| Name | Type | Width | Decimals | Label | Values | Missing | Columns | Align | Measure |
|------|------|-------|----------|-------|--------|---------|---------|-------|---------|
| id | Numeric | 9 | 0 | Faculty ID | None | None | 8 | Right | Scale |
| preaward17 | Numeric | 20 | 0 | Preaward satisf... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| postaward17 | Numeric | 20 | 0 | Postaward sati... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| dept17 | Numeric | 20 | 0 | Departmental s... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| inst17 | Numeric | 20 | 0 | Institutional sati... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| preaward18 | Numeric | 20 | 0 | Preaward satisf... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| postaward18 | Numeric | 20 | 0 | Postaward sati... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| dept18 | Numeric | 20 | 0 | Departmental s... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| inst18 | Numeric | 20 | 0 | Institutional sati... | {1, Below Expectations}... | None | 8 | Right | Ordinal |
| chair | Numeric | 9 | 0 | Chair | None | None | 8 | Right | Scale |
| rasunit | Numeric | 31 | 0 | RAS Unit | {1, ABOSS}... | None | 8 | Right | Nominal |
| awardnum | Numeric | 10 | 0 | Number of awar... | None | None | 8 | Right | Scale |
| awardtotal | Numeric | 10 | 2 | Total awards in $ | None | None | 8 | Right | Scale |
| award | Numeric | 9 | 0 | Received award | None | None | 8 | Right | Scale |
| proposalnum | Numeric | 10 | 0 | Number of prop... | None | None | 8 | Right | Scale |
| proposaltotal | Numeric | 10 | 2 | Total proposals... | None | None | 8 | Right | Scale |
| proposal | Numeric | 9 | 0 | Submitted prop... | None | None | 8 | Right | Scale |
| doctortype | Numeric | 21 | 0 | Type of doctora... | {0, No doctoral degree}... | None | 8 | Right | Nominal |
| age | Numeric | 10 | 2 | Age | None | None | 8 | Right | Scale |
| female | Numeric | 10 | 0 | Female | {0, Male}... | None | 8 | Right | Scale |
| ethnicgrp | Numeric | 15 | 0 | Ethnic group | {0, White}... | None | 8 | Right | Nominal |
| white | Numeric | 9 | 0 | White | None | None | 8 | Right | Scale |
| asian | Numeric | 9 | 0 | Asian | None | None | 8 | Right | Scale |
| yos | Numeric | 10 | 2 | Years of service | None | None | 8 | Right | Scale |
| nMtg | Numeric | 9 | 0 | Number of enga... | None | None | 8 | Right | Scale |
| dMtg | Numeric | 9 | 0 | Engagement (tr... | None | None | 8 | Right | Scale |
| tenuretrack | Numeric | 9 | 0 | Tenure track | None | None | 8 | Right | Scale |

**(Figure 1)**

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Preaward satisfaction - 2017 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Postaward satisfactoin - 2017 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Departmental satisfaction - 2017 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Institutional satisfaction - 2017 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Preaward satisfaction - 2018 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Postaward satisfactoin - 2018 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Departmental satisfaction - 2018 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |
| Institutional satisfaction - 2018 | 218 | 100.0% | 0 | 0.0% | 218 | 100.0% |

**(Figure 2)**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|------|---|----------------|-----------------|
| Pair 1 | Preaward satisfaction - 2017 | 1.85 | 218 | .679 | .046 |
| | Preaward satisfaction - 2018 | 1.94 | 218 | .759 | .051 |

**(Figure 3)**

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Preaward satisfaction - 2017 - Preaward satisfaction - 2018 | -.087 | 1.033 | .070 | -.225 | .051 | -1.246 | 217 | .214 |

**(Figure 4)**

**Profile Plot - Pre-award Satisfaction**
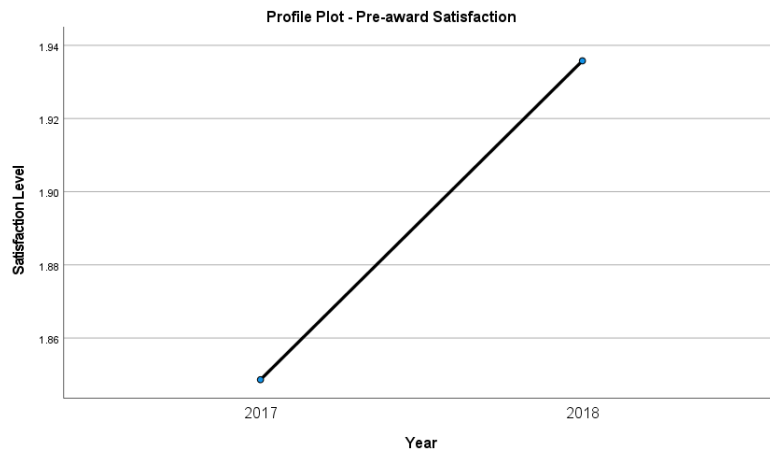


(Figure 5)

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | Postaward satisfactoin - 2017 | 1.71 | 218 | .683 | .046 |
| | Postaward satisfactoin - 2018 | 1.83 | 218 | .754 | .051 |

(Figure 6)

**Paired Samples Test**

| | | Paired Differences | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | | | | |
| | | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | t | df | Sig. (2-tailed) |
| Pair 1 | Postaward satisfactoin - 2017 - Postaward satisfactoin - 2018 | -.119 | 1.071 | .073 | -.262 | .024 | -1.644 | 217 | .102 |

(Figure 7)

**Profile Plot - Post-award Satisfaction**
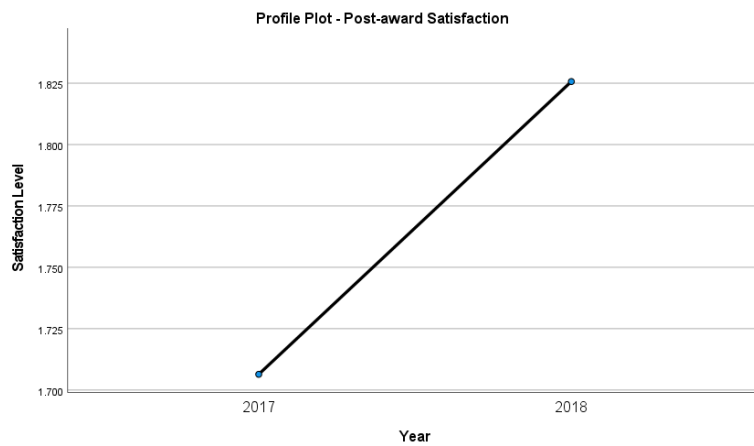


(Figure 8)

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | Departmental satisfaction - 2017 | 1.84 | 218 | .642 | .043 |
| | Departmental satisfaction - 2018 | 2.13 | 218 | .683 | .046 |

(Figure 9)

**Paired Samples Test**

| | | Paired Differences | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | Mean | Std. Deviation | | Lower | Upper | t | df | Sig. (2-tailed) |
| Pair 1 | Departmental satisfaction - 2017 - Departmental satisfaction - 2018 | -.294 | .968 | .066 | -.423 | -.164 | -4.479 | 217 | <.001 |

**(Figure 10)**

Profile Plot - Departmental Satisfaction
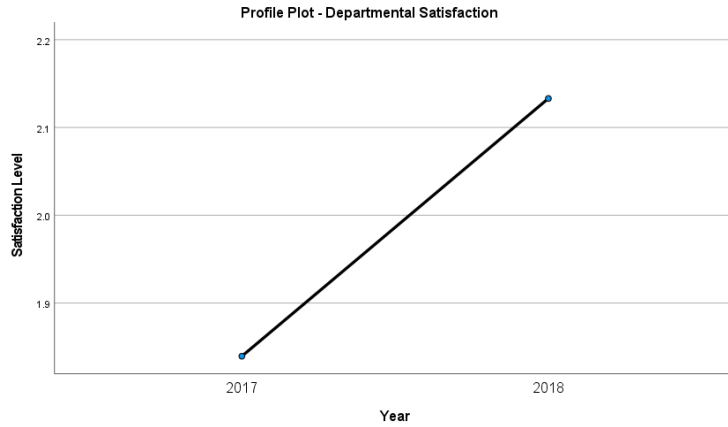
**(Figure 11)**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | Institutional satisfaction - 2017 | 1.59 | 218 | .603 | .041 |
| | Institutional satisfaction - 2018 | 1.68 | 218 | .709 | .048 |

**(Figure 12)**

**Paired Samples Test**

| | | Paired Differences | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | Mean | Std. Deviation | | Lower | Upper | t | df | Sig. (2-tailed) |
| Pair 1 | Institutional satisfaction - 2017 - Institutional satisfaction - 2018 | -.096 | .981 | .066 | -.227 | .035 | -1.449 | 217 | .149 |

**(Figure 13)**

Profile Plot - Institutional Satisfaction
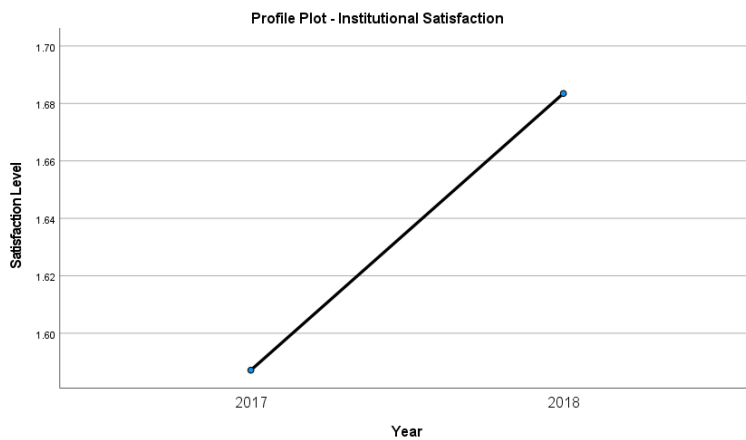
**(Figure 14)**

### 1. Female

Measure: MEASURE_1

| Female | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| Male | 1.843 | .042 | 1.760 | 1.925 |
| Female | 1.987 | .058 | 1.873 | 2.100 |

**(Figure 15)**

### 2. factor1

Measure: MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 1 | 1.859 | .048 | 1.764 | 1.955 |
| 2 | 1.970 | .054 | 1.864 | 2.076 |

**(Figure 16)**

### 3. Female * factor1

Measure: MEASURE_1

| Female | factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| Male | 1 | 1.825 | .057 | 1.713 | 1.937 |
| | 2 | 1.860 | .063 | 1.736 | 1.984 |
| Female | 1 | 1.893 | .078 | 1.739 | 2.048 |
| | 2 | 2.080 | .087 | 1.908 | 2.252 |

**(Figure 17)**



Pre-award Satisfaction by Gender
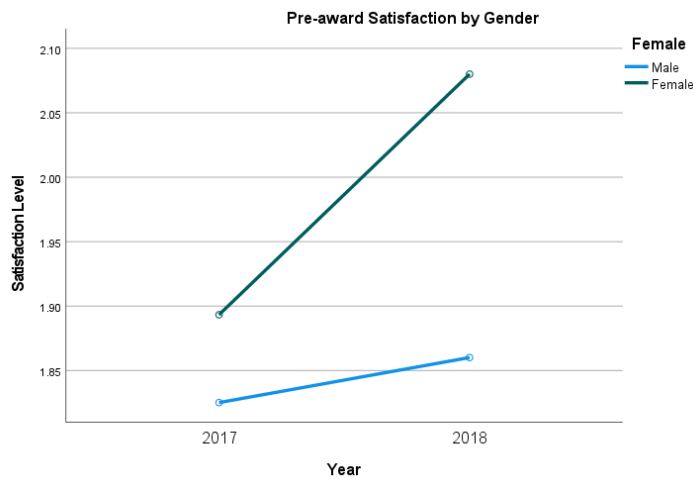
**(Figure 18)**

### Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 1.208 | 1 | 1.208 | 2.267 | .134 |
| | Greenhouse-Geisser | 1.208 | 1.000 | 1.208 | 2.267 | .134 |
| | Huynh-Feldt | 1.208 | 1.000 | 1.208 | 2.267 | .134 |
| | Lower-bound | 1.208 | 1.000 | 1.208 | 2.267 | .134 |
| factor1 * female | Sphericity Assumed | .566 | 1 | .566 | 1.062 | .304 |
| | Greenhouse-Geisser | .566 | 1.000 | .566 | 1.062 | .304 |
| | Huynh-Feldt | .566 | 1.000 | .566 | 1.062 | .304 |
| | Lower-bound | .566 | 1.000 | .566 | 1.062 | .304 |
| Error(factor1) | Sphericity Assumed | 115.106 | 216 | .533 | | |
| | Greenhouse-Geisser | 115.106 | 216.000 | .533 | | |
| | Huynh-Feldt | 115.106 | 216.000 | .533 | | |
| | Lower-bound | 115.106 | 216.000 | .533 | | |

