

Report on Gender/Race Equity at Central Connecticut State University

Carolyn R. Fallahi and Sally A. Lesik

August 31, 2009

MASKED REPORT: Several entries in tables have been deleted because of potentially identifying information.

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Section I: Introduction and Background

Previous projects at CCSU concerning diversity

In 2006, based on concerns from faculty, the Faculty Senate Diversity Committee met with AAUP and began talk of doing a gender equity study at Central Connecticut State University (CCSU). In the fall semester of 2007, President Miller charged the Diversity Committee to evaluate gender equity at CCSU utilizing available data. Dr. Carolyn Fallahi, the chair of the Faculty Senate Diversity Committee, completed a preliminary report where many concerns were examined using limited resources and existing data. The focus of the study was centered on the following:

- 1) The hiring of women and Minorities.
- 2) Efforts to attract more Minorities to CCSU.
- 3) The process used to extend a search in order to provide additional time to recruit Minorities and women.
- 4) The percentage of female and minority candidates turned down for promotion and tenure.
- 5) Grant awards by gender and ethnicity.

Using readily available data to attempt to answer some of these questions related to gender equity proved to be difficult since there was not data available for many of these questions. A summary of the results of this original study are as follows. Please see Appendix A for the complete report.

- 1) There was evidence of gender discrimination based on promotion and tenure data as compiled and analyzed by David Spector for one year (see Appendix B).
- 2) In examining the load credit activity by gender, there were not significant differences in the load credit activity for the number of students taught between male and female professors from 2002-2006.
- 3) Female faculty had significantly more non-teaching load credit activity than did males, but the reason for this was not clear. One explanation maybe that female faculty are involved with more special projects for the university than are male faculty.
- 4) There was some indication that male faculty were receiving higher overall initial salaries than were female faculty. However, there was a cautionary note associated with this conclusion – the data was not analyzed by department or school and did not take into account rank or other important factors.
- 5) No differences were found in the initial salaries between males and females in SUOAF-AFSCME.
- 6) There were differences in the initial salaries of female versus males in administration jobs. However, there was a cautionary note associated with this conclusion – the data contained some significant outliers as we had recently hired the president and the provost.

7) There is a lack of minority hiring, but finding a diverse applicant pool has proven difficult.

After the completion of this study, the following recommendations were made:

- 1) Hire a professional consulting firm to complete a thorough gender and race equity study.
- 2) Put forth a campus wide initiative to bring more qualified women and Minorities to campus.
- 3) Allow new hires to be given a “hiring guide” to help them negotiate their salary.

In 2007, following the receipt of several complaints by the faculty and staff at CCSU, Dr. Moises Salinas, on behalf of the Faculty Senate Diversity Committee, sent out a survey that focused on issues of diversity (see Appendix C and Appendix D). This short Diversity Climate Survey for faculty and staff yielded 121 faculty and staff who responded. He concluded that the “results confirmed the general perception that many members of ethnic and sexual orientation minority groups that there is a clear climate of prejudice and discrimination on campus, coupled with a lack of intervention by the administration” (Salinas, 2007; Appendix D). Based on this report, he recommended that the administration and the faculty senate address issues of prejudice and discrimination that included upgrading the coordinator of multi-cultural affairs and including diversity as a component in the general education requirements.

History of this project

During the summer of 2008, President Miller budgeted monies to hire a consulting group to perform a gender and race equity study. Bids were submitted to the university, but they were significantly higher than the budgeted amount to complete the study. It was decided that we would complete the study internally and use available resources to be more precise in getting the needed data in order to detect trends and patterns regarding gender and race equity. The following team was put together for the project.

Principal Investigator: Carolyn R. Fallahi, Department of Psychology, CCSU

Statistician: Sally A. Lesik, Department of Mathematical Sciences, CCSU

Research Assistant: Lisa Leishman, Graduate Student in Psychology and Law Student at Western New England College School of Law, Springfield, MA.

We would also like to acknowledge the help and support from the following individuals who provided data, made sure that the data was accurate, provided advice, and their time in order to complete this study:

Anne Alling, Chief Human Resources Officer

Laurie Dunn, University HR Administrator, Human Resources

Moises Salinas, Chief Diversity Officer

Braden Hosch, Director of Institutional Research and Assessment

Summary of Results

- 1) At Central Connecticut State University, there are more male instructional faculty at the full professor level ($n = 122$) as compared to female faculty at the same level ($n = 67$). At the associate professor level, there are 63 male faculty versus 50 female faculty and at the assistant level, 67 male faculty versus 51 female faculty. Similarly, smaller numbers of faculty of color exist as compared to White faculty.
- 2) When examining the salary differences between male and female tenured and tenure-track faculty, a simple mean difference reflects male faculty earning an average salary of \$80,451 as compared to female faculty who earn an average of \$77,334.
- 3) The salary differences by race or ethnicity reflect averages of \$80,448 for Black faculty, \$76,446 for Hispanic faculty, \$78,911 for White faculty, and \$81,753 for American Indian faculty.
- 4) Male faculty had an average of 6.310 years in rank as compared to female faculty with an average of 5.341 years in rank.
- 5) American Indian faculty had an average of 8.000 years in rank as compared to Black faculty (6.120 years), White faculty (5.906 years) and Hispanic faculty (3.950 years).
- 6) There are a range of salaries by department, with the highest salaries coming from Accounting, Anthropology, Computer Science, MIS, and Marketing, and the lowest salaries coming from Design, Social Work, Sociology, and Special Education.

