

Salary Equity Study

University of North Carolina at Charlotte

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Introduction

The University of North Carolina at Charlotte's ADVANCE institutional transformation program sponsored by the National Science Foundation promotes the equitable participation of women faculty in science, technology, engineering, and mathematics (STEM). ADVANCE's goals include the examination of, and possible transformation of, the opportunity structure at UNC Charlotte so that fundamental components of the university's climate, culture, and organizational structure are equitable with respect to gender, ethnicity, and race. Salary equity is an important dimension supporting faculty participation, and nationwide, studies of salary equity have documented gender disparities in salary. Thus, it is important to know the conditions that exist at UNC Charlotte with respect to salary equity.

This report presents findings of the ADVANCE Evaluation team's investigation of the factors related to salaries of faculty at University of North Carolina at Charlotte from 2004-5 through 2007-8. Like many other institutions of higher education, UNC Charlotte has struggled with gender-based salary inequities for decades.¹ The purposes of this study are to investigate the various factors that currently predict salaries, to explore whether there is evidence of systemic gender bias in salaries, and to examine if there have been changes in these relationships over the four year period.

¹ Two earlier UNC Charlotte studies found evidence of gender differences in salaries. In 2000 Provost Denise Trauth commissioned UNC Charlotte economists Dr. John Gandar and Dr. Jennifer Troyer to conduct a Salary Equity Study. They used a Oaxaca decomposition method that is one of AAUP's recommended approaches. After controlling for differences in other measurable characteristics, Gandar and Troyer found a small but statistically significant gender difference in salaries – female salaries for tenure track faculty were approximately 2.38% lower than male salaries in 2000-2001. Compared to 1999-2000, there was evidence that the gender difference in salaries had markedly declined when tuition increase money was used to make salary adjustments to faculty in disciplines and ranks that were underpaid relative to national averages.

In 1992 an ad hoc committee of faculty women (that included the first author), in cooperation with UNC Charlotte's Institutional Research and then-Provost Philip Dubois, conducted an analysis of gender differences in faculty salaries from 1988 through 1992. The ad hoc committee's methodology was similar to the one employed in this study, although the variables in their multiple regression models were somewhat different from the current study's model. The ad hoc committee found that, controlling for department, experience, and race, at every rank female faculty earned less than male faculty; that male faculty earned larger annual raises; and had larger starting salaries. No action was taken at the time.

To conduct this investigation of gender equity in salaries, we developed regression models using data available from UNC Charlotte's Office of Institutional Research. NSF recommends the procedures we used to build our regression model. They follow one of the methodologies recommended by the American Association of University Professors (AAUP) as described in the publication Paychecks: A Guide to Conducting Salary Equity Studies for Higher Education Faculty, by Lois Haignere (AAUP, 2002).

Population

We include in our analyses all full-time UNC Charlotte faculty. We exclude full-time administrators who may teach one course but whose primary responsibilities (and salaries) are administrative. Paychecks refers to this practice as a total population analysis and recommends this approach. Because we use the entire faculty population, any salary differences we find reflect actual sources of the differences in faculty pay. We report and interpret the magnitude and implications of any nontrivial factors that predict salary irrespective of the obtained statistical significance level of any coefficients.² We analyze salary data for the following numbers of faculty members in each year:

<u>Year</u>	<u>N</u>
2004-05	790
2005-06	824
2006-07	870
2007-08	904

Data

Our data come from the faculty employment information files provided by UNC Charlotte's Office of Institutional Research for the 2004-05, 2005-06, 2006-07, and 2007-2008 academic years. We use data from four years in order to assess if there are trends with respect to gender equity across the time periods we examine.