**(Figure 19)**

**Tests of Within-Subjects Contrasts**

Measure:   MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 1.208 | 1 | 1.208 | 2.267 | .134 |
| factor1 * female | Linear | .566 | 1 | .566 | 1.062 | .304 |
| Error(factor1) | Linear | 115.106 | 216 | .533 | | |

**(Figure 20)**

**Tests of Between-Subjects Effects**

Measure:   MEASURE_1

Transformed Variable:   Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1442.830 | 1 | 1442.830 | 2901.972 | <.001 |
| female | 2.041 | 1 | 2.041 | 4.104 | .044 |
| Error | 107.393 | 216 | .497 | | |

**(Figure 21)**

**1. Female**

Measure:   MEASURE_1

| Female | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|
| Male | 1.745 | .040 | 1.666 | 1.824 |
| Female | 1.807 | .055 | 1.697 | 1.916 |

**(Figure 22)**

**2. factor1**

Measure:   MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|
| 1 | 1.691 | .049 | 1.595 | 1.787 |
| 2 | 1.861 | .053 | 1.756 | 1.966 |

**(Figure 23)**

**3. Female * factor1**

Measure:   MEASURE_1

| Female | factor1 | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|---|
| Male | 1 | 1.741 | .057 | 1.629 | 1.854 |
| | 2 | 1.748 | .063 | 1.625 | 1.872 |
| Female | 1 | 1.640 | .079 | 1.485 | 1.795 |
| | 2 | 1.973 | .086 | 1.803 | 2.144 |

**(Figure 24)**



Post-award Satisfaction by Gender
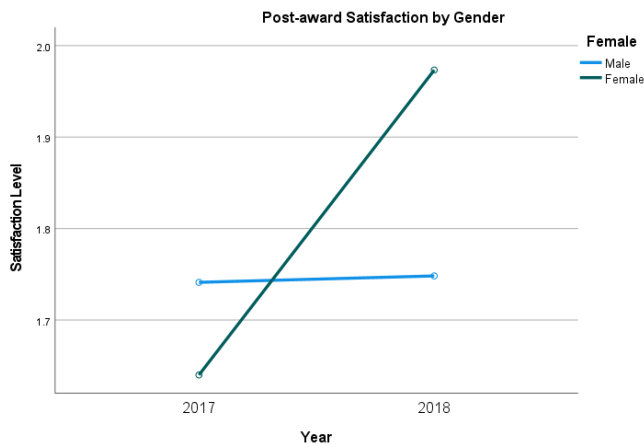
**(Figure 25)**

**Mauchly's Test of Sphericity[a]**

Measure: MEASURE_1

| Within Subjects Effect | Mauchly's W | Approx. Chi-Square | df | Sig. | Epsilon[b] | | |
|---|---|---|---|---|---|---|---|
| | | | | | Greenhouse-Geisser | Huynh-Feldt | Lower-bound |
| factor1 | 1.000 | .000 | 0 | . | 1.000 | 1.000 | 1.000 |

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

   a. Design: Intercept + female
      Within Subjects Design: factor1

   b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

**(Figure 26)**

**Tests of Within-Subjects Effects**

Measure: MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 2.849 | 1 | 2.849 | 5.051 | .026 |
| | Greenhouse-Geisser | 2.849 | 1.000 | 2.849 | 5.051 | .026 |
| | Huynh-Feldt | 2.849 | 1.000 | 2.849 | 5.051 | .026 |
| | Lower-bound | 2.849 | 1.000 | 2.849 | 5.051 | .026 |
| factor1 * female | Sphericity Assumed | 2.620 | 1 | 2.620 | 4.645 | .032 |
| | Greenhouse-Geisser | 2.620 | 1.000 | 2.620 | 4.645 | .032 |
| | Huynh-Feldt | 2.620 | 1.000 | 2.620 | 4.645 | .032 |
| | Lower-bound | 2.620 | 1.000 | 2.620 | 4.645 | .032 |
| Error(factor1) | Sphericity Assumed | 121.830 | 216 | .564 | | |
| | Greenhouse-Geisser | 121.830 | 216.000 | .564 | | |
| | Huynh-Feldt | 121.830 | 216.000 | .564 | | |
| | Lower-bound | 121.830 | 216.000 | .564 | | |

**(Figure 27)**

**Tests of Within-Subjects Contrasts**

Measure: MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 2.849 | 1 | 2.849 | 5.051 | .026 |
| factor1 * female | Linear | 2.620 | 1 | 2.620 | 4.645 | .032 |
| Error(factor1) | Linear | 121.830 | 216 | .564 | | |

**(Figure 28)**

**Tests of Between-Subjects Effects**

Measure: MEASURE_1
Transformed Variable: Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1241.010 | 1 | 1241.010 | 2687.018 | <.001 |
| female | .377 | 1 | .377 | .817 | .367 |
| Error | 99.760 | 216 | .462 | | |

**(Figure 29)**

**1. Female**

Measure: MEASURE_1

| Female | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| Male | 1.927 | .037 | 1.853 | 2.000 |
| Female | 2.100 | .052 | 1.998 | 2.202 |

**(Figure 30)**

**2. factor1**

Measure: MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 1 | 1.843 | .046 | 1.752 | 1.933 |
| 2 | 2.184 | .048 | 2.090 | 2.277 |

**(Figure 31)**

### 3. Female * factor1

Measure:  MEASURE_1

| Female | factor1 | Mean | Std. Error | 95% Confidence Interval | |
|--------|---------|------|------------|-------------|-------------|
| | | | | Lower Bound | Upper Bound |
| Male | 1 | 1.832 | .054 | 1.726 | 1.938 |
| | 2 | 2.021 | .056 | 1.911 | 2.131 |
| Female | 1 | 1.853 | .074 | 1.707 | 2.000 |
| | 2 | 2.347 | .077 | 2.195 | 2.498 |

**(Figure 32)**



Departmental Satisfaction by Gender
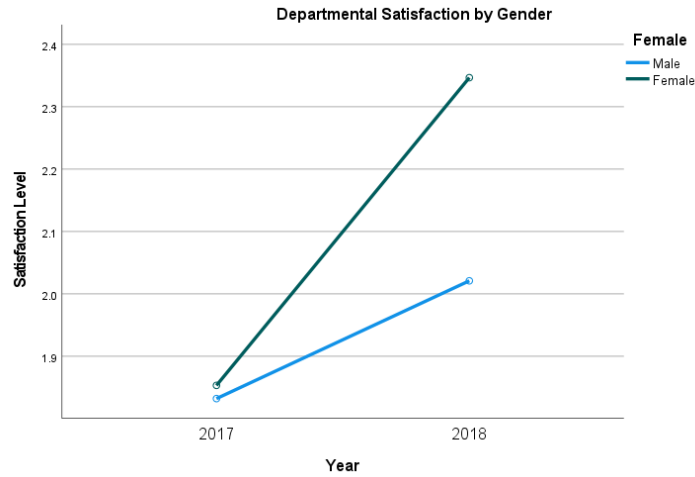
**(Figure 33)**

### Tests of Within-Subjects Effects

Measure:  MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|--|-------------------------|-----|-------------|--------|-------|
| factor1 | Sphericity Assumed | 11.446 | 1 | 11.446 | 24.892 | <.001 |
| | Greenhouse-Geisser | 11.446 | 1.000 | 11.446 | 24.892 | <.001 |
| | Huynh-Feldt | 11.446 | 1.000 | 11.446 | 24.892 | <.001 |
| | Lower-bound | 11.446 | 1.000 | 11.446 | 24.892 | <.001 |
| factor1 * female | Sphericity Assumed | 2.281 | 1 | 2.281 | 4.961 | .027 |
| | Greenhouse-Geisser | 2.281 | 1.000 | 2.281 | 4.961 | .027 |
| | Huynh-Feldt | 2.281 | 1.000 | 2.281 | 4.961 | .027 |
| | Lower-bound | 2.281 | 1.000 | 2.281 | 4.961 | .027 |
| Error(factor1) | Sphericity Assumed | 99.324 | 216 | .460 | | |
| | Greenhouse-Geisser | 99.324 | 216.000 | .460 | | |
| | Huynh-Feldt | 99.324 | 216.000 | .460 | | |
| | Lower-bound | 99.324 | 216.000 | .460 | | |

**(Figure 34)**

### Tests of Within-Subjects Contrasts

Measure:  MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|---------|-------------------------|-----|-------------|--------|-------|
| factor1 | Linear | 11.446 | 1 | 11.446 | 24.892 | <.001 |
| factor1 * female | Linear | 2.281 | 1 | 2.281 | 4.961 | .027 |
| Error(factor1) | Linear | 99.324 | 216 | .460 | | |

**(Figure 35)**

### Tests of Between-Subjects Effects

Measure:  MEASURE_1
Transformed Variable:  Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|-------------------------|-----|-------------|----------|-------|
| Intercept | 1595.299 | 1 | 1595.299 | 4008.753 | <.001 |
| female | 2.959 | 1 | 2.959 | 7.437 | .007 |
| Error | 85.958 | 216 | .398 | | |

**(Figure 36)**

**1. Female**

Measure: MEASURE_1

| Female | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| Male | 1.605 | .037 | 1.533 | 1.677 |
| Female | 1.693 | .051 | 1.594 | 1.793 |

(Figure 37)

**2. factor1**

Measure: MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 1 | 1.565 | .043 | 1.481 | 1.649 |
| 2 | 1.733 | .049 | 1.636 | 1.831 |

(Figure 38)

**3. Female * factor1**

Measure: MEASURE_1

| Female | factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| Male | 1 | 1.636 | .050 | 1.537 | 1.735 |
| | 2 | 1.573 | .058 | 1.459 | 1.688 |
| Female | 1 | 1.493 | .069 | 1.357 | 1.630 |
| | 2 | 1.893 | .080 | 1.735 | 2.051 |

(Figure 39)



Insitutional Satisfaction by Gender
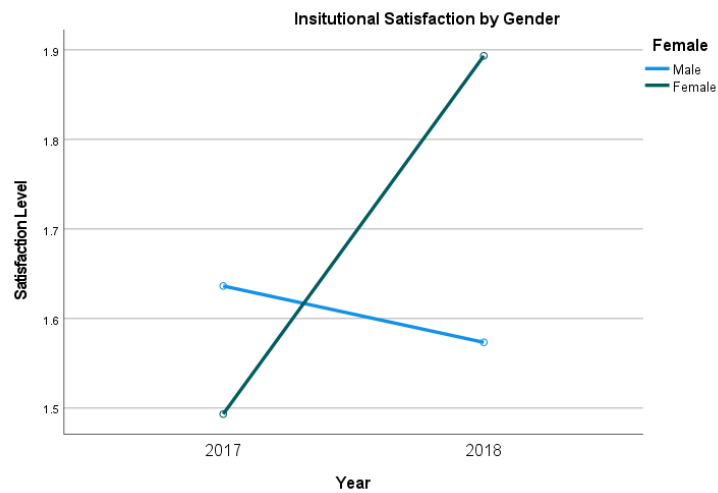
(Figure 40)

**Tests of Within-Subjects Effects**

Measure: MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 2.795 | 1 | 2.795 | 6.084 | .014 |
| | Greenhouse-Geisser | 2.795 | 1.000 | 2.795 | 6.084 | .014 |
| | Huynh-Feldt | 2.795 | 1.000 | 2.795 | 6.084 | .014 |
| | Lower-bound | 2.795 | 1.000 | 2.795 | 6.084 | .014 |
| factor1 * female | Sphericity Assumed | 5.272 | 1 | 5.272 | 11.477 | <.001 |
| | Greenhouse-Geisser | 5.272 | 1.000 | 5.272 | 11.477 | <.001 |
| | Huynh-Feldt | 5.272 | 1.000 | 5.272 | 11.477 | <.001 |
| | Lower-bound | 5.272 | 1.000 | 5.272 | 11.477 | <.001 |
| Error(factor1) | Sphericity Assumed | 99.217 | 216 | .459 | | |
| | Greenhouse-Geisser | 99.217 | 216.000 | .459 | | |
| | Huynh-Feldt | 99.217 | 216.000 | .459 | | |
| | Lower-bound | 99.217 | 216.000 | .459 | | |

(Figure 41)

### Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 2.795 | 1 | 2.795 | 6.084 | .014 |
| factor1 * female | Linear | 5.272 | 1 | 5.272 | 11.477 | <.001 |
| Error(factor1) | Linear | 99.217 | 216 | .459 | | |

**(Figure 42)**

### Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1070.366 | 1 | 1070.366 | 2794.065 | <.001 |
| female | .770 | 1 | .770 | 2.009 | .158 |
| Error | 82.746 | 216 | .383 | | |

**(Figure 43)**

### 1. factor1

Measure: MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|
| 1 | 1.843 | .046 | 1.752 | 1.933 |
| 2 | 1.942 | .051 | 1.840 | 2.043 |

**(Figure 44)**

### 2. Tenure track

Measure: MEASURE_1

| Tenure track | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|
| 0 | 1.891 | .050 | 1.792 | 1.990 |
| 1 | 1.893 | .047 | 1.801 | 1.985 |

