

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

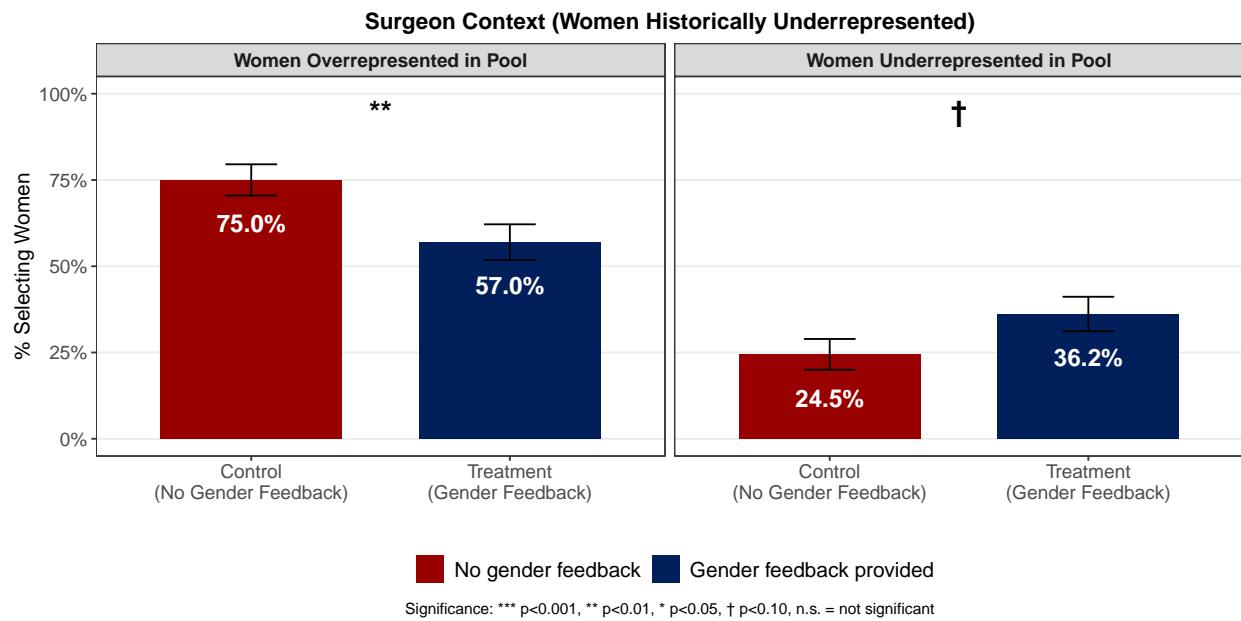


Figure 1: Surgeon Context: Women's Selection by Pool Composition and Feedback

Figure 2: Nursing Context

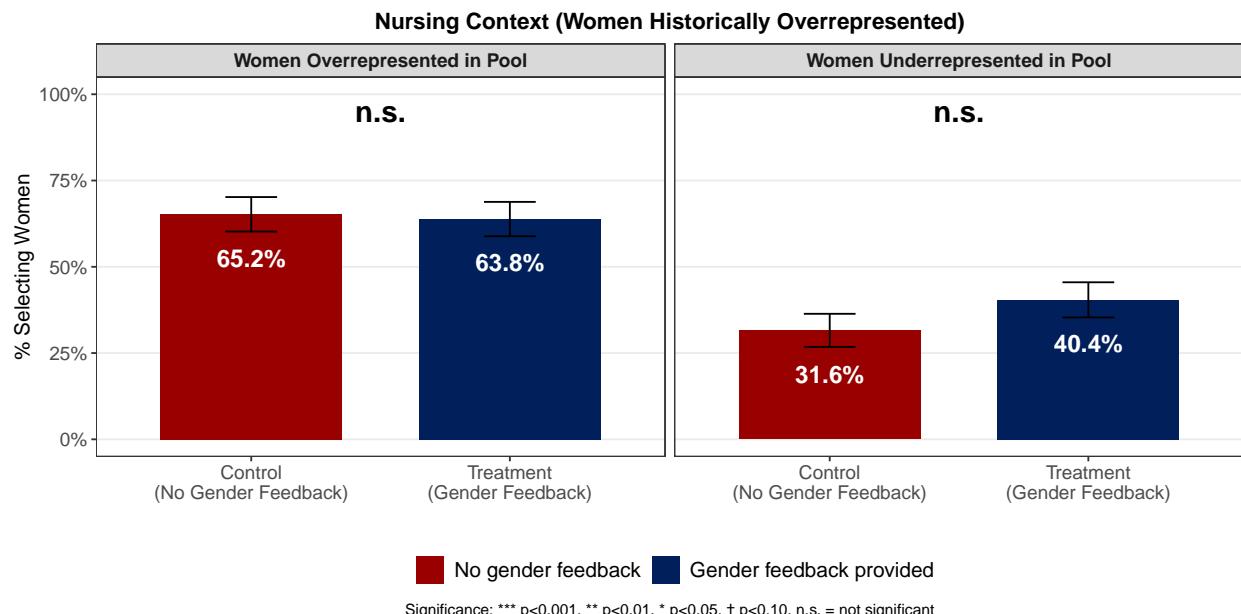


Figure 2: Nursing Context: Women's Selection by Pool Composition and Feedback