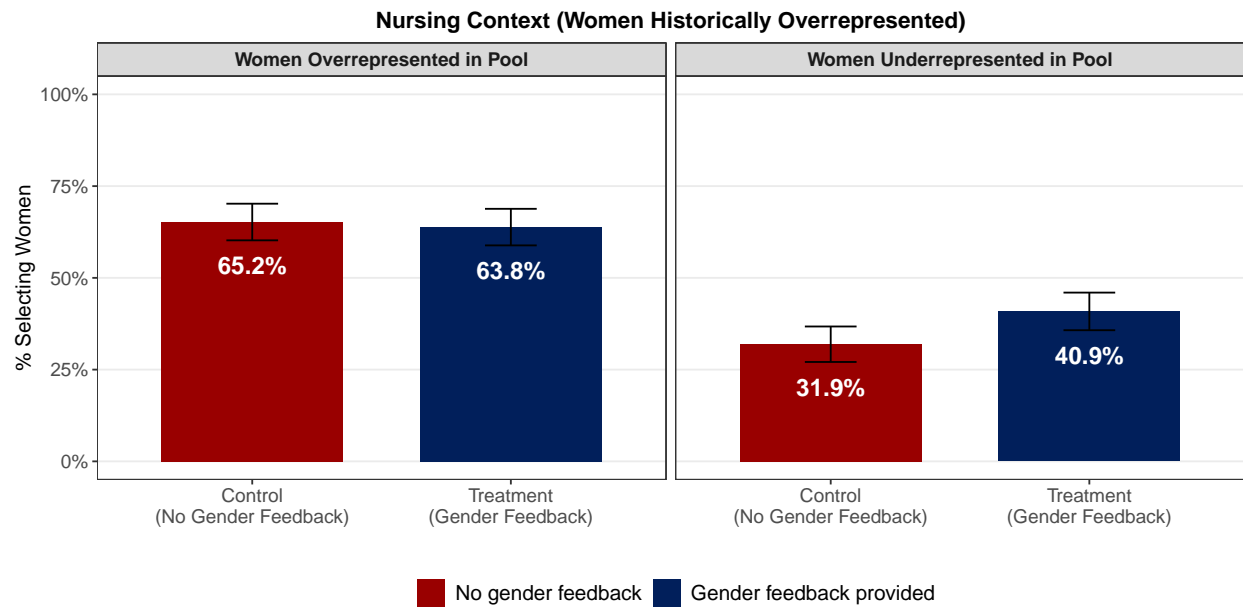


Figure 2: Nursing Context: Women's Selection by Pool Composition and Feedback