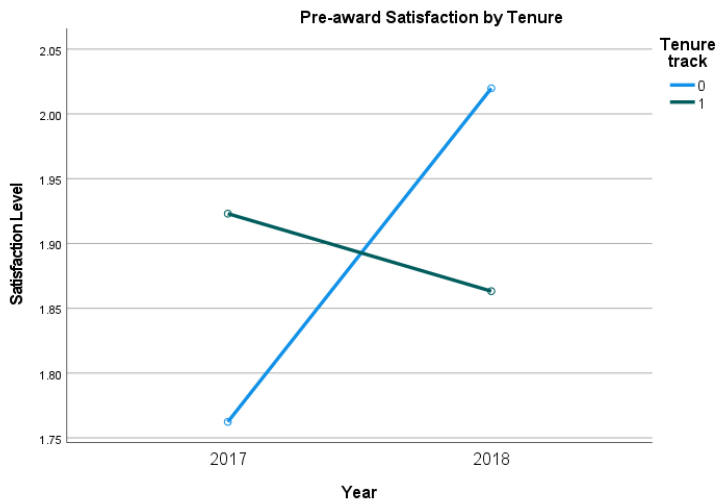**(Figure 45)**

### 3. Tenure track * factor1

Measure: MEASURE_1

| Tenure track | factor1 | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|---|
| 0 | 1 | 1.762 | .067 | 1.630 | 1.895 |
| | 2 | 2.020 | .075 | 1.871 | 2.168 |
| 1 | 1 | 1.923 | .062 | 1.800 | 2.046 |
| | 2 | 1.863 | .070 | 1.725 | 2.001 |

**(Figure 46)**

**Pre-award Satisfaction by Tenure**



(Figure 47)

**Tests of Within-Subjects Effects**

Measure:  MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 1.058 | 1 | 1.058 | 2.024 | .156 |
| | Greenhouse-Geisser | 1.058 | 1.000 | 1.058 | 2.024 | .156 |
| | Huynh-Feldt | 1.058 | 1.000 | 1.058 | 2.024 | .156 |
| | Lower-bound | 1.058 | 1.000 | 1.058 | 2.024 | .156 |
| factor1 * tenuretrack | Sphericity Assumed | 2.728 | 1 | 2.728 | 5.217 | .023 |
| | Greenhouse-Geisser | 2.728 | 1.000 | 2.728 | 5.217 | .023 |
| | Huynh-Feldt | 2.728 | 1.000 | 2.728 | 5.217 | .023 |
| | Lower-bound | 2.728 | 1.000 | 2.728 | 5.217 | .023 |
| Error(factor1) | Sphericity Assumed | 112.944 | 216 | .523 | | |
| | Greenhouse-Geisser | 112.944 | 216.000 | .523 | | |
| | Huynh-Feldt | 112.944 | 216.000 | .523 | | |
| | Lower-bound | 112.944 | 216.000 | .523 | | |

(Figure 48)

**Tests of Within-Subjects Contrasts**

Measure:  MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 1.058 | 1 | 1.058 | 2.024 | .156 |
| factor1 * tenuretrack | Linear | 2.728 | 1 | 2.728 | 5.217 | .023 |
| Error(factor1) | Linear | 112.944 | 216 | .523 | | |

(Figure 49)

**Tests of Between-Subjects Effects**

Measure:  MEASURE_1

Transformed Variable:  Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1552.533 | 1 | 1552.533 | 3064.404 | <.001 |
| tenuretrack | .000 | 1 | .000 | .001 | .976 |
| Error | 109.433 | 216 | .507 | | |

(Figure 50)

**1. factor1**

Measure:  MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 1 | 1.703 | .046 | 1.612 | 1.795 |
| 2 | 1.834 | .051 | 1.734 | 1.934 |

(Figure 51)

## 2. Tenure track

Measure: MEASURE_1

| Tenure track | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 0 | 1.807 | .048 | 1.713 | 1.901 |
| 1 | 1.731 | .044 | 1.643 | 1.818 |

**(Figure 52)**

## 3. Tenure track * factor1

Measure: MEASURE_1

| Tenure track | factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| 0 | 1 | 1.663 | .068 | 1.529 | 1.797 |
| | 2 | 1.950 | .074 | 1.804 | 2.097 |
| 1 | 1 | 1.744 | .063 | 1.619 | 1.868 |
| | 2 | 1.718 | .069 | 1.582 | 1.854 |

**(Figure 53)**
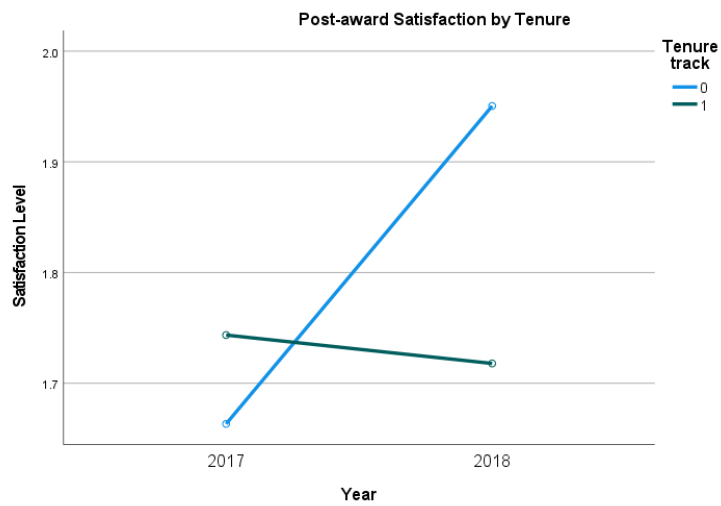


**(Figure 54)**

### Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 1.853 | 1 | 1.853 | 3.287 | .071 |
| | Greenhouse-Geisser | 1.853 | 1.000 | 1.853 | 3.287 | .071 |
| | Huynh-Feldt | 1.853 | 1.000 | 1.853 | 3.287 | .071 |
| | Lower-bound | 1.853 | 1.000 | 1.853 | 3.287 | .071 |
| factor1 * tenuretrack | Sphericity Assumed | 2.651 | 1 | 2.651 | 4.702 | .031 |
| | Greenhouse-Geisser | 2.651 | 1.000 | 2.651 | 4.702 | .031 |
| | Huynh-Feldt | 2.651 | 1.000 | 2.651 | 4.702 | .031 |
| | Lower-bound | 2.651 | 1.000 | 2.651 | 4.702 | .031 |
| Error(factor1) | Sphericity Assumed | 121.798 | 216 | .564 | | |
| | Greenhouse-Geisser | 121.798 | 216.000 | .564 | | |
| | Huynh-Feldt | 121.798 | 216.000 | .564 | | |
| | Lower-bound | 121.798 | 216.000 | .564 | | |

**(Figure 55)**

### Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 1.853 | 1 | 1.853 | 3.287 | .071 |
| factor1 * tenuretrack | Linear | 2.651 | 1 | 2.651 | 4.702 | .031 |
| Error(factor1) | Linear | 121.798 | 216 | .564 | | |

**(Figure 56)**

### Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1356.822 | 1 | 1356.822 | 2945.203 | <.001 |
| tenuretrack | .629 | 1 | .629 | 1.365 | .244 |
| Error | 99.509 | 216 | .461 | | |

**(Figure 57)**

### 1. factor1

Measure: MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval Lower Bound | Upper Bound |
|---|---|---|---|---|
| 1 | 1.834 | .043 | 1.749 | 1.920 |
| 2 | 2.142 | .046 | 2.052 | 2.232 |

**(Figure 58)**

### 2. Tenure track

Measure: MEASURE_1

| Tenure track | Mean | Std. Error | 95% Confidence Interval Lower Bound | Upper Bound |
|---|---|---|---|---|
| 0 | 2.015 | .045 | 1.926 | 2.104 |
| 1 | 1.962 | .042 | 1.879 | 2.044 |

**(Figure 59)**

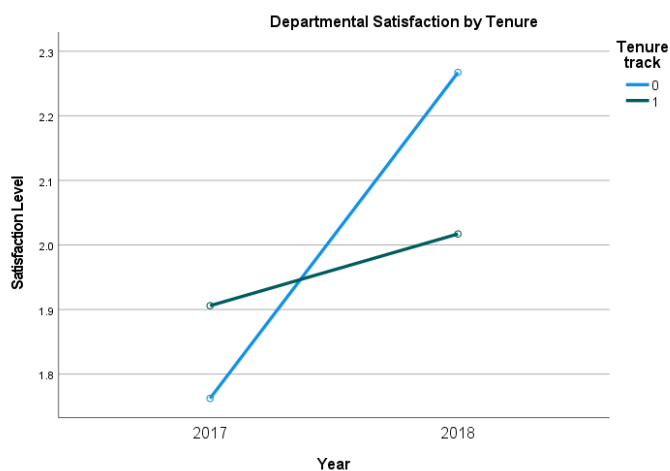### 3. Tenure track * factor1

Measure: MEASURE_1

| Tenure track | factor1 | Mean | Std. Error | 95% Confidence Interval Lower Bound | Upper Bound |
|---|---|---|---|---|---|
| 0 | 1 | 1.762 | .064 | 1.637 | 1.888 |
| | 2 | 2.267 | .067 | 2.135 | 2.399 |
| 1 | 1 | 1.906 | .059 | 1.790 | 2.022 |
| | 2 | 2.017 | .062 | 1.895 | 2.140 |

**(Figure 60)**



**(Figure 61)**

**Tests of Within-Subjects Effects**

Measure: MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 10.287 | 1 | 10.287 | 22.812 | <.001 |
| | Greenhouse-Geisser | 10.287 | 1.000 | 10.287 | 22.812 | <.001 |
| | Huynh-Feldt | 10.287 | 1.000 | 10.287 | 22.812 | <.001 |
| | Lower-bound | 10.287 | 1.000 | 10.287 | 22.812 | <.001 |
| factor1 * tenuretrack | Sphericity Assumed | 4.204 | 1 | 4.204 | 9.323 | .003 |
| | Greenhouse-Geisser | 4.204 | 1.000 | 4.204 | 9.323 | .003 |
| | Huynh-Feldt | 4.204 | 1.000 | 4.204 | 9.323 | .003 |
| | Lower-bound | 4.204 | 1.000 | 4.204 | 9.323 | .003 |
| Error(factor1) | Sphericity Assumed | 97.402 | 216 | .451 | | |
| | Greenhouse-Geisser | 97.402 | 216.000 | .451 | | |
| | Huynh-Feldt | 97.402 | 216.000 | .451 | | |
| | Lower-bound | 97.402 | 216.000 | .451 | | |

**(Figure 62)**

**Tests of Within-Subjects Contrasts**

Measure: MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 10.287 | 1 | 10.287 | 22.812 | <.001 |
| factor1 * tenuretrack | Linear | 4.204 | 1 | 4.204 | 9.323 | .003 |
| Error(factor1) | Linear | 97.402 | 216 | .451 | | |

**(Figure 63)**

**Tests of Between-Subjects Effects**

Measure: MEASURE_1

Transformed Variable: Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1714.189 | 1 | 1714.189 | 4178.623 | <.001 |
| tenuretrack | .308 | 1 | .308 | .751 | .387 |
| Error | 88.609 | 216 | .410 | | |

**(Figure 64)**

**1. factor1**

Measure: MEASURE_1

| factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 1 | 1.582 | .041 | 1.501 | 1.662 |
| 2 | 1.696 | .047 | 1.603 | 1.788 |

**(Figure 65)**

**2. Tenure track**

Measure: MEASURE_1

| Tenure track | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|
| | | | Lower Bound | Upper Bound |
| 0 | 1.683 | .044 | 1.597 | 1.769 |
| 1 | 1.594 | .040 | 1.514 | 1.674 |

**(Figure 66)**

**3. Tenure track * factor1**

Measure: MEASURE_1

| Tenure track | factor1 | Mean | Std. Error | 95% Confidence Interval | |
|---|---|---|---|---|---|
| | | | | Lower Bound | Upper Bound |
| 0 | 1 | 1.505 | .060 | 1.387 | 1.622 |
| | 2 | 1.861 | .069 | 1.726 | 1.997 |
| 1 | 1 | 1.658 | .055 | 1.549 | 1.767 |
| | 2 | 1.530 | .064 | 1.404 | 1.656 |