- 7) Ten-month Full professors make more than Associate or Assistant Professors (Full $M = \$91,792$, Associate $M = \$74,356$, and Assistant $M = \$60,568$).
- 8) There are a range of salaries by division or school, and gender. Female faculty in Business and Engineering and Technology have higher salaries than males in those departments. Male faculty members have higher average salaries in Arts and Sciences, Education, and Library/Counseling & Wellness as compared to female faculty.
- 9) SUOAF-AFSCME salary data revealed differences in the average salaries for males ($\$75,409$) as compared to females ($\$66,943$), without taking into account important variables that may account for these differences. Further, self-described Black SUOAF-AFSCME employees earned an average of $\$67,081$, as compared to Hispanic members ($\$71,836$), and White members ($\$70,778$).
- 10) Male SUOAF-AFSCME members have an average of 3.914 years employed as compared to females with an average of 3.254 years. Hispanic SUOAF-AFSCME employees had an average of 4.063 years in their position, Black SUOAF-AFSCME employees had an average of 2.962 years, and Whites had an average of 3.617 years.
- 11) Initial salary data was examined to see if wage differences by gender and race/ethnicity at the time of hire explained differences seen in salaries. Once hired, salary increases for faculty are primarily determined by number of years in rank and current salary as prescribed by formula. SUOAF-AFSCME salaries are determined by merit and a prescribed formula. Wage differences were found between male and female faculty. More specifically, we found males earn an average of $\$61,106$ as compared to $\$57,057$

for females, giving a wage difference equivalent to approximately 7.19%. However, when accounting for the same age and rank at hire, as well as other variables, 4.78% of the difference between male and female faculty salaries is explained. That leaves a 2.30% wage gap that is left unexplained. No wage differences were found between Minority and White faculty members.

12) Similar analyses were completed in order to examine wage differences based on gender and minority status for SUOAF-AFSCME employees. No discrepancies appear to exist on the basis of gender or minority status.

13) Promotion and tenure decisions were examined between 2002 and 2008. There appear to be numerous differences in both positive and negative tenure and promotion decisions based on gender and race/ethnicity. For instance, in 2004-2005, more males were denied promotion from Assistant to Associate Professor as compared to females. Also, in 2003-2004 and 2005-2006, more females were denied promotion from Associate to Full Professor as compared to males, yet in 2007-2008, more males were denied promotion from Associate to Full professor as compared to females. Furthermore, in 2007-2008, more Minorities were denied promotion from Associate to Full Professor as compared to Whites. Also, in 2006-2007, more males were denied tenure as compared to females.

14) Differences were found in the proportion of males applying for faculty positions (19.08%) and who made it to the finalist pool as compared to the proportion of females

applying for faculty positions (22.55%) and who made it to the finalist pool. A higher percentage of females made it to the finalist pool.

15) A larger proportion of Whites apply for faculty positions (42.26%) and make it to the finalist pool as compared to the proportion of Minorities applying for faculty positions (21.49%).

16) A larger proportion of males applying for SUOAF-AFSCME positions (17.90%) made it to the finalist pool as compared to females applying for SUOAF-AFSCME positions (13.56%).

17) A larger proportion of Whites applying for SUOAF-AFSCME positions make it to the finalist pool (71.38%) as compared to Minority finalists (46.81%).

18) We looked at the frequencies of male and female applicants applying for faculty or SUOAF-AFSCME positions to see if gender influenced whether or not they were more likely to be hired or rejected the offer, as compared to not being hired. No differences were found.

19) When we looked at the frequencies of the finalist pool based on ethnicity and whether or not faculty or SUOAF-AFSCME applicants were hired or rejected the offer, we found that this depended on ethnicity. More White finalists are hired or rejected the offer for faculty and SUOAF-AFSCME positions as compared to Minority finalists.

20) We found similar levels of experience between male and female faculty applicants. However, with SUOAF-AFSCME positions, males were rated as having a stronger

experience record as compared to females. Similar results were found when comparing Minority and White candidates. White candidates were rated as having moderate or strong experience as compared to Minority candidates for both faculty and SUOAF-AFSCME positions.

21) More female faculty candidates were rated as having a moderate or strong research program as compared to male candidates. More Minority candidates were rated as having a moderate or strong research program as compared to White candidates.

22) There was a difference between male and female faculty applicants as well as between Whites and Minority applicants based on scholarship, or knowledge within their field of study. More females and Whites were rated as having more knowledge within their field. However, more White candidates were rated as having moderate or strong scholarship as compared to Minority candidates.

23) There were no differences in separation from the university for either faculty or SUOAF-AFSCME employees based on gender or minority status.

Section II: Data Collection

To evaluate the state of gender and race equity on campus, we utilized the existing population of data, much of which needed to be extensively coded into a usable format. Because we were provided with population-level data, we need to recognize the limitations of reporting and interpreting any findings strictly in terms of their statistical significance, and look more at the substantive results. Since statistical significance is associated with using sample data to make generalizations to a larger often unknown population of interest, we relied on the recommendations of Haignere (2002) to present and describe our findings. Haignere authored an AAUP guide to conducting equity studies in higher education, and recommends that statistical significance be used to describe general patterns and/or trends in equity between different groups, and cautions that the absence of statistical significance at the traditional level of 0.05 may not imply equity amongst different groups. Therefore, throughout this study we consider observed significance levels of less than 0.10 as indicative of such general patterns and/or trends in equity.

