

The Face of Gender Equity Among Faculty: At Institutions of Higher Education (IHE) Under the University of North Carolina System

Valjeaner Ford, Ed.D., Betty Brown, Ph.D.,
University of North Carolina at Pembroke

Angela Mullennix, MAT,
Fayetteville State University

Abstract

Although many faculty members in higher education will contend that their occupations are chosen because of a calling to the profession rather than a desire to make a certain salary, faculty members are also apt to agree that salary equity remains a concern. In other words, faculty members may not be in the profession for the money, but once in the profession, faculty members do seek to receive equitable pay for their time and rank (Carney, 2012). The problem is that, for the most part, salary is not equitable among men and women in the education profession; therefore, this study seeks to focus on salary disparities within the University of North Carolina System through an in-depth analysis of other institutions' salary studies and data retrieved from the 2013-2014 Annual Association of University Professors salary survey.

Introduction

This study provides a divergent body of literature that discusses data in three dimensions of gender equity at the University of North Carolina (UNC) System at Institutions of Higher Education (IHE): 1) tenure status for full-time faculty; 2) promotion to full professor rank; and 3) average salary for full-time faculty. Several questions will be discussed regarding the relationship between gender inequality and institutions of higher education. Two poignant questions are posed: 1) What aspects of education exhibit the most distinct gender disparities? 2) How does the education of female faculty border with

gender inequality at various universities across the nation? Aggregated tables within the UNC System will depict the three equity indicators by the type of institution as either a Doctoral university, Master's university, or Baccalaureate college or university. Data for this report are drawn chiefly from the American Association of University Professors (AAUP) Faculty Compensation Survey and the U.S. Department of Education.

Purpose of Study

The purpose of this study is to bring an awareness of the inequity among female faculty at a number of universities across the nation; however, the major focus of this

report is the gender equity among the University of North Carolina System of higher education that consists of 17 universities considered as the UNC System in North Carolina. This study provides data for the following universities: Appalachian State University; East Carolina University; Elizabeth City State University; Fayetteville State University; North Carolina A&T State University; North Carolina Central University; North Carolina State University; UNC Asheville; UNC-Chapel Hill; UNC Charlotte; UNC Greensboro; UNC Pembroke; UNC Wilmington; Western Carolina University; and Winston-Salem State University. The study considers four factors of gender equity among men and women: full and part-time faculty; tenure status for full-time faculty; promotion to full professor rank; and average salary for full-time female and male faculty. This study further examines gender equity indicators of the three very different types of universities: Doctoral universities, Master's universities, and Baccalaureate universities. A distinction between cost-of-living and merit adjustments are examined related to gender differences in faculty pay. It is important to note the importance of gender-neutral salary practices and equal access to promotion and retention for female faculty.

A Series of Unanswered Questions Posed

Though many faculty working in academia within the twenty-first century economy are hesitant to question the issue of gender equality and salary equity, many female faculty members have questions pertaining to why men and women are not compensated equally within the UNC System, as well as elsewhere in the United States. After all, males and females, alike, must meet certain criteria in order to attain the position of faculty and to become promoted through the faculty ranks; nonetheless, equity in terms of pay does not

necessarily seem to be a major concern among the key leaders and policy-makers within the UNC System. As a result, a series of unanswered questions are posed:

1. Why is the percentage of women faculty holding doctorates smaller than the percentage among men?
2. Why are women less likely to achieve full-time tenure-track positions?
3. Why are women less likely to be employed in research universities?
4. Why do women faculty normally spend more of their time on student advising and committee service than do men?
5. Why do positions in the disciplines in which women faculty are concentrated usually pay less?
6. Why are female faculty less likely than male faculty to earn tenure and promotion to full professor?
7. Why do female faculty earn less on average at each rank than their male counterparts?

Review of Related Literature

AAUP data from years 2011-2014 indicate that women full-time faculty members earn less than their male colleagues at each of the professional ranks (professor, associate professor, and assistant professor). The overall salary disparity between women and men is the product of both rank and institutional locations in each category: Doctoral, Master's, and Baccalaureate. Women are more likely to hold faculty positions at lower ranks, as well as make up a greater proportion of the faculty at the institutions that pay the lowest salary. The overall average salary for women full-time faculty members was lower than that for men. The average salary for women faculty was 81 percent of that earned by men. This comparison has remained virtually unchanged since the AAUP began collecting

separate data for women and men faculty. Among all full professors at all types of institutions, women earned on average 88 percent of what men earned. For associate and assistant professors, the overall national figure for women was 93 percent. Though AAUP reports this information, other university systems and individual institutions have conducted their own salary and gender studies to convey whether or not AAUP's findings are relevant to that particular system or individual institution.