² Even though we employ a population rather than a sample, we also report the statistical significance of the coefficients. We do so because there remain conflicting views on the appropriateness of significance tests in population studies of salary. One position holds that significance testing has no meaning in salary-equity studies of institutional populations because there is nothing random about the data, hiring process, or the awarding of salaries. There is no sampling procedures (or error), and thus no context that is appropriate for using statistical tests. The other position asserts that although there is no question of inference when one studies a population, the statistical significance of coefficients can be used as an indicator of whether the observed differences could be due to random variations in faculty salaries (for example, salary increments for promotion may be smaller in a low-funding year) (Paychecks, 2002, p. 55). Paychecks cautions that while the statistical significance of coefficients may be used as one piece of information in weighing results, the absence of significance should not be viewed as evidence of the absence of gender (or racial) bias.

Model Development

Nationwide, gender equity studies typically include variables that are likely predictors of faculty salary. These factors are tenure status, rank, years in rank (years since last promotion), years of service at a university (years since date of hire), prior experience (the length of time between the awarding of highest degree and hire date at the university), discipline, and faculty characteristics such as gender, race, and citizenship. The outcome variable is the faculty member's salary based on a 9-month academic year (either annual or monthly salary).

Consistent with Paycheck's methodological recommendations for conducting a gender-equity study, we developed several models for predicting salaries. Our initial models included all the factors identified in the paragraph above. We adapted the recommended models to UNC Charlotte's context. For instance, following our practices in reporting to NSF for our ADVANCE grant, we collapsed UNC Charlotte's departments into eight discipline groups that capture the major distinctions between STEM and non-STEM departments. Appendix I presents the departments that fall into each discipline group.

Capturing any effects of faculty gender and race on salary requires particular attention to the possible interaction of the two factors. Social science research on related outcomes (such as educational and occupational attainment) reveals race-by-gender interactions. Table 1 presents race-by-gender cohort frequencies by disciplinary group for 2007-2008 data. Table 2 shows race-by-gender cohort frequencies by academic rank for 2007-2008 data. Paychecks recommends entering specific race-by-gender dummy variables (e.g., white female) into regression models. Instead, we created only dummy variables for gender (male and female) and race (underrepresented minority and others). An examination of the distributions of faculty in race-by-gender cohorts by disciplinary grouping (Table 1) and by rank (Table 2) for each of the four years in our study reveals numerous cells with very few cases and many cells with zero cases.

Table 1: Academic discipline by race*gender cohort (2007-8)

Academic Colleges	Black male	Black female	White male	White female	Asian male	Asian female	Latino male	Latino female	Other male	Other female	Total
Humanities	3	6	103	95	4	5	6	4	0	0	226
Social Science	3	8	78	57	4	4	0	1	1	0	156
Engineering Science	3	2	80	18	40	8	2	0	0	0	153
Education	4	3	30	31	1	5	1	3	0	0	78
Physical Science	0	0	56	13	16	5	0	1	0	0	91
Life Science	1	3	31	17	1	1	3	1	0	0	58
Health	3	5	15	51	2	1	1	1	0	0	79
Business	3	1	34	15	5	5	0	0	0	0	63
Total	20	28	427	297	73	34	13	11	1	0	904

Table 2: Academic rank by race*gender (2007-8)

Academic Rank	Black male	Black female	White male	White female	Asian male	Asian female	Latino male	Latino female	Other male	Other female	Total
Lecturers	2	6	69	105	1	7	1	2	0	0	
Assistant Professor	7	12	95	88	36	21	4	5	0	0	268
Associate Professor	8	8	128	73	16	4	6	2	1	0	246
Professor	3	2	135	31	20	2	2	2	0	0	197
Total	20	28	427	297	73	34	13	11	1	0	904

Consequently, we decided against creating specific race-by-gender dummy variables as recommended by *Paychecks* for two reasons: 1) modeling with categorical variables (race-by-gender cohort, in this case) is very sensitive to cell size, especially cells with zeros, and 2) with so few faculty in some of the categories (e.g., Latino male associate professors) analyses by discipline or by rank could result in a loss of faculty anonymity.