Institutional Data

The following data and information were made available to us by Human Resources, the CCSU Office of Institutional Research and Assessment, and the office of Diversity and Equity:

- 1) Human Resources Office:
 - a. Discussion and protocol for evaluating professional positions in SUOAF-AFSCME.

- b. CCSU SUOAF-AFSCME new hires from 2003 to 2008, including grade, salary plan, appointment status, annual rate, sex, ethnic group, and age at hire.
 - c. CCSU SUOAF-AFSCME Salary Data Fall 2008, including job title, grade, salary plan, department, appointment status, annual rate, ethnic group, sex, age, years in the job, and years in SUOAF-AFSCME.
 - d. CCSU AAUP New hires, including rank, department, appointment status, annual rate, sex, ethnic group, and age at hire.
 - e. CCSU AAUP salary data, including title, grade, salary plan, department, appointment status, years in rank, annual rate, ethnic group, sex, and age.
 - f. CCSU AAUP promotion decisions from 2002 through 2008, by Final decision maker, University Promotion and Tenure Committee, Dean, and DEC, and by sex and ethnic group.
 - g. SUOAF-AFSCME separation data from 2003 through 2008, by title, department, appointment status, separation type, years of service, ethnic group, sex, and age as of termination.
 - h. Faculty separation data from 2003 through 2008, by job description, title, department, appointment type, termination date, action reason description, ethnic group, and sex.
- 2) CCSU Office of Institutional Research and Assessment:
- a. Demographic descriptors of CCSU as compared to ten peer institutions (IPEDS Peer Analysis System) from 1993 through 2008, by sex and minority group.

- b. Demographic distributions of full-time faculty and non-faculty employees at CCSU (Fall 1993-2008).
- 3) Diversity and Equity Office:
- a. AAP2, AAP3, AAP4, and AAP5 forms for new searches from 2004-2008.

Section III: Description of Students, Faculty, and SUOAF-AFSCME Employees at CCSU

Description of Students

Out of 9,297 undergraduate students, 48% are males, 52% females, and 16% are self-described minority students with 1% international students (Office of Institutional Research and Assessment, 2009). Of those students, 78% attend the university full-time and 22% attend part-time. Out of 2,405 graduate students, 810 are male and 1,595 are female with 19% attending full-time and 81% attending part-time (Office of Institutional Research and Assessment, 2009).

Description of Faculty (AAUP)

The Office of Institutional Research and Assessment (OIRA) published a descriptive overview of the distribution of full-time faculty at CCSU from Fall 1993 through Fall 2008 by gender and by race/ethnicity (Hosch, 2009). (Please note that the “calculations of percentages include ‘Unknown / No Report’”). In the fall of 2008, “41% of full-time faculty were women, and 18% were from minority groups. These proportions reflect an increase from 1993 when 33% of full-time faculty members were women and 13% were from minority groups, but they have risen only slightly or remained relatively unchanged since 2001 when 39% were women and 18% were from minority groups” (Hosch, 2009, p. 4). Compared to CCSU’s peer institutions (IPEDS Peer Analysis System), “CCSU is at or above the group median in the proportion of full-time faculty with a race/ethnicity of Hispanic or Black, Non-Hispanic. Proportions of full-time faculty at CCSU with a race/ethnicity of Asian/Pacific Islander were at or slightly below the peer group median” (Hosch, 2009, p. 4).

Based on the Fall 2008 headcount of all full-time instructional faculty by rank and gender ($n = 420$), there were 122 male full professors with 27 professors self-identifying as either a non-White faculty or a non-resident alien as compared with 67 female full professors, of which 15 self-identified as a non-White faculty with no non-resident alien standings . Further, out of 63 associate male professors, 15 were self-identified as non-White or a non-resident alien, versus 50 associate female professors, with 4 self-identified non-White status. Finally, at the level of assistant professor, there were 67 White male faculty members with 19 members self-identifying as non-White or non-resident-alien status as compared to 51 female faculty with 6 self-identifying as non-White or non-resident alien status (Institutional Research and Assessment, 2009b).

Description of Administrative Faculty Employees (SUOAF-AFSCME)

SUOAF-AFSCME is the bargaining unit representing administrative faculty employees at CCSU. In the fall of 2008, 131 women and 92 men comprised SUOAF-AFSCME. Of the 223 employees, 173 were self-described as White, non-Hispanic, 24 Black, non-Hispanic, 8 Asian or Pacific Islander, 16 Hispanic, and 2 Unknown (Institutional Research and Assessment, 2008).

Section IV: Salary Data

Tenured and Tenure-track Faculty Salary Data

Table 1 presents the summary statistics of the salary data for all tenured and tenure-track faculty during the Fall of 2008 by gender¹. The data reflect differences between the average salaries for males and females. A simple comparison of mean salaries shows a mean salary of \$80,451 for males and \$77,334 for females ($p < 0.05$). However, only comparing the mean salaries for males and females does not take into account other factors such as number of years at CCSU, level of experience, and other important variables that are needed to understand gender equity. Please note, the *trimmed mean* is the mean of the observations where the upper and lower 5% of the observations are removed. This measure was included in cases where there were enough observations to delete the upper and lower 5%.