**(Figure 67)**

**Institutional Satisfaction by Tenure**
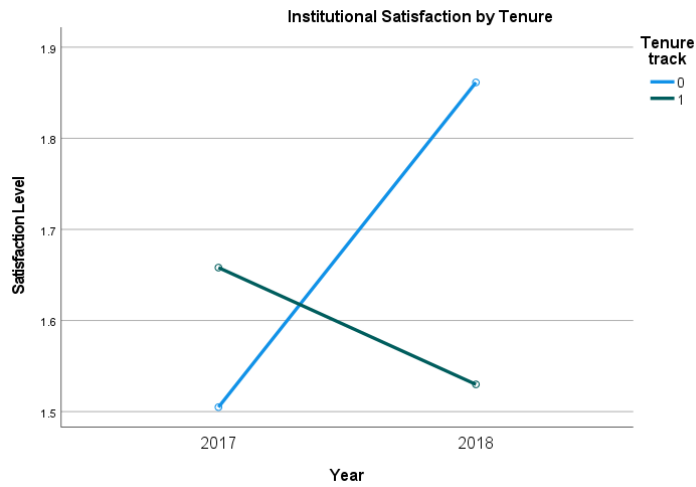
**(Figure 68)**

## Tests of Within-Subjects Effects

Measure:  MEASURE_1

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Sphericity Assumed | 1.412 | 1 | 1.412 | 3.108 | .079 |
| | Greenhouse-Geisser | 1.412 | 1.000 | 1.412 | 3.108 | .079 |
| | Huynh-Feldt | 1.412 | 1.000 | 1.412 | 3.108 | .079 |
| | Lower-bound | 1.412 | 1.000 | 1.412 | 3.108 | .079 |
| factor1 * tenuretrack | Sphericity Assumed | 6.366 | 1 | 6.366 | 14.013 | <.001 |
| | Greenhouse-Geisser | 6.366 | 1.000 | 6.366 | 14.013 | <.001 |
| | Huynh-Feldt | 6.366 | 1.000 | 6.366 | 14.013 | <.001 |
| | Lower-bound | 6.366 | 1.000 | 6.366 | 14.013 | <.001 |
| Error(factor1) | Sphericity Assumed | 98.123 | 216 | .454 | | |
| | Greenhouse-Geisser | 98.123 | 216.000 | .454 | | |
| | Huynh-Feldt | 98.123 | 216.000 | .454 | | |
| | Lower-bound | 98.123 | 216.000 | .454 | | |

**(Figure 69)**

## Tests of Within-Subjects Contrasts

Measure:  MEASURE_1

| Source | factor1 | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| factor1 | Linear | 1.412 | 1 | 1.412 | 3.108 | .079 |
| factor1 * tenuretrack | Linear | 6.366 | 1 | 6.366 | 14.013 | <.001 |
| Error(factor1) | Linear | 98.123 | 216 | .454 | | |

**(Figure 70)**

## Tests of Between-Subjects Effects

Measure:  MEASURE_1
Transformed Variable:  Average

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Intercept | 1164.348 | 1 | 1164.348 | 3042.780 | <.001 |
| tenuretrack | .862 | 1 | .862 | 2.252 | .135 |
| Error | 82.654 | 216 | .383 | | |

**(Figure 71)**

## Categorical Variable Information

| | | | N | Percent |
|---|---|---|---|---|
| Dependent Variable | Preaward satisfaction - 2018 | Below Expectations | 70 | 32.1% |
| | | Meets Expectations | 92 | 42.2% |
| | | Exceeds Expectations | 56 | 25.7% |
| | | Total | 218 | 100.0% |
| Factor | Preaward satisfaction - 2017 | Below Expectations | 69 | 31.7% |
| | | Meets Expectations | 113 | 51.8% |
| | | Exceeds Expectations | 36 | 16.5% |
| | | Total | 218 | 100.0% |

**(Figure 72)**

**Continuous Variable Information**

| | | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Covariate | Female | 218 | 0 | 1 | .34 | .476 |
| | White | 218 | 0 | 1 | .78 | .412 |
| | Asian | 218 | 0 | 1 | .13 | .340 |
| | Years of service | 218 | .10 | 46.50 | 22.3183 | 9.28465 |
| | Chair | 218 | 0 | 1 | .06 | .229 |
| | Tenure track | 218 | 0 | 1 | .54 | .500 |
| | Engagement (treatment) | 218 | 0 | 1 | .22 | .415 |

**(Figure 73)**

**Parameter Estimates**

| | | | | 95% Wald Confidence Interval | | Hypothesis Test | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parameter | | B | Std. Error | Lower | Upper | Wald Chi-Square | df | Sig. | Exp(B) |
| Threshold | [Preaward satisfaction - 2018=1] | -.775 | .6176 | -1.985 | .436 | 1.573 | 1 | .210 | .461 |
| | [Preaward satisfaction - 2018=2] | 1.194 | .6214 | -.024 | 2.412 | 3.694 | 1 | .055 | 3.301 |
| [Preaward satisfaction - 2017=1] | | .224 | .3774 | -.515 | .964 | .353 | 1 | .552 | 1.252 |
| [Preaward satisfaction - 2017=2] | | -.079 | .3478 | -.761 | .602 | .052 | 1 | .820 | .924 |
| [Preaward satisfaction - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| Female | | .419 | .2796 | -.129 | .967 | 2.245 | 1 | .134 | 1.520 |
| White | | -.046 | .4756 | -.978 | .886 | .009 | 1 | .922 | .955 |
| Asian | | .332 | .5930 | -.830 | 1.495 | .314 | 1 | .575 | 1.394 |
| Years of service | | -.012 | .0148 | -.041 | .017 | .634 | 1 | .426 | .988 |
| Chair | | -.057 | .6099 | -1.252 | 1.138 | .009 | 1 | .926 | .945 |
| Tenure track | | -.215 | .2763 | -.757 | .326 | .606 | 1 | .436 | .806 |
| Engagement (treatment) | | 1.216 | .3236 | .582 | 1.850 | 14.122 | 1 | <.001 | 3.374 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Preaward satisfaction - 2018
Model: (Threshold), Preaward satisfaction - 2017, Female, White, Asian, Years of service, Chair, Tenure track, Engagement (treatment)

a. Set to zero because this parameter is redundant.
b. Fixed at the displayed value.

**(Figure 74)**

**Categorical Variable Information**

| | | | N | Percent |
|---|---|---|---|---|
| Dependent Variable | Postaward satisfactoin - 2018 | Below Expectations | 84 | 38.5% |
| | | Meets Expectations | 88 | 40.4% |
| | | Exceeds Expectations | 46 | 21.1% |
| | | Total | 218 | 100.0% |
| Factor | Postaward satisfactoin - 2017 | Below Expectations | 92 | 42.2% |
| | | Meets Expectations | 98 | 45.0% |
| | | Exceeds Expectations | 28 | 12.8% |
| | | Total | 218 | 100.0% |

**(Figure 75)**

**Continuous Variable Information**

| | | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Covariate | Female | 218 | 0 | 1 | .34 | .476 |
| | White | 218 | 0 | 1 | .78 | .412 |
| | Asian | 218 | 0 | 1 | .13 | .340 |
| | Years of service | 218 | .10 | 46.50 | 22.3183 | 9.28465 |
| | Chair | 218 | 0 | 1 | .06 | .229 |
| | Tenure track | 218 | 0 | 1 | .54 | .500 |
| | Engagement (treatment) | 218 | 0 | 1 | .22 | .415 |

**(Figure 76)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Postaward satisfactoin - 2018=1] | -.283 | .6594 | -1.575 | 1.010 | .184 | 1 | .668 | .754 |
| | [Postaward satisfactoin - 2018=2] | 1.842 | .6757 | .518 | 3.167 | 7.431 | 1 | .006 | 6.310 |
| [Postaward satisfactoin - 2017=1] | | .681 | .4338 | -.170 | 1.531 | 2.460 | 1 | .117 | 1.975 |
| [Postaward satisfactoin - 2017=2] | | .070 | .4214 | -.757 | .896 | .027 | 1 | .869 | 1.072 |
| [Postaward satisfactoin - 2017=3] | | 0ᵃ | . | . | . | . | . | . | 1 |
| Female | | .396 | .2818 | -.156 | .948 | 1.975 | 1 | .160 | 1.486 |
| White | | -.284 | .4880 | -1.241 | .672 | .339 | 1 | .560 | .753 |
| Asian | | .795 | .6052 | -.391 | 1.982 | 1.727 | 1 | .189 | 2.215 |
| Years of service | | -.006 | .0153 | -.036 | .024 | .138 | 1 | .710 | .994 |
| Chair | | -.656 | .6162 | -1.863 | .552 | 1.132 | 1 | .287 | .519 |
| Tenure track | | -.433 | .2843 | -.990 | .124 | 2.323 | 1 | .128 | .648 |
| Engagement (treatment) | | 1.686 | .3365 | 1.026 | 2.345 | 25.090 | 1 | <.001 | 5.396 |
| (Scale) | | 1ᵇ | | | | | | | |

Dependent Variable: Postaward satisfactoin - 2018
Model: (Threshold), Postaward satisfactoin - 2017, Female, White, Asian, Years of service, Chair, Tenure track, Engagement (treatment)

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 77)**

**Categorical Variable Information**

| | | | N | Percent |
|---|---|---|---|---|
| Dependent Variable | Departmental satisfaction - 2018 | Below Expectations | 38 | 17.4% |
| | | Meets Expectations | 113 | 51.8% |
| | | Exceeds Expectations | 67 | 30.7% |
| | | Total | 218 | 100.0% |
| Factor | Departmental satisfaction - 2017 | Below Expectations | 65 | 29.8% |
| | | Meets Expectations | 123 | 56.4% |
| | | Exceeds Expectations | 30 | 13.8% |
| | | Total | 218 | 100.0% |

**(Figure 78)**

**Continuous Variable Information**

| | | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Covariate | Female | 218 | 0 | 1 | .34 | .476 |
| | White | 218 | 0 | 1 | .78 | .412 |
| | Asian | 218 | 0 | 1 | .13 | .340 |
| | Years of service | 218 | .10 | 46.50 | 22.3183 | 9.28465 |
| | Chair | 218 | 0 | 1 | .06 | .229 |
| | Tenure track | 218 | 0 | 1 | .54 | .500 |
| | Engagement (treatment) | 218 | 0 | 1 | .22 | .415 |

**(Figure 79)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Departmental satisfaction - 2018=1] | -1.433 | .6889 | -2.783 | -.083 | 4.326 | 1 | .038 | .239 |
| | [Departmental satisfaction - 2018=2] | 1.334 | .6866 | -.012 | 2.680 | 3.776 | 1 | .052 | 3.797 |
| [Departmental satisfaction - 2017=1] | | .386 | .4490 | -.494 | 1.266 | .739 | 1 | .390 | 1.471 |
| [Departmental satisfaction - 2017=2] | | .066 | .4120 | -.741 | .874 | .026 | 1 | .872 | 1.069 |
| [Departmental satisfaction - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| Female | | .873 | .2934 | .298 | 1.448 | 8.857 | 1 | .003 | 2.394 |
| White | | -.611 | .4976 | -1.587 | .364 | 1.509 | 1 | .219 | .543 |
| Asian | | .000 | .6145 | -1.205 | 1.204 | .000 | 1 | 1.000 | 1.000 |
| Years of service | | .016 | .0157 | -.015 | .047 | 1.058 | 1 | .304 | 1.016 |
| Chair | | -.350 | .6390 | -1.602 | .903 | .299 | 1 | .584 | .705 |
| Tenure track | | -.614 | .2951 | -1.192 | -.036 | 4.331 | 1 | .037 | .541 |
| Engagement (treatment) | | 1.815 | .3664 | 1.097 | 2.533 | 24.539 | 1 | <.001 | 6.142 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Departmental satisfaction - 2018
Model: (Threshold), Departmental satisfaction - 2017, Female, White, Asian, Years of service, Chair, Tenure track, Engagement (treatment)

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 80)**

**Categorical Variable Information**

| | | | N | Percent |
|---|---|---|---|---|
| Dependent Variable | Institutional satisfaction - 2018 | Below Expectations | 100 | 45.9% |
| | | Meets Expectations | 87 | 39.9% |
| | | Exceeds Expectations | 31 | 14.2% |
| | | Total | 218 | 100.0% |
| Factor | Institutional satisfaction - 2017 | Below Expectations | 103 | 47.2% |
| | | Meets Expectations | 102 | 46.8% |
| | | Exceeds Expectations | 13 | 6.0% |
| | | Total | 218 | 100.0% |

**(Figure 81)**

**Continuous Variable Information**

| | | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Covariate | Female | 218 | 0 | 1 | .34 | .476 |
| | White | 218 | 0 | 1 | .78 | .412 |
| | Asian | 218 | 0 | 1 | .13 | .340 |
| | Years of service | 218 | .10 | 46.50 | 22.3183 | 9.28465 |
| | Chair | 218 | 0 | 1 | .06 | .229 |
| | Tenure track | 218 | 0 | 1 | .54 | .500 |
| | Engagement (treatment) | 218 | 0 | 1 | .22 | .415 |