Several of our decisions to exclude other variables from our final models were driven by the need to avoid multicollinearity among the predictors of faculty salary. We did not include tenure status in our models because, with the exception of a handful of UNC Charlotte faculty, there is a one-to-one relationship between the ranks of lecturer and assistant professor and nontenured status. Similarly, early models included both years of experience at UNC Charlotte and time in rank. However, the two variables are highly correlated ($r = .84$). We included years of experience because it contributed more to the overall explained variance than the inclusion of time in rank. We tested the utility of a variable for citizenship but excluded it when it added nothing to the explained variance in salaries. We explored a model that included a quadratic term for years of experience at UNC Charlotte to test for a possible non-linear relationship between experience at UNC Charlotte and salary. We dropped the quadratic term from our final model because it did not improve the explanatory power of our model.

We did not include other predictors of salary because their indicators are not readily available in the Institutional Research database. The most important omitted variable is a measure of individual job performance. In order to reliably capture variability in job performance, we would need to obtain faculty members' CVs or annual reviews and code these documents in ways that validly capture productivity across disciplines. Doing so is extremely difficult because of varying disciplinary norms for productivity. For example, it is not clear how authorship of a book ought to be compared with a peer reviewed journal article, a successful National Science Foundation grant, or an exhibition of sculpture. *Paychecks* recognizes this problem and suggests promotion across the

ranks can be considered a proxy for performance. We acknowledge the problematic nature of this assumption.³

Based on these considerations, our final regression model is:

$$\text{Base Monthly Pay} = \text{Academic Unit} + \text{Rank} + \text{Gender} + \text{Ethnicity} + \\ \text{Years at UNC Charlotte} + \text{Years Prior Experience} + \text{Chair}$$

Variable Definitions and Calculations

Base Monthly Salary is calculated after the removal of any supplemental pay for administrative positions. We derived monthly salaries by dividing annual salaries by length of contract (9, 10, or 12 months).

We developed a set of dummy variables to represent Academic Units. Appendix I presents the Academic Units and their departmental categories. The ways we categorized certain departments into academic units correspond to the practices used by UNC Charlotte when reporting ADVANCE results to NSF. So, for example, we consider Economics as a social science although the department is part of the College of Business. Some salary equity studies employ dummy variables for every department on their campus. We chose to use the Academic Unit categorizations because of the paucity of women in some departments and our desire to be consistent with the categories UNC Charlotte uses for reporting to NSF. We chose life sciences as the reference category in the regression analysis because of the representative number of female scientists in chemistry and biology relative to the larger labor pool in these disciplines.

Rank reflects a set of dummy variables for lecturers, assistant professors, associate professors, and full professors. Associate professor is the reference category in the regression analyses.

Gender is dummy coded with female as the reference category in the regression analyses.

We categorize faculty ethnicity as White, Asian, African American, Latino/a, Native American, and Other. We collapsed faculty ethnicity into two categories: Disadvantaged Minority, in which we assigned African American, Latino/a, and Other faculty; and Not Disadvantaged Minority, in which we assigned White and Asian faculty. Thus, we have two dummy variables, Disadvantaged

³ Using data from Annual Reports for each department in each year, Gandar and Troyer (1999) attempted to capture variation in productivity by measuring the number of items (publications, awards, and grants) listed in the research section for each faculty member relative to the average number of items for all faculty in that year. This approach allowed each faculty's research output to be measured relative to other faculty in the same department in each year. Admittedly, this measure favors quantity over quality. If gender is correlated with the quality of research productivity, this measure may bias the coefficient on gender. In addition, if there is gender bias in reporting of research productivity in the Annual Report by the department chair, the same bias may exist.

Minorities and Whites/Asians, with the latter treated as the reference category for the regression analyses.

Years at UNC Charlotte is defined as the number of years a faculty has been employed at UNC Charlotte, and is calculated as: $WORKYEARS = 2008 - \text{Hire date at UNC Charlotte}$.