Table 1: Salary statistics for all tenured and tenure-track faculty by gender ($n = 425$).

| Gender | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|---------------|--------------|-------------|---------------------|---------------|----------------|----------------|----------------|
| <i>Female</i> | 173 | 77334 | 77231 | 76976 | 15074 | 53781 | 101851 |
| <i>Male</i> | 252 | 80451 | 80458 | 80701 | 15569 | 51640 | 122222 |

Table 2 presents a collection of salary statistics by minority status that do not take into account other important variables that may account for differences in salary by race. In addition, some of the counts across categories are quite small, e.g. American Indian has only 4 observations as compared to Whites with 342 observations. For instance, self-described Black

¹ This includes instructional and non-instructional faculty such as counselors, librarians, and all other AAUP members but does not include faculty on special or temporary appointments, or coaches. We did not include salaries on coaches as that data was not provided.

faculty earned an average of \$80,448 as compared to Hispanic faculty, \$76,446, and White faculty \$78,911.

Table 2: Salary statistics for all tenured and tenure-track faculty by ethnicity ($n = 425$).

| Ethnicity | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|------------------|--------------|-------------|---------------------|---------------|----------------|----------------|----------------|
| <i>Amer Ind</i> | 4 | 81753 | * | 78203 | 14156 | 68753 | 101851 |
| <i>Asian</i> | 25 | 85292 | 85891 | 87708 | 15733 | 54947 | 101851 |
| <i>Black</i> | 26 | 80448 | 79995 | 79628 | 15295 | 58000 | 113773 |
| <i>Hispanic</i> | 21 | 76446 | 76301 | 76883 | 14079 | 53781 | 101851 |
| <i>NSPEC</i> | 7 | 72607 | * | 69491 | 14574 | 54947 | 101851 |
| <i>White</i> | 342 | 78911 | 78860 | 78340 | 15489 | 51640 | 122222 |

When looking at salary data, it is important to take into account the number of years in rank, as we would expect to see differences in salary based on the number of years a faculty member has been employed by the university. As can be seen in Table 3, male faculty have an average of 6.310 years in rank as compared to female faculty with an average of 5.341 years in rank ($p < 0.05$). Thus, females spend less time-in-rank as compared to males.

Table 3: Summary statistics for years in rank of all tenured and tenure-track faculty by gender ($n = 425$).

| Gender | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|---------------|--------------|-------------|---------------------|---------------|----------------|----------------|----------------|
| <i>Female</i> | 173 | 5.341 | 4.832 | 4 | 4.989 | 0 | 29 |
| <i>Male</i> | 252 | 6.310 | 5.469 | 4 | 6.910 | 0 | 34 |

Similarly, Table 4 presents the differences in the rank of faculty by minority status.

Table 4: Summary statistics for years in rank of tenured and tenure-track faculty by minority status ($n = 425$).

| Ethnicity | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|------------------|--------------|-------------|---------------------|---------------|----------------|----------------|----------------|
| <i>Amer Ind</i> | 4 | 8.000 | * | 9 | 2.710 | 4 | 10 |
| <i>Asian</i> | 25 | 7.640 | 7.130 | 4 | 8.130 | 0 | 27 |
| <i>Black</i> | 26 | 6.120 | 5.790 | 5 | 5.280 | 0 | 20 |
| <i>Hispanic</i> | 21 | 3.950 | 3.320 | 3 | 4.970 | 0 | 20 |
| <i>NSPEC</i> | 7 | 4.140 | * | 1 | 7.100 | 0 | 20 |
| <i>White</i> | 342 | 5.906 | 5.175 | 4 | 6.189 | 0 | 34 |

American Indian faculty had the most number of years in rank (8.000 years) as compared to Black faculty (6.120 years), White faculty (5.906 years), and Hispanic faculty (3.950 years).

Salary statistics for tenured and tenure-track faculty by department are presented in Table 5².

Without considering years in rank and other factors related to salary differences, the departments with the highest mean salaries included Accounting, Anthropology, Computer Science, MIS, and Marketing. The lowest salaried departments included Design, Social Work, Sociology, and Special Education.

² Only those departments and/or categories with more than two members are included. Thus salaries for Intercollegiate Athletics, and assistant or associate deans in the schools of Engineering and Technology, Arts & Sciences, and Education are not included.

Table 5: Summary statistics for salaries of tenured and tenure-track faculty by department ($n = 421$).

