Faculty Salary Study Overview

University Senate

April 18, 2017

Take Away

- To test for gender-based salary inequity, the IR office studied records for all full-time faculty and librarians at Auburn University, as of Fall 2015.

- Our study controlled for individual- and department-level characteristics, using a technique called Hierarchical Linear Modeling.

- We found no evidence of gender-based salary inequity.

Data Set

- Our data set <u>included</u> full-time instructional faculty and librarians (N=1,230)

- We <u>excluded</u> visiting faculty, current deans and associate/assistant deans

- We also <u>excluded</u> former deans who are now serving as full-time faculty members

Study Variables

DEPENDENT   Salary, expressed on a 9-month-appointment basis

INDEPENDENT   Academic

Appointment Type Flags

Time-Related

Special Circumstances Flags

Demographic

Academic Variables

- Academic department/discipline

- SREB salary benchmark for that discipline

- Rank at hire

- Current rank

- Highest degree earned at time of current rank

Appointment Type Flags (Y/N)

- Tenured or Tenure-Track

- Instructor/Lecturer

- Clinical

- Research

- Extension

Time-Related Variables

- Time elapsed between date of highest degree and date of current rank

- Time elapsed between date of current rank and start of Fall 2015 semester

- Contract length (9- or 12-month)

Special Circumstances Flags (Y/N)

- Current or Former Administrator Flag

- Titled Professorship Flag

- Both Current or Former Administrator and Titled Professorship Interaction Effect

Demographic Variables

- Ethnicity

- Gender

Multi-Level Approach

- Data on faculty salaries involve at least two levels of hierarchy

  - Data about individuals

  - Data about the departments in which those individuals are nested

MODELING THE DATA

MODEL 1

Unconditional

Random Intercept

MODEL 2

Predictors

Random Intercept

MODEL 3

Predictors

Random Intercept

Random Slopes

MODEL 4

Predictors

Random Intercept

Random Slopes

Gender & Ethnicity

Findings

Controlling for individual- and department-level characteristics, some independent variables were associated with higher (lower) salaries for full-time faculty members:

Associated with Higher Salary

- Higher current rank
- Higher rank at hire
- Administrative Appointment
- Titled Professorship
- Terminal Degree
- Years at Current Rank

Associated with Lower Salary

- Appointment Type: Research Faculty
- Appointment Type: Instructor/Lecturer

No Association

- Clinical Faculty

- Extension Faculty

- 9-Month Appointment

- Ethnicity

- <u>Gender</u>

One Further Test

- Because each variable could affect differently the salaries of female and male faculty members, we analyzed differences between expected and actual salaries by gender and college

- There was no effect for gender, for college, or for the interaction of gender and college:
  - Gender (Sig. = 0.906)
  - College (Sig. = 0.985)
  - Interaction of Gender & College (Sig. = 0.939)