Prior Experience is defined as the difference between a faculty's hire date and the date when he/she received the highest degree, and is calculated as: $PRIOREXP = \text{Hire date at UNC Charlotte} - \text{Highest Degree Date}$

Chair is a dummy variable indicating whether the faculty member is chair of his/her department.

Analytic Steps

Once we determined the variables in our model, we conducted a series of ordinary least squares (OLS) multiple regression analyses using SPSS (Version 16). We simultaneously entered all variables into the equations.⁴ We conducted separate OLS regression analyses for STEM faculty and faculty from all disciplines (hereafter referred to as all faculty). In order to examine trends over time, we conducted the multiple regression analyses for four consecutive academic years: 2004-5 through 2007-8.

Results

Table 3 presents the results of the analysis of STEM faculty and Table 4 presents the results of the analysis of all faculty at UNC Charlotte. The columns in the top portion of Table 3 show the unstandardized regression coefficients. These coefficients indicate the effects of predictors on salary in dollars per month. We compare the unstandardized coefficients for a particular variable across years. The columns in the lower portion of Tables 3 and 4 show the standardized coefficients (beta), which allow us to assess the relative importance to predicted salary of various elements within the set of predictors for a given year. We report the results of the series of OLS regressions of 2007 salaries beginning with the STEM faculty, followed by the results for the entire faculty. We then compare results from 2007 with results from prior years.

The R^2 (next to last row in each Table) indicates the proportion of the total variance in salary explained by our model. For example, our 2007 model explains 74 percent of the variance in STEM faculty salaries. Our model explains 78 percent of the variance in all UNC Charlotte faculty salaries in 2007.⁵ Our baseline model is a white female associate professor of life sciences who is not

⁴ Paychecks notes that stepwise regression is not an appropriate statistical approach for salary studies. Results from stepwise regressions are at best difficult to interpret and at worst can mask a substantial gender or race salary disparity because of restrictive levels of significance that drop race or gender before they enter the regression equation (p. 55-56)

⁵ The models for the other years explain comparable amounts of the variance in salaries. Paychecks considers a model to be strong if it explains over 70 percent of the variance in faculty salary.

her department's chair. Her predicted monthly salary is \$7850.46 (or \$70,654.12 annually) before taking into account the effects of prior experience and years of service at UNC Charlotte.

Academic Unit. Not unexpectedly, even after we have controlled for a STEM faculty member's gender, race, rank, years at UNC Charlotte, and prior experience, the academic unit in which he or she teaches has a large influence on salaries. Table 3 indicates that in 2007, faculty in the engineering, social science, and physical sciences earned higher monthly salaries than their colleagues in the life sciences. On average engineering science faculty earned \$2283.89 more per month than otherwise similar life science faculty, and the salary gaps between these academic units have increased since 2004. Salaries for faculty in the physical sciences are modestly higher (\$271), and this gap between academic units has decreased since 2004. In 2004, life science faculty earned about \$30 more per month than social scientists. However, in 2007, social science faculty earn approximately \$85.90 more per month than life scientists.

When 2007 salaries of all UNC Charlotte faculty are examined (Table 4), the engineering sciences' salary edge (\$2311.07) among STEM faculty is overshadowed by the business faculty salaries, who on average earned \$3932.62 more per month than their counterparts who teach in the life sciences. The business faculty advantage has grown over the past four years. Health and human services faculty receive \$725 more per month and their advantage has doubled in the past four years. Humanities faculty earned \$327 less per month than life scientists. This difference has been relatively consistent since 2004. Education faculty also earn less per month (\$314.67) and this gap has increased since 2004.

Rank. Rank makes a large contribution to differences in salaries among STEM faculty. Professors earn \$2891.78 more per month than associates, while assistant professors and lecturers earn \$1140.35 and \$3651.96 less per month respectively. Over the past four years, the salary gaps among the ranks have increased. The results from analyses of all faculty are similar. The absolute pay differences associated with various ranks appear to have grown over the past four years. In fact, we believe the gaps may be related to salary compression, which we discuss in subsequent paragraphs.