| Department | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|----------------------|-------|-------|--------------|--------|---------|---------|---------|
| <i>Accounting</i> | 11 | 92215 | 93669 | 96947 | 10550 | 69491 | 101851 |
| <i>Anthropology</i> | 6 | 91337 | * | 92251 | 11563 | 79550 | 101851 |
| <i>Art</i> | 13 | 82985 | 83541 | 84713 | 11644 | 58000 | 101851 |
| <i>Biology</i> | 12 | 78225 | 78075 | 79991 | 12336 | 58947 | 99004 |
| <i>Bio Sci</i> | 8 | 73536 | * | 76114 | 12246 | 57181 | 91958 |
| <i>Chem/Bio Chem</i> | 8 | 77303 | * | 77638 | 15601 | 56816 | 101851 |
| <i>Communication</i> | 12 | 82388 | 82685 | 84046 | 14581 | 59947 | 101851 |
| <i>Comp Elec Gph</i> | 3 | 83479 | * | 81170 | 15274 | 69491 | 99776 |
| <i>Comp Sci</i> | 7 | 90325 | * | 89822 | 8947 | 77796 | 101851 |
| <i>Cncl Fam Ther</i> | 7 | 79487 | * | 82150 | 17465 | 54782 | 101851 |
| <i>Cncl/Well</i> | 3 | 80712 | * | 74539 | 18827 | 65746 | 101851 |
| <i>Crim Jst</i> | 9 | 72514 | * | 68781 | 12564 | 61600 | 101851 |
| <i>Design</i> | 4 | 68096 | * | 59446 | 23096 | 51640 | 101851 |
| <i>Economics</i> | 7 | 85896 | * | 101851 | 20339 | 56794 | 101851 |
| <i>Educ Ldrshp</i> | 11 | 84926 | 85839 | 92870 | 17285 | 59782 | 101851 |
| <i>Engineering</i> | 10 | 74223 | 72972 | 70348 | 8840 | 65000 | 93454 |
| <i>English</i> | 34 | 70814 | 69833 | 65774 | 12993 | 54947 | 110846 |
| <i>Finance</i> | 8 | 80322 | * | 82631 | 7635 | 63290 | 85671 |
| <i>Geography</i> | 9 | 76882 | * | 76920 | 13547 | 58718 | 101851 |
| <i>History</i> | 18 | 79670 | 78629 | 76114 | 19202 | 53781 | 122222 |
| <i>Library</i> | 16 | 76144 | 75561 | 78714 | 13394 | 58601 | 101851 |
| <i>Mgmt/Organ</i> | 11 | 88597 | 89248 | 90558 | 10701 | 69491 | 101851 |
| <i>MIS</i> | 8 | 91253 | * | 91284 | 10668 | 69491 | 101851 |
| <i>Manufact/Cons</i> | 11 | 85438 | 86354 | 85671 | 17575 | 60781 | 101851 |
| <i>Marketing</i> | 8 | 93179 | * | 98818 | 11546 | 69491 | 101851 |
| <i>Mathematics</i> | 29 | 74559 | 74195 | 69491 | 15232 | 56947 | 102005 |
| <i>Mod Lang</i> | 12 | 75209 | 75498 | 76948 | 13016 | 53781 | 93750 |
| <i>Music</i> | 9 | 79722 | * | 76956 | 15307 | 61600 | 100548 |
| <i>Nursing</i> | 4 | 78905 | * | 77855 | 2813 | 76902 | 83009 |
| <i>Philosophy</i> | 8 | 89116 | * | 95427 | 15875 | 57500 | 101851 |
| <i>Phys Ed</i> | 13 | 73260 | 72432 | 66472 | 17073 | 53781 | 101851 |
| <i>Physics ES</i> | 12 | 82299 | 82796 | 87480 | 17476 | 57781 | 101851 |
| <i>Pol Sci</i> | 7 | 77692 | * | 74539 | 18916 | 54500 | 101851 |
| <i>Psychology</i> | 20 | 80563 | 80692 | 79727 | 17118 | 56947 | 101851 |
| <i>Reading Lang</i> | 8 | 77791 | * | 76394 | 13588 | 63718 | 101851 |
| <i>Social Work</i> | 3 | 66771 | * | 70778 | 9633 | 55781 | 73753 |
| <i>Sociology</i> | 9 | 68765 | * | 66276 | 11673 | 55947 | 91252 |
| <i>Spec Ed</i> | 6 | 69204 | * | 66140 | 12936 | 54782 | 92062 |
| <i>Teach Ed</i> | 16 | 75517 | 75173 | 77148 | 16596 | 54000 | 101851 |
| <i>Tech Engr</i> | 5 | 79700 | * | 81197 | 15564 | 63947 | 101851 |
| <i>Theatre</i> | 6 | 74945 | * | 71583 | 16855 | 53781 | 101851 |

Salary statistics for tenured and tenure-track faculty by rank is presented in Table 6³.

When focusing exclusively on salary by rank, as expected, Full Professors make more than Associate Professors or Assistant Professors (Full $M = \$91,792$, $n = 183$; Associate $M = \$74,356$, $n = 114$; Assistant $M = \$60,568$, $n = 100$).

Table 6: Salary statistics for tenured and tenure-track faculty by rank ($n = 417$).

| Rank | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|-------------------------------|-------|--------|--------------|--------|---------|---------|---------|
| <i>SUAssocLibrn</i> | 5 | 80692 | * | 85239 | 7684 | 67930 | 85671 |
| <i>SUAssocProfr(10months)</i> | 114 | 74356 | 74342 | 73004 | 7806 | 63290 | 85671 |
| <i>SUAsstLibrn</i> | 6 | 61831 | * | 62197 | 2776 | 58601 | 64718 |
| <i>SUAsstProfr(10Months)</i> | 100 | 60568 | 60473 | 59691 | 4636 | 51640 | 69491 |
| <i>SULibrarian</i> | 5 | 88771 | * | 87918 | 8462 | 78478 | 101851 |
| <i>SUProfr(10Months)</i> | 183 | 91792 | 92103 | 93194 | 9145 | 75346 | 101851 |
| <i>SUProfr(12Months)</i> | 4 | 112211 | * | 112309 | 8340 | 102005 | 122222 |

In Table 7, the salary statistics are presented by years in rank, where rank is categorized in increments of five. As expected, as the years in rank increase, so too does the mean salary.