**(Figure 82)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Institutional satisfaction - 2018=1] | -.152 | .8090 | -1.738 | 1.433 | .035 | 1 | .851 | .859 |
| | [Institutional satisfaction - 2018=2] | 2.218 | .8316 | .588 | 3.848 | 7.114 | 1 | .008 | 9.190 |
| [Institutional satisfaction - 2017=1] | | .681 | .6217 | -.538 | 1.899 | 1.199 | 1 | .274 | 1.975 |
| [Institutional satisfaction - 2017=2] | | .434 | .6211 | -.783 | 1.651 | .488 | 1 | .485 | 1.543 |
| [Institutional satisfaction - 2017=3] | | 0ᵃ | . | . | . | . | . | . | 1 |
| Female | | .630 | .2873 | .067 | 1.194 | 4.814 | 1 | .028 | 1.878 |
| White | | -.227 | .5003 | -1.207 | .754 | .206 | 1 | .650 | .797 |
| Asian | | .235 | .6100 | -.961 | 1.431 | .148 | 1 | .700 | 1.265 |
| Years of service | | -.020 | .0158 | -.051 | .011 | 1.644 | 1 | .200 | .980 |
| Chair | | -1.094 | .6661 | -2.399 | .212 | 2.695 | 1 | .101 | .335 |
| Tenure track | | -.602 | .2933 | -1.177 | -.027 | 4.211 | 1 | .040 | .548 |
| Engagement (treatment) | | 1.642 | .3421 | .971 | 2.312 | 23.026 | 1 | <.001 | 5.163 |
| (Scale) | | 1ᵇ | | | | | | | |

Dependent Variable: Institutional satisfaction - 2018
Model: (Threshold), Institutional satisfaction - 2017, Female, White, Asian, Years of service, Chair, Tenure track, Engagement (treatment)

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 83)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Preaward satisfaction - 2018=1] | -.989 | .6055 | -2.176 | .198 | 2.667 | 1 | .102 | .372 |
| | [Preaward satisfaction - 2018=2] | .999 | .6058 | -.188 | 2.187 | 2.721 | 1 | .099 | 2.716 |
| Female * Engagement (treatment) | | 2.382 | .5478 | 1.308 | 3.456 | 18.909 | 1 | <.001 | 10.826 |
| [Preaward satisfaction - 2017=1] | | .127 | .3783 | -.614 | .869 | .113 | 1 | .737 | 1.136 |
| [Preaward satisfaction - 2017=2] | | -.145 | .3488 | -.828 | .539 | .172 | 1 | .678 | .865 |
| [Preaward satisfaction - 2017=3] | | 0ᵃ | . | . | . | . | . | . | 1 |
| White | | -.021 | .4761 | -.955 | .912 | .002 | 1 | .964 | .979 |
| Asian | | .261 | .5988 | -.912 | 1.435 | .191 | 1 | .662 | 1.299 |
| Years of service | | -.009 | .0149 | -.038 | .021 | .335 | 1 | .563 | .991 |
| Chair | | .167 | .5995 | -1.008 | 1.342 | .077 | 1 | .781 | 1.182 |
| Tenure track | | -.268 | .2758 | -.809 | .272 | .947 | 1 | .331 | .765 |
| (Scale) | | 1ᵇ | | | | | | | |

Dependent Variable: Preaward satisfaction - 2018
Model: (Threshold), Female * Engagement (treatment), Preaward satisfaction - 2017, White, Asian, Years of service, Chair, Tenure track

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 84)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Postaward satisfactoin - 2018=1] | -.472 | .6491 | -1.744 | .800 | .529 | 1 | .467 | .624 |
| | [Postaward satisfactoin - 2018=2] | 1.664 | .6622 | .366 | 2.962 | 6.315 | 1 | .012 | 5.281 |
| Female * Engagement (treatment) | | 3.049 | .6072 | 1.859 | 4.240 | 25.225 | 1 | <.001 | 21.104 |
| [Postaward satisfactoin - 2017=1] | | .620 | .4327 | -.228 | 1.468 | 2.051 | 1 | .152 | 1.858 |
| [Postaward satisfactoin - 2017=2] | | .000 | .4214 | -.826 | .825 | .000 | 1 | .999 | 1.000 |
| [Postaward satisfactoin - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| White | | -.292 | .4857 | -1.244 | .660 | .360 | 1 | .548 | .747 |
| Asian | | .769 | .6044 | -.416 | 1.953 | 1.617 | 1 | .203 | 2.157 |
| Years of service | | .001 | .0154 | -.029 | .031 | .003 | 1 | .958 | 1.001 |
| Chair | | -.280 | .5981 | -1.453 | .892 | .220 | 1 | .639 | .756 |
| Tenure track | | -.456 | .2827 | -1.010 | .098 | 2.605 | 1 | .107 | .634 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Postaward satisfactoin - 2018
Model: (Threshold), Female * Engagement (treatment), Postaward satisfactoin - 2017, White, Asian, Years of service, Chair, Tenure track

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 85)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Departmental satisfaction - 2018=1] | -2.038 | .6753 | -3.362 | -.715 | 9.111 | 1 | .003 | .130 |
| | [Departmental satisfaction - 2018=2] | .642 | .6588 | -.650 | 1.933 | .948 | 1 | .330 | 1.899 |
| Female * Engagement (treatment) | | 4.085 | 1.0479 | 2.031 | 6.139 | 15.194 | 1 | <.001 | 59.425 |
| White | | -.639 | .4840 | -1.587 | .310 | 1.741 | 1 | .187 | .528 |
| Asian | | -.052 | .6050 | -1.238 | 1.134 | .007 | 1 | .932 | .950 |
| Years of service | | .022 | .0159 | -.009 | .053 | 1.886 | 1 | .170 | 1.022 |
| Chair | | -.060 | .6384 | -1.312 | 1.191 | .009 | 1 | .925 | .941 |
| Tenure track | | -.700 | .2985 | -1.285 | -.115 | 5.508 | 1 | .019 | .496 |
| [Departmental satisfaction - 2017=1] | | .021 | .4563 | -.873 | .916 | .002 | 1 | .963 | 1.022 |
| [Departmental satisfaction - 2017=2] | | -.240 | .4162 | -1.056 | .576 | .333 | 1 | .564 | .787 |
| [Departmental satisfaction - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Departmental satisfaction - 2018
Model: (Threshold), Female * Engagement (treatment), White, Asian, Years of service, Chair, Tenure track, Departmental satisfaction - 2017

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 86)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Institutional satisfaction - 2018=1] | -.677 | .8063 | -2.258 | .903 | .706 | 1 | .401 | .508 |
| | [Institutional satisfaction - 2018=2] | 1.829 | .8238 | .214 | 3.443 | 4.927 | 1 | .026 | 6.225 |
| Female * Engagement (treatment) | | 3.391 | .5857 | 2.243 | 4.539 | 33.512 | 1 | <.001 | 29.684 |
| [Institutional satisfaction - 2017=1] | | .432 | .6186 | -.780 | 1.645 | .488 | 1 | .485 | 1.541 |
| [Institutional satisfaction - 2017=2] | | .156 | .6151 | -1.049 | 1.362 | .065 | 1 | .799 | 1.169 |
| [Institutional satisfaction - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| White | | -.257 | .4978 | -1.232 | .719 | .266 | 1 | .606 | .774 |
| Asian | | .092 | .6180 | -1.119 | 1.304 | .022 | 1 | .881 | 1.097 |
| Years of service | | -.014 | .0160 | -.046 | .017 | .799 | 1 | .371 | .986 |
| Chair | | -.657 | .6291 | -1.890 | .576 | 1.091 | 1 | .296 | .518 |
| Tenure track | | -.701 | .2943 | -1.277 | -.124 | 5.667 | 1 | .017 | .496 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Institutional satisfaction - 2018
Model: (Threshold), Female * Engagement (treatment), Institutional satisfaction - 2017, White, Asian, Years of service, Chair, Tenure track

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 87)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Preaward satisfaction - 2018=1] | -.747 | .6114 | -1.945 | .452 | 1.492 | 1 | .222 | .474 |
| | [Preaward satisfaction - 2018=2] | 1.119 | .6144 | -.085 | 2.323 | 3.317 | 1 | .069 | 3.061 |
| Tenure track * Engagement (treatment) | | .026 | .3963 | -.750 | .803 | .004 | 1 | .947 | 1.027 |
| [Preaward satisfaction - 2017=1] | | .180 | .3711 | -.547 | .908 | .236 | 1 | .627 | 1.198 |
| [Preaward satisfaction - 2017=2] | | -.088 | .3422 | -.758 | .583 | .066 | 1 | .797 | .916 |
| [Preaward satisfaction - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| Female | | .515 | .2750 | -.024 | 1.054 | 3.510 | 1 | .061 | 1.674 |
| White | | .113 | .4681 | -.804 | 1.031 | .059 | 1 | .809 | 1.120 |
| Asian | | .633 | .5834 | -.511 | 1.776 | 1.177 | 1 | .278 | 1.883 |
| Years of service | | -.014 | .0144 | -.042 | .014 | .966 | 1 | .326 | .986 |
| Chair | | .002 | .6001 | -1.174 | 1.178 | .000 | 1 | .998 | 1.002 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Preaward satisfaction - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Preaward satisfaction - 2017, Female, White, Asian, Years of service, Chair

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 88)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Postaward satisfactoin - 2018=1] | -.116 | .6423 | -1.375 | 1.143 | .032 | 1 | .857 | .891 |
| | [Postaward satisfactoin - 2018=2] | 1.804 | .6567 | .517 | 3.091 | 7.546 | 1 | .006 | 6.073 |
| Tenure track * Engagement (treatment) | | .333 | .3951 | -.441 | 1.107 | .711 | 1 | .399 | 1.395 |
| [Postaward satisfactoin - 2017=1] | | .740 | .4213 | -.086 | 1.566 | 3.084 | 1 | .079 | 2.096 |
| [Postaward satisfactoin - 2017=2] | | .175 | .4097 | -.628 | .978 | .183 | 1 | .669 | 1.191 |
| [Postaward satisfactoin - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| Female | | .502 | .2732 | -.034 | 1.037 | 3.369 | 1 | .066 | 1.651 |
| White | | -.119 | .4722 | -1.044 | .807 | .063 | 1 | .801 | .888 |
| Asian | | 1.104 | .5836 | -.040 | 2.248 | 3.576 | 1 | .059 | 3.015 |
| Years of service | | -.010 | .0148 | -.039 | .019 | .466 | 1 | .495 | .990 |
| Chair | | -.561 | .5900 | -1.718 | .595 | .905 | 1 | .341 | .570 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Postaward satisfactoin - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Postaward satisfactoin - 2017, Female, White, Asian, Years of service, Chair

  a. Set to zero because this parameter is redundant.

  b. Fixed at the displayed value.

**(Figure 89)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Departmental satisfaction - 2018=1] | -1.342 | .6677 | -2.650 | -.033 | 4.037 | 1 | .045 | .261 |
| | [Departmental satisfaction - 2018=2] | 1.181 | .6651 | -.122 | 2.485 | 3.154 | 1 | .076 | 3.258 |
| Tenure track * Engagement (treatment) | | .423 | .4262 | -.412 | 1.258 | .986 | 1 | .321 | 1.527 |
| [Departmental satisfaction - 2017=1] | | .368 | .4368 | -.488 | 1.224 | .711 | 1 | .399 | 1.445 |
| [Departmental satisfaction - 2017=2] | | -.019 | .4018 | -.807 | .768 | .002 | 1 | .962 | .981 |
| [Departmental satisfaction - 2017=3] | | 0[a] | . | . | . | . | . | . | 1 |
| Female | | .943 | .2817 | .391 | 1.495 | 11.203 | 1 | <.001 | 2.567 |
| White | | -.494 | .4774 | -1.430 | .442 | 1.071 | 1 | .301 | .610 |
| Asian | | .394 | .5874 | -.757 | 1.545 | .450 | 1 | .502 | 1.483 |
| Years of service | | .008 | .0151 | -.022 | .037 | .255 | 1 | .613 | 1.008 |
| Chair | | -.275 | .6323 | -1.514 | .964 | .189 | 1 | .664 | .760 |
| (Scale) | | 1[b] | | | | | | | |

Dependent Variable: Departmental satisfaction - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Departmental satisfaction - 2017, Female, White, Asian, Years of service, Chair

  a. Set to zero because this parameter is redundant.

  b. Fixed at the displayed value.