Gender. Female STEM faculty earned \$181.36 less per month than their otherwise comparable male colleagues in 2007. Among all faculty, the male salary advantage is slightly less (\$176.86). Female STEM faculty earn, on average, \$1632.24 less per year than their male colleagues in similar disciplines, of similar race, rank, UNC Charlotte experience, and prior experience. Campus-wide, female faculty earn \$1591.74 less per year than male faculty. Our comparison of the gender coefficients for all faculty across the four years of our study indicates the gaps have decreased; however, the gender gap among STEM faculty is unstable. It declined sharply in 2005, rose to 2004 levels in 2006, and declined again in 2007.

Race. On average, STEM faculty who are members of disadvantaged minority groups (Blacks, Latinos, and Native Americans) earn \$464.58 less per month than their comparable white and Asian colleagues. Among all faculty, the race gap is slightly smaller (\$375.39). For disadvantaged minority faculty, this gap translates to \$4181.52 less per year for STEM faculty and \$3378.51 among all faculty. Our comparison of the disadvantaged minority coefficients across the four years of our

study indicates the gaps have increased in the past four years for all faculty, but especially among STEM faculty.

UNC Charlotte Experience. We assess salary compression dynamics at UNC Charlotte by examining the effects of years of experience on salaries. Our results indicate that for every year a STEM faculty member has worked at UNC Charlotte, he or she loses \$28.42 per month relative to a newly hired person at the same rank. Salary compression has a cumulative effect on earnings. Based on the data for 2007, someone who has taught at UNC Charlotte for ten years will earn, on average, \$2557.80 less per year than a newly hired colleague with comparable characteristics and qualifications ($[\$28.42 * 9 \text{ months} = \$255.78 \text{ annually}] * 10 \text{ years} = \2557.80). The effects of salary compression among all faculty are slightly smaller, at \$25.52 per month. The size of the coefficient for years of service at UNC Charlotte has nearly doubled over the past four years, suggesting that salary compression effects have increased during this period.

Prior Experience. The advantages of prior experience for salaries are evident among STEM faculty. In 2007, for each year of prior experience, STEM faculty earn an additional \$45.86 per month compared to colleagues with otherwise comparable backgrounds and credentials. Each year of prior experience among all faculty members contributed \$34.37 more per month to their salaries. The size of the advantages of prior experience have decreased in the past few years for all faculty.

Chairs. On average, STEM chairs earn \$357.74 less per month than their departmental colleagues with similar characteristics who are not chairs. This differential has grown by about \$100 in the past four years. In contrast, when we examine all faculty, the disadvantage of being a chair has decreased markedly in four years. In 2007 it was \$299.05, roughly half the size of the coefficient we obtained with 2004 data (\$616.52).

What Contributes the Most to Predicting Salaries? The standardized regression coefficients allow us to assess the relative contributions of various factors to the prediction of salaries. We discuss the results for 2007 only. Rank and discipline contribute the most to the explained variance in faculty salaries, dwarfing the effects of other factors. Among STEM faculty, prior experience is the next most important factor for predicting salaries, followed by years at UNC Charlotte and gender, respectively. But among all the faculty, UNC Charlotte experience and gender contribute more to the explained variance in salaries than prior experience. Gender has relatively the same effect among STEM faculty and among the faculty as a whole. The relative contribution to the prediction of faculty salaries of being a chair or a member of a disadvantaged minority group is small.

Discussion

The primary purpose of this analysis was to determine if there is any evidence of gender inequity in salaries at UNC Charlotte. Gender (and racial) inequities in salaries can have a deleterious effect on the very dimensions of campus climate at which the ADVANCE grant is targeted. The results indicate a number of expected differences in faculty salaries, as well as some differences that reflect possible gender bias and, therefore, deserve attention from the administration.