Table 7: Salary statistics for tenured and tenure-track faculty by years in rank ($n = 425$).

| Years in Rank | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|---------------|-------|-------|--------------|--------|---------|---------|---------|
| 0 | 54 | 68064 | 67483 | 65101 | 10237 | 54500 | 95000 |
| 1-5 | 203 | 71728 | 71269 | 69491 | 12178 | 51640 | 101851 |
| 6-10 | 90 | 88541 | 88507 | 87356 | 11132 | 62061 | 122222 |
| 11-15 | 45 | 96019 | 96567 | 100548 | 8418 | 78951 | 101851 |
| 16-20 | 17 | 97092 | 98615 | 101851 | 9512 | 69491 | 101851 |
| 21-25 | 6 | 99155 | * | 101851 | 6606 | 85671 | 101851 |
| 26-30 | 6 | 81626 | * | 77581 | 17539 | 61401 | 101851 |
| 31-35 | 4 | 97806 | * | 101851 | 8090 | 85671 | 101851 |

³ Ranks with fewer than three observations were not included, such as Associate Counselor, Assistant Counselor, Counselor, Instructor, and CSU Professor.

Table 8 presents salary statistics by for tenured and tenure-track faculty members by school (Arts and Sciences, Business, Engineering and Technology, Education, Library/Counseling and Wellness) and gender⁴. When examining by division, female faculty members in Business and Engineering and Technology have higher salaries than males. Male faculty members have higher average salaries in Arts & Science, Education, and Library/Counseling & Wellness than females⁵.

Table 8: Salary statistics for tenured and tenure-track faculty by gender and division ($n = 424$).

| Division | Female | | Male | |
|--|--------|-------------|-------|-------------|
| | Count | Mean Salary | Count | Mean Salary |
| <i>Arts & Science</i> | 102 | 75411 | 158 | 79554 |
| <i>Business</i> | 18 | 90031 | 39 | 87852 |
| <i>Engineering/Technology</i> | 3 | 81631 | 16 | 78753 |
| <i>Education</i> | 37 | 76211 | 32 | 77419 |
| <i>Library/Counseling & Wellness</i> | 12 | 76675 | 7 | 77190 |

Table 9 presents the salary statistics for tenured and tenure-track faculty based on gender, years in rank, and department. Out of the 39 departments listed, 2 departments do not have any female faculty; and 2 departments do not have any male faculty.

⁴ Intercollegiate Athletics was excluded because there was only a single observation in this group and not enough variation to include in the analysis

⁵ We did not examine statistics for minority faculty by division because the number of minority faculty in some divisions was too small.

Table 9: Summary statistics for tenured and tenure-track faculty by department, rank, years in rank, and gender for 10 month Assistant, Associate, and Full Professors ($n = 399$).

| Department | Female | | | | | | Male | | | | | |
|---------------|------------------|-------|------|-------------|-------|------|------------------|-------|------|-------------|-------|------|
| | Mean Yrs in Rank | | | Mean Salary | | | Mean Yrs in Rank | | | Mean Salary | | |
| | Asst | Assoc | Full | Asst | Assoc | Full | Asst | Assoc | Full | Asst | Assoc | Full |
| Accounting | | | | | | | | | | | | |
| Anthropology | | | | | | | | | | | | |
| Art | | | | | | | | | | | | |
| Biology | | | | | | | | | | | | |
| Bio Sci | | | | | | | | | | | | |
| Chem/Bio Chem | | | | | | | | | | | | |
| Communication | | | | | | | | | | | | |
| Comp Elec Gph | | | | | | | | | | | | |
| Comp Sci | | | | | | | | | | | | |
| Cncl Fam Ther | | | | | | | | | | | | |
| Crim Jst | | | | | | | | | | | | |
| Design | | | | | | | | | | | | |
| Economics | | | | | | | | | | | | |
| Educ Ldrshp | | | | | | | | | | | | |
| Engineering | | | | | | | | | | | | |
| English | | | | | | | | | | | | |
| Finance | | | | | | | | | | | | |
| Geography | | | | | | | | | | | | |
| History | | | | | | | | | | | | |
| Mgmt/Organ | | | | | | | | | | | | |
| MIS | | | | | | | | | | | | |
| Manufact/Cons | | | | | | | | | | | | |
| Marketing | | | | | | | | | | | | |
| Mathematics | | | | | | | | | | | | |
| Mod Lang | | | | | | | | | | | | |
| Music | | | | | | | | | | | | |
| Nursing | | | | | | | | | | | | |
| Philosophy | | | | | | | | | | | | |
| Phys Ed | | | | | | | | | | | | |
| Physics ES | | | | | | | | | | | | |
| Pol Sci | | | | | | | | | | | | |
| Psychology | | | | | | | | | | | | |
| Reading Lang | | | | | | | | | | | | |
| Social Work | | | | | | | | | | | | |
| Sociology | | | | | | | | | | | | |
| Spec Ed | | | | | | | | | | | | |
| Teach Ed | | | | | | | | | | | | |
| Tech Engr | | | | | | | | | | | | |
| Theatre | | | | | | | | | | | | |

SUOAF-AFSCME Salary Data

Table 10 presents the summary statistics of the salary data for SUOAF-AFSCME during the Fall of 2008. The data reflect differences between the mean salaries for males and females ($p < 0.01$). A simple comparison of mean salaries shows an average salary of \$75,409 for males and \$66,943 for females.