**(Figure 90)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Institutional satisfaction - 2018=1] | -.186 | .7661 | -1.687 | 1.316 | .059 | 1 | .809 | .831 |
| | [Institutional satisfaction - 2018=2] | 1.926 | .7809 | .396 | 3.457 | 6.084 | 1 | .014 | 6.863 |
| Tenure track * Engagement (treatment) | | .163 | .4165 | -.653 | .980 | .154 | 1 | .695 | 1.177 |
| [Institutional satisfaction - 2017=1] | | .639 | .5931 | -.524 | 1.801 | 1.159 | 1 | .282 | 1.894 |
| [Institutional satisfaction - 2017=2] | | .247 | .5920 | -.913 | 1.408 | .175 | 1 | .676 | 1.281 |
| [Institutional satisfaction - 2017=3] | | 0a | . | . | . | . | . | . | 1 |
| Female | | .714 | .2811 | .163 | 1.264 | 6.445 | 1 | .011 | 2.041 |
| White | | -.124 | .4760 | -1.057 | .809 | .068 | 1 | .795 | .884 |
| Asian | | .579 | .5866 | -.571 | 1.729 | .974 | 1 | .324 | 1.784 |
| Years of service | | -.026 | .0153 | -.056 | .004 | 2.895 | 1 | .089 | .974 |
| Chair | | -.887 | .6228 | -2.108 | .334 | 2.029 | 1 | .154 | .412 |
| (Scale) | | 1b | | | | | | | |

Dependent Variable: Institutional satisfaction - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Institutional satisfaction - 2017, Female, White, Asian, Years of service, Chair

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 91)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Preaward satisfaction - 2018=1] | -.929 | .6051 | -2.115 | .257 | 2.359 | 1 | .125 | .395 |
| | [Preaward satisfaction - 2018=2] | 1.069 | .6062 | -.119 | 2.257 | 3.111 | 1 | .078 | 2.913 |
| Tenure track * Engagement (treatment) | | -.809 | .4566 | -1.704 | .086 | 3.139 | 1 | .076 | .445 |
| Female * Engagement (treatment) | | 2.749 | .5967 | 1.579 | 3.918 | 21.219 | 1 | <.001 | 15.623 |
| [Preaward satisfaction - 2017=1] | | .068 | .3793 | -.675 | .812 | .033 | 1 | .857 | 1.071 |
| [Preaward satisfaction - 2017=2] | | -.198 | .3499 | -.883 | .488 | .319 | 1 | .572 | .821 |
| [Preaward satisfaction - 2017=3] | | 0a | . | . | . | . | . | . | 1 |
| White | | -.021 | .4718 | -.946 | .903 | .002 | 1 | .964 | .979 |
| Asian | | .327 | .5996 | -.848 | 1.502 | .298 | 1 | .585 | 1.387 |
| Years of service | | -.008 | .0147 | -.037 | .021 | .276 | 1 | .599 | .992 |
| Chair | | .222 | .5993 | -.952 | 1.397 | .137 | 1 | .711 | 1.249 |
| (Scale) | | 1b | | | | | | | |

Dependent Variable: Preaward satisfaction - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Female * Engagement (treatment), Preaward satisfaction - 2017, White, Asian, Years of service, Chair

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 92)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Postaward satisfactoin - 2018=1] | -.335 | .6428 | -1.594 | .925 | .271 | 1 | .603 | .716 |
| | [Postaward satisfactoin - 2018=2] | 1.791 | .6576 | .502 | 3.080 | 7.416 | 1 | .006 | 5.994 |
| Tenure track * Engagement (treatment) | | -.597 | .4575 | -1.493 | .300 | 1.700 | 1 | .192 | .551 |
| Female * Engagement (treatment) | | 3.311 | .6553 | 2.026 | 4.595 | 25.526 | 1 | <.001 | 27.400 |
| White | | -.335 | .4772 | -1.270 | .601 | .492 | 1 | .483 | .716 |
| Asian | | .806 | .6024 | -.375 | 1.987 | 1.790 | 1 | .181 | 2.239 |
| Years of service | | -.002 | .0151 | -.032 | .028 | .015 | 1 | .902 | .998 |
| Chair | | -.269 | .5988 | -1.443 | .904 | .202 | 1 | .653 | .764 |
| [Postaward satisfactoin - 2017=1] | | .655 | .4302 | -.189 | 1.498 | 2.315 | 1 | .128 | 1.924 |
| [Postaward satisfactoin - 2017=2] | | .039 | .4188 | -.782 | .860 | .009 | 1 | .926 | 1.040 |
| [Postaward satisfactoin - 2017=3] | | 0ᵃ | . | . | . | . | . | . | 1 |
| (Scale) | | 1ᵇ | | | | | | | |

Dependent Variable: Postaward satisfactoin - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Female * Engagement (treatment), White, Asian, Years of service, Chair, Postaward satisfactoin - 2017

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 93)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| Threshold | [Departmental satisfaction - 2018=1] | -1.826 | .6683 | -3.136 | -.516 | 7.462 | 1 | .006 | .161 |
| | [Departmental satisfaction - 2018=2] | .806 | .6571 | -.482 | 2.094 | 1.506 | 1 | .220 | 2.240 |
| Tenure track * Engagement (treatment) | | -.542 | .4952 | -1.512 | .429 | 1.196 | 1 | .274 | .582 |
| Female * Engagement (treatment) | | 4.292 | 1.0731 | 2.189 | 6.396 | 15.998 | 1 | <.001 | 73.135 |
| White | | -.748 | .4786 | -1.686 | .190 | 2.445 | 1 | .118 | .473 |
| Asian | | -.002 | .6074 | -1.192 | 1.188 | .000 | 1 | .997 | .998 |
| Years of service | | .016 | .0158 | -.015 | .047 | 1.073 | 1 | .300 | 1.016 |
| Chair | | -.107 | .6325 | -1.347 | 1.133 | .029 | 1 | .866 | .899 |
| [Departmental satisfaction - 2017=1] | | .129 | .4549 | -.763 | 1.020 | .080 | 1 | .777 | 1.137 |
| [Departmental satisfaction - 2017=2] | | -.189 | .4155 | -1.003 | .626 | .206 | 1 | .650 | .828 |
| [Departmental satisfaction - 2017=3] | | 0ᵃ | . | . | . | . | . | . | 1 |
| (Scale) | | 1ᵇ | | | | | | | |

Dependent Variable: Departmental satisfaction - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Female * Engagement (treatment), White, Asian, Years of service, Chair, Departmental satisfaction - 2017

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 94)**

**Parameter Estimates**

| Parameter | | B | Std. Error | 95% Wald Confidence Interval Lower | 95% Wald Confidence Interval Upper | Wald Chi-Square | df | Sig. | Exp(B) |
|---|---|---|---|---|---|---|---|---|---|
| Threshold | [Institutional satisfaction - 2018=1] | -.480 | .7948 | -2.038 | 1.077 | .365 | 1 | .546 | .619 |
| | [Institutional satisfaction - 2018=2] | 2.001 | .8139 | .405 | 3.596 | 6.042 | 1 | .014 | 7.394 |
| Tenure track * Engagement (treatment) | | -1.089 | .5239 | -2.115 | -.062 | 4.318 | 1 | .038 | .337 |
| Female * Engagement (treatment) | | 3.886 | .6639 | 2.585 | 5.188 | 34.264 | 1 | <.001 | 48.730 |
| White | | -.332 | .4863 | -1.285 | .621 | .467 | 1 | .495 | .717 |
| Asian | | .174 | .6154 | -1.032 | 1.380 | .080 | 1 | .777 | 1.190 |
| Years of service | | -.017 | .0158 | -.048 | .014 | 1.190 | 1 | .275 | .983 |
| Chair | | -.653 | .6323 | -1.893 | .586 | 1.067 | 1 | .302 | .520 |
| [Institutional satisfaction - 2017=1] | | .460 | .6244 | -.764 | 1.684 | .543 | 1 | .461 | 1.584 |
| [Institutional satisfaction - 2017=2] | | .157 | .6229 | -1.063 | 1.378 | .064 | 1 | .801 | 1.170 |
| [Institutional satisfaction - 2017=3] | | 0ᵃ | . | . | . | . | . | . | 1 |
| (Scale) | | 1ᵇ | | | | | | | |

Dependent Variable: Institutional satisfaction - 2018
Model: (Threshold), Tenure track * Engagement (treatment), Female * Engagement (treatment), White, Asian, Years of service, Chair, Institutional satisfaction - 2017

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 95)**

| Q3 (Sean Jung) | Types of Satisfaction → | Pre-award Exp(B) | Pre-award P-value | Post-award Exp(B) | Post-award P-value | Departmental Exp(B) | Departmental P-value | Institutional Exp(B) | Institutional P-value |
|---|---|---|---|---|---|---|---|---|---|
| Types of Term ↓ | Variable ↓ | Exp(B) | P-value | Exp(B) | P-value | Exp(B) | P-value | Exp(B) | P-value |
| Main Effect | Engagement | 3.374 | <0.001 | 5.396 | <0.001 | 6.142 | <0.001 | 5.163 | <0.001 |
| | Female | 1.52 | 0.134 | 1.486 | 0.16 | 2.394 | 0.003 | 1.878 | 0.028 |
| | Tenure Track | 0.806 | 0.436 | 0.648 | 0.128 | 0.541 | 0.037 | 0.548 | 0.040 |
| Interaction w/ Gender | Engagement * Female | 10.826 | <0.001 | 21.104 | <0.001 | 59.425 | <0.001 | 29.684 | <0.001 |
| | Tenure Track | 0.765 | 0.331 | 0.634 | 0.107 | 0.496 | 0.019 | 0.496 | 0.017 |
| Interaction w/ Tenure | Engagement * Tenure | 1.027 | 0.947 | 1.395 | 0.399 | 1.527 | 0.321 | 1.177 | 0.695 |
| | Female | 1.674 | 0.061 | 1.651 | 0.066 | 2.567 | <0.001 | 2.041 | 0.011 |
| Interaction w/ Gender and w/ Tenure | Engagement * Female | 15.623 | <0.001 | 27.400 | <0.001 | 73.135 | <0.001 | 48.73 | <0.001 |
| | Engagement * Tenure | 0.445 | 0.076 | 0.551 | 0.192 | 0.582 | 0.274 | 0.337 | 0.038 |

**(Figure 96)**

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation | Variance |
|---|---|---|---|---|---|---|
| Number of proposals | 217 | 0 | 16 | 2.81 | 2.828 | 7.999 |
| Valid N (listwise) | 217 | | | | | |

**(Figure 97)**

**Goodness of Fit[a]**

| | Value | df | Value/df |
|---|---|---|---|
| Deviance | 534.782 | 216 | 2.476 |
| Scaled Deviance | 534.782 | 216 | |
| Pearson Chi-Square | 615.678 | 216 | 2.850 |
| Scaled Pearson Chi-Square | 615.678 | 216 | |
| Log Likelihood[b] | -532.302 | | |
| Akaike's Information Criterion (AIC) | 1066.603 | | |
| Finite Sample Corrected AIC (AICC) | 1066.622 | | |
| Bayesian Information Criterion (BIC) | 1069.983 | | |
| Consistent AIC (CAIC) | 1070.983 | | |

Dependent Variable: Number of proposals
Model: (Intercept)

a. Information criteria are in smaller-is-better form.

b. The full log likelihood function is displayed and used in computing information criteria.

**(Figure 98)**

*Goodness of Fit result when running on Poisson regression*

**Goodness of Fit[a]**

| | Value | df | Value/df |
|---|---|---|---|
| Deviance | 159.771 | 216 | .740 |
| Scaled Deviance | 159.771 | 216 | |
| Pearson Chi-Square | 161.746 | 216 | .749 |
| Scaled Pearson Chi-Square | 161.746 | 216 | |
| Log Likelihood[b] | -475.672 | | |
| Akaike's Information Criterion (AIC) | 953.344 | | |
| Finite Sample Corrected AIC (AICC) | 953.363 | | |
| Bayesian Information Criterion (BIC) | 956.724 | | |
| Consistent AIC (CAIC) | 957.724 | | |

Dependent Variable: Number of proposals
Model: (Intercept)

a. Information criteria are in smaller-is-better form.

b. The full log likelihood function is displayed and used in computing information criteria.

**(Figure 99)**

*Goodness of Fit result when running on Negative Binomial regression*



**(Figure 100)**

## Goodness of Fit[a]

| | Value | df | Value/df |
|---|---|---|---|
| Deviance | 228.578 | 215 | 1.063 |
| Scaled Deviance | 228.578 | 215 | |
| Pearson Chi-Square | 247.806 | 215 | 1.153 |
| Scaled Pearson Chi-Square | 247.806 | 215 | |
| Log Likelihood[b] | -467.100 | | |
| Akaike's Information Criterion (AIC) | 938.199 | | |
| Finite Sample Corrected AIC (AICC) | 938.255 | | |
| Bayesian Information Criterion (BIC) | 944.959 | | |
| Consistent AIC (CAIC) | 946.959 | | |

Dependent Variable: Number of proposals
Model: (Intercept)

a. Information criteria are in smaller-is-better form.

b. The full log likelihood function is displayed and used in computing information criteria.