Our analyses confirm earlier findings with respect to the contributions of discipline, rank, and prior experience to salary differences among UNC Charlotte faculty. Relative to faculty in the life sciences (biology and chemistry), those in humanities and education earn several hundred dollars less per month, those in the social sciences earn a small additional salary, faculty in health and human services and the physical sciences earn hundreds of dollars more per month, while faculty in engineering and business earn thousands more per month. Within the ranks of tenure track faculty, professors earn more than associate professors, and assistant professors earn the least. Lecturers earn considerably less than tenure-track faculty. These results are consistent with patterns found across the academy. Salary differences associated with rank and discipline are not necessarily associated with gender, although if men are promoted more quickly or more often than women there could be an impact on gender equity. Some analysts speculate that the gender composition of a discipline affects its relative status (and pay) in the academy—the more women incumbents, the lower the relative status of the field. Testing these hypotheses is beyond the scope of this report.

Our results indicate that gender is a factor in UNC Charlotte salaries. Holding all other influences constant, women earn less than men. Although the gender differences among all faculty (\$176.86 per month) and among STEM faculty (\$181.36 per month) may appear to be relatively small, the approximately \$1600 annual cost to faculty of being a female employed at UNC Charlotte has a potentially broader impact over time. When female faculty earn less than their otherwise comparable male colleagues, the university's contribution to their retirement also is smaller. In addition, gender differences in salaries are likely to cumulate over time because raises typically are calculated as a percent of salaries.

We also found that disadvantaged minority status is a factor in UNC Charlotte salaries. Holding all other influences constant, black, Latino/a, and Native American faculty are likely to earn less than white and Asian colleagues with similar backgrounds and credentials. STEM faculty who are members of disadvantaged minority groups earn \$4181.22 less per year than white or Asian faculty. Among all faculty, the amount is \$3378.51 less per year. And, like the cost of female status, the cost of disadvantaged minority status also has a potentially cumulative impact on salaries over time because raises are typically calculated as a percent of salaries. Contributions to retirement are smaller as well.

The negative effect associated with serving as a chair may require further examination. The reward system across the university is typically tied most directly to scholarly productivity. If the negative coefficients associated with chairs' salaries are linked to decreases in scholarly productivity (arising from a heavy administrative responsibility), and the evaluation system is not adjusted to value leadership contributions, further deficits may accumulate.

UNC Charlotte Trends in Gender Inequities in Salaries

When we examine the unstandardized regression coefficients for salary predictors across the four years in our study we find different patterns for different types of variables. Among the disciplines, health and human services, engineering, and business have steadily received increasingly higher rewards relative to the life sciences. The rewards to humanities and social sciences have remained stable, while education has declined. The cost of serving as department chair has declined

while the advantages and disadvantages associated with rank have increased. Salary compression has increased as well during this time period. It is noteworthy that the cost of being a member of a disadvantaged minority group has sharply increased while the cost of being female has decreased in the past four years—although it is far from disappearing.

Although a comparison of the 1992, 1999 salary studies with this one is potentially problematic for a variety of reasons, it is, nevertheless, striking that gender disparities in salary have not disappeared during the past 16 years. In fact, the size of the average monthly salary gap in favor of male faculty found by Troyer and Gandar (\$190.69) is remarkably similar to the average monthly wage gap in favor of male faculty that we observe (\$176.86).

Conclusion

Our results indicate three types of factors influence salaries at UNC Charlotte. The first one is market forces. This factor includes rank, discipline, and prior experience. Actions by UNC Charlotte administrators are unlikely to affect these dynamics because they are consistent across the academy. The second factor is internal university operations as captured by salary compression and chair salaries. UNC Charlotte administrators could alter the internal reward structure to compensate for the salary compression that penalizes faculty the longer they serve at this institution. The University may determine that the salary penalty that chairs incur is the result of decreases in their scholarly productivity, and reprioritize contributions based on leadership. The third factor is possible bias as captured by the salary differences associated with gender and disadvantaged minority status. For both factors, the differences consistently appear across the four years examined and require attention to insure that they are addressed. Salary inequities rooted in gender and race erode campus climates and will undermine achieving the goals of the ADVANCE program.