As one related study, the University of Michigan conducted three salary and gender studies in which Ordinary Least Squares (OLS) regression techniques were employed in order to determine whether or not a list of factors determined the salary differences among male and female faculty (Croft, 2011, p. 1). The studies' modeling "demonstrated significant differences in the salaries of males and females when rank and time in rank were not controlled for statistically. Specifically, the first model

found that on average, women's salaries were lower than that of their male counterparts, but female faculty had, on average, been employed for less time than their male counterparts" (Croft, 2011, p. 1). In other words, women faculty at the University of Michigan, too, were earning less than male faculty, but the two variables—rank and time—were not controlled for during the study. The institution conducted a second study and again revealed similar results as the first model, but in the third study, in which rank and time were considered as factors, the findings—from 2007—included several fascinating facts, namely that small significant differences were present among the salaries of male and female faculty members, even when rank and time were controlled variables (Croft, 2011, p. 2). In sum, Table 1, an adapted table from Croft (2011), reveals that the three studies of University of Michigan faculty determined the following:

Table 1.

University of Michigan Gender and Salary Studies Significance Results

	Model 1 Significant	Model 2 Significant
2001 Study (all faculty)	Yes	No
2002 Study (STEM faculty)	Yes	No
2001 Study (all faculty)	Yes	Yes

Although the University of Michigan studies deemed that only a small significance was present among male and female faculty members when considering their salaries, rank, and time, consideration must be given to the fact that a significance was still present. Thus, this lends researchers to question whether or not additional universities also observe similar disparities among men and

women faculty members. To respond to that, another viable study to consider is the University of Houston (Croft, 2011), Gender Salary Study, which is also the reporting source for the University of Michigan data previously discussed. The University of Houston study is based off of the same regression modeling that was utilized for the Michigan studies; however, the institution

explains that the premise for conducting the University of Houston study was to determine why 87 faculty members left the University of Houston during fiscal years 2013 and 2014, or from September 2012 to August 2014. As such, the institution wanted to know if faculty salaries were at market or if other factors were contributing to the reasons faculty members left.

“Significant salary differentials for men and women university-wide with women paid lower than their male counterparts” (Croft, 2011, p. 10). Once again, a significant difference in salary among all University of Houston male and female faculty members is present.

Indeed, as indicated at the University of Michigan and the University of Houston, the overall salary disadvantage for women is quite apparent, and several factors may be contributing to such a disadvantage. The first factor to consider is whether or not women are more likely to have positions at institutions that pay lower salaries, and the second factor is whether or not women are less likely to hold senior faculty rank. To respond to that, Newman (2014, p.1) notes: “At doctoral universities, where the difference between male and female pay is the largest, women across all faculty ranks make about 78 cents on the dollar, nearly the national average ratio for all women. But, as critiques of the 77-cents-on-the-dollar data point will tell you, that doesn’t tell the whole story.”

Comparable to the Michigan and Houston institutions previously discussed, the UNC System consists of Doctoral Universities: University of North Carolina at Chapel Hill; North Carolina State University; University of North Carolina at Charlotte; University of North Carolina at Greensboro; and Eastern Carolina University. Similar to the Michigan and Houston institutions, these Doctoral Institutions are failing to pay

equitable salaries to its faculty members. In fact, the University of North Carolina at Chapel Hill crafted the 2012 Faculty Salary Equity Task Force Report in which the Office of the Executive Vice Chancellor and Provost conducted a comprehensive study as a follow up from the previous 2002 study, and the three main purpose of the 2012 study was to accomplish the following: “examin[e] time to promotion for tenure track and tenured faculty,” “analyz[e] the gender and race/ethnicity characteristics of new faculty hires,” and “recommend policy and strategies for identifying and addressing inequities” (p. 2).

As with the two aforementioned studies, the University of North Carolina at Chapel Hill study used regression models and considered the following factors: demographics (e.g. gender, race/ethnicity); education (e.g. highest degree attained); experience and service length (e.g. years since attaining terminal degree, years at the institution, years of experience prior to the institution, and current rank); professional status (e.g. fixed term, tenure track, tenured); rank; administrative role; distinguished professorship; and discipline (p. 2-3). The results of this study indicated that in comparison to male faculty at the University of North Carolina at Chapel Hill, “female faculty members were more likely to: Hold a fixed term appointment, have the rank of assistant or instructor, not hold a distinguished title, have spent fewer years in their current ranks, be in a lower-paying discipline area” (p. 3). What is further interesting to note from this study is that even within the female faculty categorization, additional disparities persist among racial/ethnic groups in certain departments within the institution. Table 2, an adapted table from the Chapel Hill study, illustrates these disparities.

Table 2.