Table 10: Salary statistics for SUOAF-AFSCME by gender ($n = 227$).

| Gender | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|---------------|-------|-------|--------------|--------|---------|---------|---------|
| <i>Female</i> | 134 | 66943 | 65984 | 65413 | 20703 | 32500 | 135300 |
| <i>Male</i> | 93 | 75409 | 75084 | 76423 | 19076 | 34947 | 119101 |

Table 11 presents a collection of basic descriptive statistics for SUOAF-AFSCME employees by minority status that do not take into account other important variables that may account for differences in salary by race. In addition, some of the counts across categories are quite small, e.g. there are no American Indians in SUOAF-AFSCME positions, however there are 175 Whites. Self-described Black SUOAF-AFSCME employees earned an average of \$67,081 as compared to Hispanic members, \$71,836, and White members \$70,778.

Table 11: Salary statistics for SUOAF-AFSCME by ethnicity ($n = 227$).

| Ethnicity | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|-----------------|-------|-------|--------------|--------|---------|---------|---------|
| <i>Amer Ind</i> | 0 | * | * | * | * | * | * |
| <i>Asian</i> | 8 | 68483 | * | 69392 | 18023 | 46864 | 87813 |
| <i>Black</i> | 26 | 67081 | 66298 | 67970 | 23633 | 33832 | 119101 |
| <i>Hispanic</i> | 16 | 71836 | 71828 | 73452 | 19452 | 36127 | 107663 |
| <i>NSPEC</i> | | | | | | | |
| <i>White</i> | 175 | 70778 | 70078 | 70297 | 20344 | 32500 | 135300 |

When looking at salary data, it is important to take into account the years employed at the university. As can be seen in Table 12, male SUOAF-AFSCME members have an average of 3.914 years in position as compared to female SUOAF-AFSCME members with an average of 3.254 years in rank ($p < 0.10$).

Table 12: Years in position for SUOAF-AFSCME by gender ($n = 227$).

| Gender | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|---------------|-------|-------|--------------|--------|---------|---------|---------|
| <i>Female</i> | 134 | 3.254 | 3.108 | 2.000 | 3.253 | 0.000 | 9.000 |
| <i>Male</i> | 93 | 3.914 | 3.843 | 3.000 | 2.970 | 0.000 | 9.000 |

Similarly, Table 13 presents the differences in the years in position for SUOAF-AFSCME members by minority status. Hispanic SUOAF-AFSCME members had the most years in position (4.063 years) as compared to Black SUOAF-AFSCME members (2.962 years), and White SUOAF-AFSCME members (3.617 years).

Table 13: Summary statistics for years in position for SUOAF-AFSCME employees by minority status ($n = 227$).

| Ethnicity | Count | Mean | Trimmed Mean | Median | St. Dev | Minimum | Maximum |
|-----------------|-------|-------|--------------|--------|---------|---------|---------|
| <i>Amer Ind</i> | 0 | * | * | * | * | * | * |
| <i>Asian</i> | 8 | 2.880 | * | 2.000 | 2.850 | 0.000 | 9.000 |
| <i>Black</i> | 26 | 2.962 | 2.833 | 1.500 | 3.000 | 0.000 | 9.000 |
| <i>Hispanic</i> | 16 | 4.063 | 4.000 | 3.000 | 3.130 | 0.000 | 9.000 |
| <i>NSPEC</i> | | | | | | | |
| <i>White</i> | 175 | 3.617 | 3.516 | 1.000 | 3.201 | 0.000 | 9.000 |

We were unable to classify SUOAF-AFSCME members salaries based on department as numerous departments have fewer than two employees (i.e. sponsored programs, university relations, purchasing, etc.).

Initial Salary Data

We were interested in examining whether wage differences by gender and ethnicity may begin at the time of hire. Once hired, salary increases for AAUP members are primarily determined by rank, years in rank, and current salary by a prescribed formula (see section 12.5 of the current AAUP agreement). Therefore, any differences in current faculty salaries are likely to exist at the time of hire with the initial salary offered to new hires (since increases in salaries for faculty are primarily determined by formula)⁶. However, for SUOAF-AFSCME employees, salaries are determined by formula but also may include merit increases (see section 29.4 of the current SUOAF-AFSCME agreement).

Background

We were interested in describing whether there is a significant wage differential between males and females, and between Minorities and non-Minorities, for new hires who began at the university during the years 2004-2008. We decided to use the Blinder-Oaxaca decomposition (Blinder, 1973; Oaxaca, 1973), a technique that has been used in labor market research as a way to study wage differences. The Blinder-Oaxaca decomposition is a statistical technique that can be used to study how a response variable (which for this study is starting salary) differs by groups. The main idea behind the Blinder-Oaxaca decomposition is to describe a differential (such as a difference in wages) that is based on explained and unexplained differences between two groups. This can be done by dividing the differential between the two groups into a part that can be explained by the observed group differences,

⁶ The initial salary analysis does not take into account market adjustments that may be awarded after initial hire.

and a part that is left unexplained. The literature claims that the unexplained portion can be used as a measure of unobserved group differences and/or discrimination (i.e. Neumark, 1988).