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Appendix I

The Categorization of Academic Departments Into Academic Units

Humanities

1. Dance and Theatre
2. Art
3. History
4. English
5. Language and Culture Studies
6. Architecture
7. Music
8. Philosophy
9. Religious Studies

Social Sciences

1. Africana Studies
2. Anthropology
3. Communication Studies
4. Criminal Justice
5. Geography
6. Political Science
7. Psychology
8. Sociology
9. Economics
10. Sociology and Anthropology

Engineering Sciences

1. Bioinformatics
2. Civil Engineering
3. Computer Science
4. Electrical and Computer Engineering
5. Engineering Management
6. Engineering Technology
7. Mechanical Engineering
8. Software and Information Systems
9. Information Technology

Education

1. Educational Leadership
2. Middle Grades, Sec Ed & K-12
3. Reading and Elementary Ed
4. Special Ed and Child Dev
5. Education

Physical Sciences

1. Earth Sciences
2. Mathematics and Statistics
3. Physics and Optical Science

Life Sciences (Reference Category for Statistical Analysis)

10. Biology
11. Chemistry

Health and Human Services

1. Adult Health
2. Counseling
3. Family and Community Health
4. Health Behavior and Admin
5. Kinesiology
6. School of Nursing
7. Social Work
8. Health and Human Services

Business

1. Accounting
2. Business Information Systems & Operations Management
3. Finance and Business Law
4. Management
5. Marketing

Table 3: Models of Faculty Salary (2004-2007), STEM Departments

Variables	2004	2005	2006	2007
Unstandardized Coefficients				
Social Sciences	-30.02 (193.09)	-6.61 (192.29)	186.79 (209.97)	85.90 (214.76)
Physical Sciences	382.14 (215.72)	286.27 (211.40)	390.97 (230.59)	272.01 (235.75)
Engineering Sciences	1828.93*** (202.15)	2073.46*** (200.37)	2346.35*** (215.44)	2283.89*** (219.40)
Department Chairs	-256.57 (317.84)	153.22 (317.56)	43.01 (376.11)	-357.74 (374.57)
Assistant Prof	-707.80*** (191.15)	-815.85*** (181.12)	-906.19*** (200.67)	-1140.35*** (195.28)
Professor	2286.21*** (179.46)	2424.02*** (182.09)	2564.57*** (207.46)	2891.78*** (206.20)
Lecturer	-3036.06*** (219.13)	-3064.84*** (204.11)	-3198.81*** (216.08)	-3651.96*** (217.45)
Gender	397.21** (149.67)	267.26 (140.73)	397.58* (153.68)	181.36 (154.20)
Minorities	-209.75 (242.47)	-251.69 (237.48)	-297.83 (261.37)	-464.58 (271.09)
Years at UNC Charlotte	-14.90 (9.30)	-13.95 (8.99)	-22.57* (9.82)	-28.42** (9.77)
Prior Experience	55.42** (10.39)	50.66** (9.83)	55.09** (10.77)	45.86** (11.04)
Constant	6345.68*** (293.01)	6653.69*** (271.83)	6915.30*** (293.40)	7829.70*** (288.54)
Standardized Coefficients				
Social Sciences	-.006	-.001	.034	.015
Physical Sciences	.065	.048	.061	.040
Engineering Sciences	.366	.397	.425	.401
Department Chairs	-.022	.012	.003	-.024
Assistant Prof	-.138	-.155	-.161	-.194
Professor	.449	.450	.439	.474
Lecturer	-.453	-.458	-.473	-.500
Gender	.077	.051	.070	.031
Minorities	-.023	-.026	-.029	-.042
Years at UNC Charlotte	-.065	-.058	-.087	-.105
Prior Experience	.168	.145	.147	.116
R-Square	.75	.77	.74	.74
N	380	412	436	458