UNC-CH Multiple Regression Results of Salary Relative to Comparison Group

	Female Race	Salary Compared to White Females
Academic Affairs	African American	Higher
	Asian	Higher
	Hispanic, Native American, Other	Lower
School of Medicine	African American	Lower
	Asian	Lower
	Hispanic, Native American, Other	Lower
Other Health Affairs	African American	Higher
	Asian	Lower
	Hispanic, Native American, Other	Higher

In consideration of the aforementioned data from Chapel Hill’s study, attention must be paid to the notion that not only is gender a major concern, but also race, too, is of issue. *Women as Leaders in Education: Succeeding Despite Inequity, Discrimination, and Other Challenges*, asserts, “Women in Administration: Differences in Equity” by Ringler, McFadden, and Ford (2011) that “Discriminations based on gender, ethnicity, and sex-role stereotypes in education are common within bureaucratic school governance” (see Benjamin, 2004). That clearly implies several indicators of why women faculty in the UNC System—and elsewhere—are earning less wages. Nevertheless, that does not mean women deserve to make less. Ringler, McFadden, and Ford (2011) further offer that even when “variables such as educational achievement, experience, and institutional characteristics” are taken into account, males are still more likely to advance to tenured positions (p. 228). Perhaps of significance based on Ringler, McFadden, and Ford’s assertions, is the notion that females in certain Ph.D. fields

take longer to complete their terminal degree than their male student counterparts, thus serving as a potential indicator why males are viewed as more worthy of the higher salaries. The Panel for the Study of Gender Differences in Career Outcomes of Science and Engineering Ph.D.s (2001) claims that especially in science and engineering, women Ph.D. cohort members are more likely to be in the program longer, but when that is not the case, meaning a male and female complete the degree and enter employment at the same time, men still advance to tenure track positions and attain tenure at a faster rate than women (p. 3). This particular study points out that even though there are more women in science, technology, engineering, and mathematics (STEM) Ph.D. programs, the amount of full-time males in these fields remains much greater; females are more likely to hold part-time positions with lower wages (p. 5). Given that women are needed in the STEM fields—both in academia and in the private sector—and gender equity is needed across all fields of academia, higher education must consider

revamping programs that advocate for eliminating the disparities, such as a mentorship program for women in STEM fields and the “intentionality” of closing the gender pay gap (Newman, 2014).

Methods

The data gathered for this study are pre-existing data from the American Association of University Professors, AAUP, (2014), Faculty Compensation Survey, the U.S. Department of Education, and the Chronicle of Higher Education (2007). The data are accessible to the general public through the World Wide Web. AAUP publishes a report, titled the Annual Report on the Economic Status of the Profession, in which the current status of faculty salaries and future outlook of faculty salaries are depicted. The database for gathering the data for this study was accessed through The Chronicle of Higher Education (Newman, 2014). The data included in this database is inclusive of salary information for males and females at the status of full professor, associate professor, assistant professor, instructor, and unranked faculty. The institutions do not have to participate in the salary survey, but although the database includes all 15 schools within the UNC System that are considered for this study, the schools can be filtered out by state, not by system. Thus, the researchers also accessed the website, “University of North Carolina: A System of Higher Learning,” in which the researchers retrieved the list of schools within the UNC System.

Participants

The participants of this study include the male and female faculty members within the UNC System. The participants at each institution are not required to participate in the salary survey. This information is public information published through the Chronicles of Higher Education (2014); therefore, AAUP (2005) gathers the data from the institutions. The professors’ names are not published with the survey. Given that the participants for this particular study are professors at the institutions discussed in the AAUP salary survey, which encompasses participants who previously consented to the release of the salary information, the participants for this study were not notified of their inclusion in this particular study of the UNC System.

Results

The data gathered for this study indicate that males at the assistant, associate, and full professor statuses earn a higher salary than females at the same ranks. Aside from Winston-Salem State University, a Master’s University, that favors female full professors with a \$13,700 salary difference as compared to male full professors, all 15 institutions at all levels, Doctoral, Master’s and Baccalaureate, favor male faculty in terms of salaries. Tables 3, 4, and 5 provide the salary disparities among all 15 institutions.

Table 3.

Assistant Professor Male and Female Salaries, with D as Doctoral University, M as Master's University, and B as Baccalaureate University. Amount in US dollars.

	Male	Female
UNC Chapel Hill (D)	86,000	76,500
UNC Charlotte (D)	75,700	70,700
UNC Greensboro (D)	73,500	67,800
NC State (D)	77,800	73,700
East Carolina University (D)	71,400	65,500
UNC Pembroke (M)	60,100	59,200
UNC Wilmington (M)	63,900	63,600
Appalachian State (M)	63,500	62,400
NC Central (M)	68,500	68,200
NC A&T (M)	73,800	66,600
Fayetteville State (M)	68,700	69,100
Winston Salem State (M)	66,100	69,600
Western Carolina (M)	63,600	56,200
Elizabeth City State (B)	65,400	62,200
UNC Asheville (B)	63,900	59,500

Table 4.

