

NC State Faculty Salary Equity Study – Fall 2006

University Planning and Analysis

Overview

In 2001, NC State allocated more than \$700,000 in salaries and benefits to remedy salary inequities reported in the “North Carolina State University Report on the University-Wide Salary Equity Study,” an analysis based in 2000 salaries conducted by Haignere, Inc. A study using the same methodology was conducted using 2003 salary by NC State’s University Planning and Analysis that found salary inequities remain but were greatly reduced. The 2006 study, also conducted by UPA, finds a salary disparity averaging \$491 for minority males and no salary disparity for women.

Because there is still a disparity for minority males, more needs to be done to improve the salary disparities for minority males. It is important to note that this study reflects the circumstances of the faculty population as a whole, and individual salaries should be evaluated on a case-by-case basis.

Methodology

The 2006 NC State Faculty Salary Equity Study replicated portions of Haignere, Inc.’s study. An executive summary of that report is available, upon request, at NC State’s University Planning and Analysis office.

The Haignere, Inc. study and the 2006 NC State Faculty Salary Equity Study employed a regression methodology similar to previous faculty salary equity studies at NC State. A regression equation is used to predict what the salaries for females and minority males would be if their career attributes (such as rank, degree, and previous experience) were rewarded in the same way as those of white males. Meritorious performance is not a factor in this analysis.

The difference between the predicted salary and a person’s actual salary is called the salary residual. The average residual for a gender/race group measures the difference between the actual salaries of those in a group and a statistical estimate of what they would have been paid if they had been white males. A negative residual indicates that, on average, the actual salaries of faculty members in the group (e.g. minority males) are lower than salaries of white males. A positive residual means that, on average, the actual salaries of those in the group are higher than those of white males.

The regression model employed the following variables:

- Race/Gender – white male, female, minority male
- Highest Earned Degree – PhD, First Professional, Master’s, below Master’s
- Tenure Status – tenured, on tenure track, not on tenure track
- Administrative Title – yes or no
- Rank – professor, associate professor, assistant professor, instructor, lecturer
- College – used to represent discipline at the university level
- Previous experience – years between highest degree date and first NC State hire date

The residual for females – which was -\$1167 in 2000 and -\$297 in 2003 – is now a positive \$466. This figures suggests there is no salary inequity for female faculty who are tenured or on tenure track.

The residual for minority males – which was -\$2,424 in 2000 and -\$1276 in 2003 – has been reduced to -\$491. Although minority males are still, on average, paid less than comparable white males, the gap has decreased by approximately 80% since 2000.

Tenure, Tenure Track Faculty Only						
	Adjusted R-Square	White Males	Females		Minority Males	
		n	n	residual	n	residual
CALS	0.434	264	73	420	16	3444
Design & Textiles	0.682	72	21	-2021	13	3642
Education	0.665	25	29	41	5	108
Engineering	0.763	146	18	2820	52	-1859
Nat Resource	0.689	46	11	-4699	6	4291
CHASS	0.691	125	78	-183	13	-1828
PAMS	0.700	98	30	251	33	-4297
Vet Medicine	0.723	20	10	-4140	5	-5489
Management	0.396	44	14	18315	7	13997
Student Affairs	0.862	5	0		1	-6202

Results for All Faculty

A second analysis probed the salary equity of all faculty in the population, regardless of tenure status. Given the combination of colleges, all but two females and minority male faculty member had a white male counterpart. However, some categories (e.g. Lecturer and Instructor) often had very few white males reducing the validity of regression analysis. Despite this, inferences can be drawn about salary equity within this population by comparing the residuals from tenure-track only population to those of the entire faculty. Differences in regression results can be attributed to the addition of non-tenure track faculty into the regression model. This population includes 988 white males, 474 females, and 171 minority males.

Females in the expanded population have an average residual of -\$469, which is very different from the tenure-only residual. This suggests that non-tenured females have a larger disparity between their white male counterparts than do tenured females.

The residual for minority males in the combined tenure track and non-tenured track group is - \$1,327 and more negative than the tenured-only population. This suggests, that like women, non-tenured track males experience more salary inequity than do tenured minority males.