**(Figure 101)**

*Goodness of Fit result when running on Negative Binomial regression with custom parameters.*

Factors:
- Type of doctoral degree [doctortype]
- RAS Unit [rasunit]

Covariates:
- Chair [chair]
- Female [female]
- White [white]
- Asian [asian]
- Years of service [yos]
- Tenure track [tenuretrack]

**(Figure 102)**

## Categorical Variable Information

| | | | N | Percent |
|---|---|---|---|---|
| Factor | Type of doctoral degree | No doctoral degree | 11 | 5.1% |
| | | Ph.D. | 104 | 47.9% |
| | | M.D. | 90 | 41.5% |
| | | M.D., Ph.D. | 12 | 5.5% |
| | | Total | 217 | 100.0% |
| | RAS Unit | ABOSS | 34 | 15.7% |
| | | Basic Science | 23 | 10.6% |
| | | CAPS | 18 | 8.3% |
| | | Cancer and Imaging | 36 | 16.6% |
| | | Dept of Medicine | 35 | 16.1% |
| | | Hospital and Specialty Services | 17 | 7.8% |
| | | Pediatrics | 21 | 9.7% |
| | | Public Health and Nursing | 26 | 12.0% |
| | | Yerkes | 7 | 3.2% |
| | | Total | 217 | 100.0% |

**(Figure 103)**

## Continuous Variable Information

| | | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Dependent Variable | Number of proposals | 217 | 0 | 16 | 2.81 | 2.828 |
| Covariate | Chair | 217 | 0 | 1 | .06 | .229 |
| | Female | 217 | 0 | 1 | .35 | .477 |
| | White | 217 | 0 | 1 | .78 | .413 |
| | Asian | 217 | 0 | 1 | .13 | .341 |
| | Years of service | 217 | .10 | 46.50 | 22.3111 | 9.30549 |
| | Tenure track | 217 | 0 | 1 | .54 | .500 |

**(Figure 104)**

**Goodness of Fit**[a]

| | Value | df | Value/df |
|---|---|---|---|
| Deviance | 225.703 | 198 | 1.140 |
| Scaled Deviance | 225.703 | 198 | |
| Pearson Chi-Square | 246.243 | 198 | 1.244 |
| Scaled Pearson Chi-Square | 246.243 | 198 | |
| Log Likelihood[b] | -442.045 | | |
| Akaike's Information Criterion (AIC) | 922.089 | | |
| Finite Sample Corrected AIC (AICC) | 925.947 | | |
| Bayesian Information Criterion (BIC) | 986.308 | | |
| Consistent AIC (CAIC) | 1005.308 | | |

Dependent Variable: Number of proposals
Model: (Intercept), Type of doctoral degree, Chair, RAS Unit, Female, White, Asian, Years of service, Tenure track

a. Information criteria are in smaller-is-better form.

b. The full log likelihood function is displayed and used in computing information criteria.

**(Figure 105)**

**Parameter Estimates**

| Parameter | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| (Intercept) | 2.003 | .4023 | 1.215 | 2.792 | 24.790 | 1 | <.001 | 7.412 |
| [Type of doctoral degree=0] | -.841 | .3815 | -1.589 | -.094 | 4.865 | 1 | .027 | .431 |
| [Type of doctoral degree=1] | -.242 | .2511 | -.734 | .250 | .931 | 1 | .335 | .785 |
| [Type of doctoral degree=2] | -.647 | .2593 | -1.155 | -.139 | 6.228 | 1 | .013 | .524 |
| [Type of doctoral degree=3] | 0ª | . | . | . | . | . | . | 1 |
| Chair | -.257 | .2610 | -.769 | .254 | .972 | 1 | .324 | .773 |
| [RAS Unit=1] | -.707 | .3347 | -1.363 | -.051 | 4.459 | 1 | .035 | .493 |
| [RAS Unit=2] | -.426 | .3416 | -1.095 | .244 | 1.552 | 1 | .213 | .653 |
| [RAS Unit=3] | -.927 | .3675 | -1.647 | -.206 | 6.358 | 1 | .012 | .396 |
| [RAS Unit=4] | -.527 | .3258 | -1.165 | .112 | 2.615 | 1 | .106 | .591 |
| [RAS Unit=5] | .081 | .3339 | -.573 | .736 | .059 | 1 | .808 | 1.085 |
| [RAS Unit=6] | -.296 | .3619 | -1.005 | .414 | .668 | 1 | .414 | .744 |
| [RAS Unit=7] | -.119 | .3547 | -.815 | .576 | .113 | 1 | .736 | .887 |
| [RAS Unit=8] | -.379 | .3400 | -1.045 | .288 | 1.240 | 1 | .265 | .685 |
| [RAS Unit=9] | 0ª | . | . | . | . | . | . | 1 |
| Female | -.147 | .1368 | -.416 | .121 | 1.163 | 1 | .281 | .863 |
| White | -.448 | .2114 | -.863 | -.034 | 4.495 | 1 | .034 | .639 |
| Asian | -.225 | .2508 | -.717 | .266 | .806 | 1 | .369 | .798 |
| Years of service | -.003 | .0073 | -.017 | .011 | .148 | 1 | .700 | .997 |
| Tenure track | .480 | .1440 | .198 | .762 | 11.107 | 1 | <.001 | 1.616 |
| (Scale) | 1ᵇ | | | | | | | |
| (Negative binomial) | .335 | .0689 | .224 | .502 | | | | |

Dependent Variable: Number of proposals
Model: (Intercept), Type of doctoral degree, Chair, RAS Unit, Female, White, Asian, Years of service, Tenure track
a. Set to zero because this parameter is redundant.
b. Fixed at the displayed value.

**(Figure 106A)**

| Dependent Variable →<br>Independent Variables ↓ | Number of Proposals (negative binomial) | | |
|---|---|---|---|
| [Type of doctoral degree = No Doctoral Degree] | -0.841 | 0.431 | 0.027 |
| [Type of doctoral degree = Ph.D] | -0.242 | 0.785 | 0.335 |
| [Type of doctoral degree = M.D.] | -0.647 | 0.524 | 0.013 |
| [Type of doctoral degree = M.D., Ph.D] | 0 | 1.000 | n/a |
| Chair | -0.257 | 0.773 | 0.324 |
| [RAS Unit = ABOSS] | -0.707 | 0.493 | 0.035 |
| [RAS Unit = Basic Science] | -0.426 | 0.653 | 0.213 |
| [RAS Unit = CAPS] | -0.927 | 0.396 | 0.012 |
| [RAS Unit = Cancer and Imaging] | -0.527 | 0.590 | 0.106 |
| [RAS Unit = Dept of Medicine] | 0.081 | 1.084 | 0.808 |
| [RAS Unit = Hospital & Speciality] | -0.296 | 0.744 | 0.414 |
| [RAS Unit = Pediatrics] | -0.119 | 0.888 | 0.736 |
| [RAS Unit = Public Health & Nursing] | -0.379 | 0.685 | 0.265 |
| [RAS Unit = Yerkes] | 0 | n/a | n/a |
| Female | -0.147 | 0.863 | 0.281 |
| White | -0.448 | 0.639 | 0.034 |
| Asian | -0.225 | 0.799 | 0.369 |
| Years of Service | -0.003 | 0.997 | 0.700 |
| Tenure Track | 0.48 | 1.616 | <0.001 |
| | B | Exp(B) | p-value |

**(Figure 106B)**

## Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation | Variance |
|---|---|---|---|---|---|---|
| Number of awards | 217 | 0 | 31 | 2.76 | 3.510 | 12.320 |
| Valid N (listwise) | 217 | | | | | |

**(Figure 107)**

## Categorical Variable Information

| | | | N | Percent |
|---|---|---|---|---|
| Factor | Type of doctoral degree | No doctoral degree | 11 | 5.1% |
| | | Ph.D. | 104 | 47.9% |
| | | M.D. | 90 | 41.5% |
| | | M.D., Ph.D. | 12 | 5.5% |
| | | Total | 217 | 100.0% |
| | RAS Unit | ABOSS | 34 | 15.7% |
| | | Basic Science | 23 | 10.6% |
| | | CAPS | 18 | 8.3% |
| | | Cancer and Imaging | 36 | 16.6% |
| | | Dept of Medicine | 35 | 16.1% |
| | | Hospital and Specialty Services | 17 | 7.8% |
| | | Pediatrics | 21 | 9.7% |
| | | Public Health and Nursing | 26 | 12.0% |
| | | Yerkes | 7 | 3.2% |
| | | Total | 217 | 100.0% |

**(Figure 108)**

## Continuous Variable Information

| | | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Dependent Variable | Number of awards | 217 | 0 | 31 | 2.76 | 3.510 |
| Covariate | Chair | 217 | 0 | 1 | .06 | .229 |
| | Female | 217 | 0 | 1 | .35 | .477 |
| | White | 217 | 0 | 1 | .78 | .413 |
| | Asian | 217 | 0 | 1 | .13 | .341 |
| | Years of service | 217 | .10 | 46.50 | 22.3111 | 9.30549 |
| | Tenure track | 217 | 0 | 1 | .54 | .500 |

**(Figure 109)**

## Goodness of Fit[a]

| | Value | df | Value/df |
|---|---|---|---|
| Deviance | 218.769 | 198 | 1.105 |
| Scaled Deviance | 218.769 | 198 | |
| Pearson Chi-Square | 248.455 | 198 | 1.255 |
| Scaled Pearson Chi-Square | 248.455 | 198 | |
| Log Likelihood[b] | -438.833 | | |
| Akaike's Information Criterion (AIC) | 915.667 | | |
| Finite Sample Corrected AIC (AICC) | 919.524 | | |
| Bayesian Information Criterion (BIC) | 979.885 | | |
| Consistent AIC (CAIC) | 998.885 | | |

Dependent Variable: Number of awards
Model: (Intercept), Type of doctoral degree, Chair, RAS Unit, Female, White, Asian, Years of service, Tenure track

  a. Information criteria are in smaller-is-better form.

  b. The full log likelihood function is displayed and used in computing information criteria.

**(Figure 110)**

**Parameter Estimates**

| Parameter | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | Exp(B) |
|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | Wald Chi-Square | df | Sig. | |
| (Intercept) | 1.495 | .4586 | .597 | 2.394 | 10.634 | 1 | .001 | 4.461 |
| [Type of doctoral degree=0] | -1.130 | .4609 | -2.033 | -.226 | 6.006 | 1 | .014 | .323 |
| [Type of doctoral degree=1] | -.366 | .2963 | -.946 | .215 | 1.523 | 1 | .217 | .694 |
| [Type of doctoral degree=2] | .106 | .2984 | -.479 | .691 | .127 | 1 | .722 | 1.112 |
| [Type of doctoral degree=3] | 0<sup>a</sup> | . | . | . | . | . | . | 1 |
| Chair | -.112 | .2772 | -.656 | .431 | .165 | 1 | .685 | .894 |
| [RAS Unit=1] | -.733 | .3844 | -1.486 | .021 | 3.631 | 1 | .057 | .481 |
| [RAS Unit=2] | -.098 | .3917 | -.866 | .670 | .063 | 1 | .802 | .906 |
| [RAS Unit=3] | -.744 | .4253 | -1.577 | .090 | 3.058 | 1 | .080 | .475 |
| [RAS Unit=4] | -.325 | .3693 | -1.048 | .399 | .773 | 1 | .379 | .723 |
| [RAS Unit=5] | .300 | .3778 | -.440 | 1.041 | .631 | 1 | .427 | 1.350 |
| [RAS Unit=6] | -.320 | .4119 | -1.127 | .488 | .602 | 1 | .438 | .726 |
| [RAS Unit=7] | -.621 | .4100 | -1.425 | .182 | 2.297 | 1 | .130 | .537 |
| [RAS Unit=8] | -.359 | .3936 | -1.131 | .412 | .832 | 1 | .362 | .698 |
| [RAS Unit=9] | 0<sup>a</sup> | . | . | . | . | . | . | 1 |
| Female | -.156 | .1481 | -.447 | .134 | 1.116 | 1 | .291 | .855 |
| White | -.423 | .2262 | -.866 | .021 | 3.492 | 1 | .062 | .655 |
| Asian | -.416 | .2755 | -.956 | .124 | 2.280 | 1 | .131 | .660 |
| Years of service | .012 | .0080 | -.004 | .027 | 2.105 | 1 | .147 | 1.012 |
| Tenure track | .159 | .1595 | -.154 | .471 | .990 | 1 | .320 | 1.172 |
| (Scale) | 1<sup>b</sup> | | | | | | | |
| (Negative binomial) | .433 | .0762 | .306 | .611 | | | | |

Dependent Variable: Number of awards
Model: (Intercept), Type of doctoral degree, Chair, RAS Unit, Female, White, Asian, Years of service, Tenure track

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

**(Figure 111A)**

| Dependent Variable → Independent Variables ↓ | Number of Awards Received (negative binomial) | | |
|---|---|---|---|
| [Type of doctoral degree = No Doctoral Degree] | -1.130 | 0.323 | 0.014 |
| [Type of doctoral degree = Ph.D] | -0.366 | 0.694 | 0.217 |
| [Type of doctoral degree = M.D.] | 0.106 | 1.112 | 0.722 |
| [Type of doctoral degree = M.D., Ph.D] | 0 | 1.000 | n/a |
| Chair | -0.112 | 0.894 | 0.685 |
| [RAS Unit = ABOSS] | -0.733 | 0.480 | 0.057 |
| [RAS Unit = Basic Science] | -0.098 | 0.907 | 0.802 |
| [RAS Unit = CAPS] | -0.744 | 0.475 | 0.080 |
| [RAS Unit = Cancer and Imaging] | -0.325 | 0.723 | 0.379 |
| [RAS Unit = Dept of Medicine] | 0.300 | 1.350 | 0.427 |
| [RAS Unit = Hospital & Speciality] | -0.32 | 0.726 | 0.438 |
| [RAS Unit = Pediatrics] | -0.621 | 0.537 | 0.130 |
| [RAS Unit = Public Health & Nursing] | -0.359 | 0.698 | 0.362 |
| [RAS Unit = Yerkes] | 0 | 1.000 | n/a |
| Female | -0.156 | 0.856 | 0.291 |
| White | -0.423 | 0.655 | 0.062 |
| Asian | -0.416 | 0.660 | 0.131 |
| Years of Service | 0.012 | 1.012 | 0.147 |
| Tenure Track | 0.159 | 1.172 | 0.320 |
| | B | Exp(B) | p-value |