Associate Professor Male and Female Salaries, with D as Doctoral University, M as Master's University, and B as Baccalaureate University. Amount in US dollars.

	Male	Female
UNC Chapel Hill (D)	99,400	96,400
UNC Charlotte (D)	83,900	74,700
UNC Greensboro (D)	79,200	72,800
East Carolina University (D)	76,500	73,200
NC State University (D)	87,400	85,100
UNC Pembroke (M)	62,400	60,800
UNC Wilmington (M)	73,200	69,800
Appalachian State (M)	72,600	70,700
NC Central (M)	80,300	73,700
NC A&T (M)	75,100	76,100
Fayetteville State (M)	72,000	71,700
Winston Salem State (M)	76,400	72,700
Western Carolina (M)	73,700	68,900
Elizabeth City State (B)	66,100	66,300
UNC Asheville (B)	69,300	66,300

Table 5.

Full Professor Male and Female Salaries, with D as Doctoral University, M as Master's University, and B as Baccalaureate University. Amount in US dollars.

	Male	Female
UNC Chapel Hill (D)	151,600	134,400
UNC Charlotte (D)	116,200	101,800
UNC Greensboro (D)	111,000	102,800
East Carolina University (D)	76,500	73,200
NC State University (D)	87,400	85,100
UNC Pembroke (M)	82,700	68,900
UNC Wilmington (M)	98,000	90,000
Appalachian State (M)	93,900	85,200
NC Central (M)	99,000	91,300
NC A&T (M)	93,600	91,100
Fayetteville State (M)	90,800	91,600
Winston Salem State (M)	81,700	95,400
Western Carolina (M)	95,700	81,700
Elizabeth City State (B)	80,800	82,400
UNC Asheville (B)	86,200	76,300

Conclusion

As a result of this study it is apparent that progress has been made in some respect; however questions are still posed, as complaints and further research is pertinent to attempt to resolve historical pay inequities at the university level as well as gender inequities as a whole. One can accurately state that “yes” advancements have been made, but at a deplorable rate toward the equalization of female and male salaries. Salary disparities are far too great, as

numerous state and national studies have been conducted to convey to society and bring light to the huge salary discrepancies of female and male faculty as it continues to widen.

A common thread that runs through most of the studies of gender and other ethnicities is evidence of wage discrimination against women in higher education at the college and university level. Female faculty have lower average salaries than male faculty

at all three levels of rank, with the greatest difference being at the professor level. The difference between the female (\$100,427) and male faculty (\$102,778) at the professor level is 2.3 percent. The end result is that gender equity is a growing problem and continues to exist.

References

American Association of University Professors. (2014). 2013-2014 AAUP faculty salary survey. Retrieved October 1, 2014, from <http://chronicle.com/article/2013-14-AAUP-Faculty-Salary/145679#id=199999>

Benjamin, E. (2004). Disparities in the salaries and appointments of academic women and men. Washington, DC: American Association of University Professors

Carney, B. (2012). 2012 Faculty salary equity task force report. Retrieved March 3, 2015, from <https://provost.unc.edu/files/2014/02/2012-Faculty-Salary-Equity-Report-Summary.pdf>

Croft, M. (2011). University of Houston 2011 gender salary study. Retrieved March 3, 2015, from http://www.uh.edu/provost/faculty-compensation-review/_documents/UH-Gender-Salary-Study.pdf

Panel for the study of gender differences in career outcomes of science and engineering Ph.Ds. Retrieved 26 March 2015, from <http://site.ebrary.com.contentproxy.phoenix.edu/lib/apollolib/reader.action?docID=10071889>.

Newman, J. (2014). There is a gender pay gap in academe, but it may not be the gap that matters. *The Chronicle of Higher Education*. Retrieved 26 March 2015, from

<http://chronicle.com/blogs/data/2014/04/11/there-is-a-gender-pay-gap-in-academe-but-it-may-not-be-the-gap-that-matters/>

Ringler, M., McFadden, C., & Ford, V. (2011). University of North Carolina: A system of higher learning. Retrieved March 3, 2015, from <http://www.northcarolina.edu/?q=content/our-17-campuses>. Women in administration: Differences in equity. In J. L. Martin Eds., *women as leaders in education: Succeeding despite inequity, discrimination, and other challenges* (221-43). Santa Barbara, CA: Praeger.