* p<.05 ** p<.01 *** p<.001

Table 4 : Models of Faculty Salary (2004-2007), All Departments

Variables	2004	2005	2006	2007
	Unstandardized Coefficients			
Humanities	-337.87 (180.08)	-338.33 (191.62)	-258.76 (206.74)	-327.15 (201.40)
Social Sciences	-57.39 (187.53)	-35.90 (198.02)	111.74 (215.36)	77.49 (210.68)
Physical Sciences	386.67 (209.40)	290.85 (217.75)	398.39 (236.55)	282.32 (230.80)
Engineering Sciences	1887.10 ^{***} (194.39)	2114.59 ^{**} (204.71)	2408.66 ^{***} (219.30)	2311.07 ^{***} (213.38)
Health	311.71 (212.72)	328.55 (226.38)	730.41 ^{**} (248.63)	725.94 ^{**} (239.27)
Education	-243.08 (212.64)	-231.60 (224.86)	-130.32 (240.09)	-313.67 (238.80)
Business	3175.87 ^{***} (211.08)	3259.11 ^{***} (229.92)	3629.70 ^{***} (249.88)	3932.62 ^{***} (248.34)
Department Chairs	-616.52 [*] (217.93)	-152.77 (228.90)	-229.80 (268.89)	-299.05 (246.80)
Assistant Prof	-870.30 ^{***} (127.37)	-927.77 ^{***} (131.31)	-1140.75 ^{***} (141.34)	-1166.09 ^{***} (139.47)
Professor	2266.76 ^{***} (127.54)	2447.05 ^{***} (135.79)	2679.72 ^{***} (148.02)	2874.37 ^{***} (146.84)
Lecturer	-3013.23 ^{***} (134.69)	-3020.20 ^{***} (137.89)	-3180.63 ^{***} (148.79)	-3591.50 ^{***} (145.61)
Gender	210.91 [*] (92.10)	181.84 [*] (94.79)	332.09 ^{**} (104.34)	176.86 (101.94)
Minorities	-242.21 (155.83)	-272.67 (158.38)	-210.78 (178.31)	-375.39 [*] (169.53)
Years at UNC Charlotte	-14.17 [*] (6.09)	-15.14 [*] (6.32)	-27.60 ^{***} (6.41)	-25.52 ^{***} (6.63)
Prior Experience	39.25 ^{***} (6.91)	28.07 ^{***} (7.00)	0.57 (0.74)	34.37 ^{***} (7.58)
Constant	6615.45 ^{***} (223.88)	6880.76 ^{***} (229.27)	7356.41 ^{***} (236.70)	7850.46 ^{***} (236.88)

Table 4 Continued

	Standardized Coefficients			
Humanities	-.061	-.058	-.041	-.050
Social Sciences	-.009	-.006	.016	.010
Physical Sciences	.047	.035	.044	.030
Engineering Sciences	.278	.304	.328	.304
Health	.037	.037	.074	.072
Education	-.029	-.026	-.014	-.031
Business	.373	.346	.356	.352
Department Chairs	-.051	-.012	-.016	-.021
Assistant Prof	-.163	-.169	-.194	-.187
Professor	.402	.409	.408	.417
Lecturer	-.489	-.477	-.486	-.517
Gender	.043	.035	.06	.031
Minorities	-.026	-.029	-.021	-.036
Years at UNC Charlotte	-.058	-.059	-.099	-.088
Prior Experience	.114	.080	.013	.083
R-Square	.78	.77	.74	.78
N	790	824	870	904

* p<.05 ** p<.01 *** p<.001