**(Figure 111B)**

## Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .357[a] | .128 | .094 | 1.48731 |

a. Predictors: (Constant), Type of doctoral degree, RAS Unit, Chair, Years of service, Asian, Female, Tenure track, White

**(Figure 112)**

## Parameter Estimates

| Parameter | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | |
|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | Wald Chi-Square | df | Sig. |
| (Intercept) | 4.948 | .6691 | 3.636 | 6.259 | 54.677 | 1 | <.001 |
| [Type of doctoral degree=0] | -1.530 | .5389 | -2.586 | -.474 | 8.058 | 1 | .005 |
| [Type of doctoral degree=1] | -1.277 | .4044 | -2.070 | -.485 | 9.978 | 1 | .002 |
| [Type of doctoral degree=2] | -1.789 | .4096 | -2.592 | -.986 | 19.079 | 1 | <.001 |
| [Type of doctoral degree=3] | 0[a] | . | . | . | . | . | . |
| Chair | .827 | .3816 | .079 | 1.575 | 4.694 | 1 | .030 |
| [RAS Unit=1] | -3.455 | .5307 | -4.495 | -2.415 | 42.392 | 1 | <.001 |
| [RAS Unit=2] | -2.992 | .5498 | -4.070 | -1.915 | 29.617 | 1 | <.001 |
| [RAS Unit=3] | -3.862 | .5654 | -4.970 | -2.753 | 46.648 | 1 | <.001 |
| [RAS Unit=4] | -3.593 | .5253 | -4.623 | -2.564 | 46.794 | 1 | <.001 |
| [RAS Unit=5] | -2.416 | .5452 | -3.484 | -1.347 | 19.638 | 1 | <.001 |
| [RAS Unit=6] | -2.937 | .5813 | -4.077 | -1.798 | 25.536 | 1 | <.001 |
| [RAS Unit=7] | -3.074 | .5708 | -4.193 | -1.955 | 29.006 | 1 | <.001 |
| [RAS Unit=8] | -3.504 | .5443 | -4.571 | -2.437 | 41.443 | 1 | <.001 |
| [RAS Unit=9] | 0[a] | . | . | . | . | . | . |
| Female | -.289 | .2019 | -.685 | .106 | 2.055 | 1 | .152 |
| White | .004 | .3240 | -.631 | .639 | .000 | 1 | .991 |
| Asian | .279 | .3861 | -.478 | 1.036 | .522 | 1 | .470 |
| Years of service | .005 | .0104 | -.016 | .025 | .208 | 1 | .649 |
| Tenure track | .612 | .2041 | .212 | 1.013 | 8.999 | 1 | .003 |
| (Scale) | 1.570[b] | .1507 | 1.301 | 1.895 | | | |

Dependent Variable: Total proposals in $
Model: (Intercept), Type of doctoral degree, Chair, RAS Unit, Female, White, Asian, Years of service, Tenure track

a. Set to zero because this parameter is redundant.

b. Maximum likelihood estimate.

**(Figure 113A)**

| Dependent Variable →<br>Independent Variables ↓ | Total proposals submitted in $ (OLS) | |
|---|---|---|
| [Type of doctoral degree = No Doctoral Degree] | -1.53 | 0.005 |
| [Type of doctoral degree = Ph.D] | -1.277 | 0.002 |
| [Type of doctoral degree = M.D.] | -1.789 | <0.001 |
| [Type of doctoral degree = M.D., Ph.D] | 0 | n/a |
| Chair | 0.827 | 0.03 |
| [RAS Unit = ABOSS] | -3.455 | <0.001 |
| [RAS Unit = Basic Science] | -2.992 | <0.001 |
| [RAS Unit = CAPS] | -3.862 | <0.001 |
| [RAS Unit = Cancer and Imaging] | -3.593 | <0.001 |
| [RAS Unit = Dept of Medicine] | -2.416 | <0.001 |
| [RAS Unit = Hospital & Speciality] | -2.937 | <0.001 |
| [RAS Unit = Pediatrics] | -3.074 | <0.001 |
| [RAS Unit = Public Health & Nursing] | -3.504 | <0.001 |
| [RAS Unit = Yerkes] | 0 | n/a |
| Female | -0.289 | 0.152 |
| White | 0.004 | 0.991 |
| Asian | 0.279 | 0.470 |
| Years of Service | 0.005 | 0.649 |
| Tenure Track | 0.612 | 0.003 |
| | B | p-value |

**(Figure 113B)**

## Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .247[a] | .061 | .025 | 1.10621 |

a. Predictors: (Constant), Type of doctoral degree, RAS Unit, Chair, Years of service, Asian, Female, Tenure track, White

**(Figure 114)**

**Parameter Estimates**

| Parameter | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | |
| | | | Lower | Upper | Wald Chi-Square | df | Sig. |
|---|---|---|---|---|---|---|---|
| (Intercept) | 2.380 | .5370 | 1.328 | 3.433 | 19.646 | 1 | <.001 |
| [Type of doctoral degree=0] | -.360 | .4325 | -1.208 | .488 | .693 | 1 | .405 |
| [Type of doctoral degree=1] | -.034 | .3246 | -.670 | .603 | .011 | 1 | .918 |
| [Type of doctoral degree=2] | -.309 | .3288 | -.953 | .336 | .882 | 1 | .348 |
| [Type of doctoral degree=3] | 0[a] | . | . | . | . | . | . |
| Chair | .156 | .3063 | -.444 | .756 | .259 | 1 | .611 |
| [RAS Unit=1] | -2.045 | .4259 | -2.880 | -1.210 | 23.049 | 1 | <.001 |
| [RAS Unit=2] | -1.399 | .4413 | -2.264 | -.534 | 10.047 | 1 | .002 |
| [RAS Unit=3] | -2.252 | .4538 | -3.142 | -1.363 | 24.631 | 1 | <.001 |
| [RAS Unit=4] | -1.949 | .4216 | -2.776 | -1.123 | 21.377 | 1 | <.001 |
| [RAS Unit=5] | -1.377 | .4376 | -2.234 | -.519 | 9.899 | 1 | .002 |
| [RAS Unit=6] | -1.872 | .4666 | -2.787 | -.958 | 16.103 | 1 | <.001 |
| [RAS Unit=7] | -1.818 | .4581 | -2.716 | -.920 | 15.745 | 1 | <.001 |
| [RAS Unit=8] | -1.666 | .4369 | -2.523 | -.810 | 14.546 | 1 | <.001 |
| [RAS Unit=9] | 0[a] | . | . | . | . | . | . |
| Female | -.249 | .1621 | -.567 | .069 | 2.362 | 1 | .124 |
| White | .013 | .2600 | -.497 | .523 | .003 | 1 | .960 |
| Asian | .035 | .3099 | -.573 | .642 | .013 | 1 | .911 |
| Years of service | .000 | .0083 | -.017 | .016 | .003 | 1 | .959 |
| Tenure track | .221 | .1639 | -.100 | .542 | 1.822 | 1 | .177 |
| (Scale) | 1.011[b] | .0971 | .838 | 1.221 | | | |

Dependent Variable: Total awards in $
Model: (Intercept), Type of doctoral degree, Chair, RAS Unit, Female, White, Asian, Years of service, Tenure track
a. Set to zero because this parameter is redundant.
b. Maximum likelihood estimate.

**(Figure 115A)**

| Dependent Variable →<br>Independent Variables ↓ | Total awards received in $ (OLS) | |
|---|---|---|
| [Type of doctoral degree = No Doctoral Degree] | -0.36 | 0.405 |
| [Type of doctoral degree = Ph.D] | -0.034 | 0.918 |
| [Type of doctoral degree = M.D.] | -0.309 | 0.348 |
| [Type of doctoral degree = M.D., Ph.D] | 0 | n/a |
| Chair | 0.156 | 0.611 |
| [RAS Unit = ABOSS] | -2.045 | <0.001 |
| [RAS Unit = Basic Science] | -1.399 | 0.002 |
| [RAS Unit = CAPS] | -2.252 | <0.001 |
| [RAS Unit = Cancer and Imaging] | -1.949 | <0.001 |
| [RAS Unit = Dept of Medicine] | -1.377 | 0.002 |
| [RAS Unit = Hospital & Speciality] | -1.872 | <0.001 |
| [RAS Unit = Pediatrics] | -1.818 | <0.001 |
| [RAS Unit = Public Health & Nursing] | -1.666 | <0.001 |
| [RAS Unit = Yerkes] | 0 | n/a |
| Female | -0.249 | 0.124 |
| White | 0.013 | 0.960 |
| Asian | 0.035 | 0.911 |
| Years of Service | 0.000 | 0.959 |
| Tenure Track | 0.221 | 0.177 |
| | B | p-value |

**(Figure 115B)**

| Dependent Variable → Independent Variables ↓ | Number of Proposals (negative binomial) | | | Number of Awards Received (negative binomial) | | | Total proposals submitted in $ (OLS) | | Total awards received in $ (OLS) | |
|---|---|---|---|---|---|---|---|---|---|---|
| [Type of doctoral degree = No Doctoral Degree] | -0.841 | 0.431 | 0.027 | -1.130 | 0.323 | 0.014 | -1.53 | 0.005 | -0.36 | 0.405 |
| [Type of doctoral degree = Ph.D] | -0.242 | 0.785 | 0.335 | -0.366 | 0.694 | 0.217 | -1.277 | 0.002 | -0.034 | 0.918 |
| [Type of doctoral degree = M.D.] | -0.647 | 0.524 | 0.013 | 0.106 | 1.112 | 0.722 | -1.789 | <0.001 | -0.309 | 0.348 |
| [Type of doctoral degree = M.D., Ph.D] | 0 | 1.000 | n/a | 0 | 1.000 | n/a | 0 | n/a | 0 | n/a |
| Chair | -0.257 | 0.773 | 0.324 | -0.112 | 0.894 | 0.685 | 0.827 | 0.03 | 0.156 | 0.611 |
| [RAS Unit = ABOSS] | -0.707 | 0.493 | 0.035 | -0.733 | 0.480 | 0.057 | -3.455 | <0.001 | -2.045 | <0.001 |
| [RAS Unit = Basic Science] | -0.426 | 0.653 | 0.213 | -0.098 | 0.907 | 0.802 | -2.992 | <0.001 | -1.399 | 0.002 |
| [RAS Unit = CAPS] | -0.927 | 0.396 | 0.012 | -0.744 | 0.475 | 0.080 | -3.862 | <0.001 | -2.252 | <0.001 |
| [RAS Unit = Cancer and Imaging] | -0.527 | 0.590 | 0.106 | -0.325 | 0.723 | 0.379 | -3.593 | <0.001 | -1.949 | <0.001 |
| [RAS Unit = Dept of Medicine] | 0.081 | 1.084 | 0.808 | 0.300 | 1.350 | 0.427 | -2.416 | <0.001 | -1.377 | 0.002 |
| [RAS Unit = Hospital & Speciality] | -0.296 | 0.744 | 0.414 | -0.32 | 0.726 | 0.438 | -2.937 | <0.001 | -1.872 | <0.001 |
| [RAS Unit = Pediatrics] | -0.119 | 0.888 | 0.736 | -0.621 | 0.537 | 0.130 | -3.074 | <0.001 | -1.818 | <0.001 |
| [RAS Unit = Public Health & Nursing] | -0.379 | 0.685 | 0.265 | -0.359 | 0.698 | 0.362 | -3.504 | <0.001 | -1.666 | <0.001 |
| [RAS Unit = Yerkes] | 0 | n/a | n/a | 0 | 1.000 | n/a | 0 | n/a | 0 | n/a |
| Female | -0.147 | 0.863 | 0.281 | -0.156 | 0.856 | 0.291 | -0.289 | 0.152 | -0.249 | 0.124 |
| White | -0.448 | 0.639 | 0.034 | -0.423 | 0.655 | 0.062 | 0.004 | 0.991 | 0.013 | 0.960 |
| Asian | -0.225 | 0.799 | 0.369 | -0.416 | 0.660 | 0.131 | 0.279 | 0.470 | 0.035 | 0.911 |
| Years of Service | -0.003 | 0.997 | 0.700 | 0.012 | 1.012 | 0.147 | 0.005 | 0.649 | 0.000 | 0.959 |
| Tenure Track | 0.48 | 1.616 | <0.001 | 0.159 | 1.172 | 0.320 | 0.612 | 0.003 | 0.221 | 0.177 |
| | B | Exp(B) | p-value | B | Exp(B) | p-value | B | p-value | B | p-value |

(Figure 116)