Data

We first considered wage differences by gender for all tenured and tenure-track new hires. A total of $n = 111$ new tenure-track faculty were hired between 2004-2008. Variables used for this analysis and the coding scheme is described in Table 14.

Table 14: Variable descriptions and coding schemes for faculty initial wage data ($n = 111$).

| Variable Name | Description | Notes/Coding |
|---------------------------|---|--|
| Predictor Variable | | |
| <i>Ln(wages)</i> | Natural logarithm of the annual wages (in dollars). | Transformation is used so that the model approximates a constant percentage effect (Wooldridge, 2003). |
| Control Variables | | |
| <i>Year of Hire</i> | Binary variable which indicates the year hired. | $YR0x = \begin{cases} 1; & \text{hired in year } x \\ 0; & \text{otherwise} \end{cases}$ $4 \leq x \leq 8$ |
| <i>Rank</i> | Binary variable which indicates the rank at hire. | <i>ASST</i> = 1; <i>hired as assistant</i> <i>ASSOC</i> = 1; <i>hired as associate</i> <i>PROF</i> = 1; <i>hired full rank</i> |
| <i>Age at Hire</i> | Continuous variable which represents the age at hire. | Minimum value of 26. Maximum value of 60. |
| <i>School</i> | Binary variable which represents the school of hire. | <i>AS</i> = 1; <i>Arts & Science</i> <i>BUSINESS</i> = 1; <i>Business</i> <i>ENGRTECH</i> = 1; <i>Engineering and Technology</i> <i>EDUC</i> = 1; <i>Education</i> <i>LCW</i> = 1; <i>Library/Counseling & Wellnes</i> |
| Group Variables | | |
| <i>FEMALE</i> | Binary variable which represents gender. | 1 = Female 0 = Male |
| <i>MINORITY</i> | Binary variable which represents race/ethnicity. | 1 = Non-White 0 = White |

Descriptive summaries of the continuous and binary variables are given in Table 15 and in Table 16 respectively. The control variables considered in this study represent the year of hire, rank at hire, age at hire, and the school of hire.

Table 15: Mean and standard deviation for the continuous variables wages and age at hire for tenured and tenure-track faculty ($n = 111$).

| Variable Name | Mean | Standard deviation |
|----------------------|-------------|---------------------------|
| <i>Yearly Wages</i> | 60127.52 | 11002.19 |
| <i>Age at Hire</i> | 41.41 | 9.42 |

Table 16: Percentages for binary variables for tenured and tenure-track faculty hired as Assistant, Associate, or Full Professors⁷.

| Variable Name | Percentage |
|--|-------------------|
| <i>Year of Hire 04</i> | 21.62 |
| <i>Year of Hire 05</i> | 18.92 |
| <i>Year of Hire 06</i> | 18.92 |
| <i>Year of Hire 07</i> | 20.72 |
| <i>Year of Hire 08</i> | 19.82 |
| <i>Assistant</i> | 80.91 |
| <i>Associate</i> | 15.45 |
| <i>Professor</i> | 3.64 |
| <i>Arts & Science</i> | 49.55 |
| <i>Business</i> | 20.72 |
| <i>Engineering & Technology</i> | 6.30 |
| <i>Education</i> | 18.02 |
| <i>Library/Counseling & Wellness</i> | 5.41 |
| <i>Female</i> | 45.05 |
| <i>Male</i> | 54.95 |
| <i>Minority</i> ⁸ | 19.44 |
| <i>White</i> | 80.56 |

⁷ One individual was hired at the instructor level.

⁸ Three observations were classified as non-specified, and thus were missing information on minority status.

Analysis

The initial analysis consisted of using a Blinder-Oaxaca decomposition to partition the mean difference in wages based on gender for tenured and tenure-track new faculty. This is done by first using linear regression to estimate the following generalized ln-wage equation⁹ for both males and females:

$$\ln(\text{wage}) = \beta_0 + \beta_1 \text{YEAR} + \beta_2 \text{RANK} + \beta_3 \text{AGE} + \beta_4 \text{SCHOOL} + \varepsilon$$

And by using linear regression to estimate the following pooled model:

$$\ln(\text{wage}) = \beta_0 + \beta_1 \text{YEAR} + \beta_2 \text{RANK} + \beta_3 \text{AGE} + \beta_4 \text{SCHOOL} + \beta_5 \text{GENDER} + \varepsilon$$

Results

Table 17 gives the estimated coefficients and standard errors for the separate ln-wage models for males and females as well as the pooled model for new tenure-track faculty hires. We then used the Blinder-Oaxaca technique to estimate the wage differential between males and females of new faculty, and to attribute the difference in wages based on explained (observed) characteristics and unexplained (unobserved) characteristics. These results are summarized in Table 18. From Table 18, the mean of the ln(wages) is 11.02 for males and 10.95 for females. This gives a wage differential of 0.069 (logarithmic scale). The exponential of the results given in the last column of Table 18 suggests that the (geometric) mean yearly wages for males is \$ 61,160.46 and \$ 57,057.39 for females. This amounts to a total wage difference of

⁹ For simplicity, the generalized ln-wage equation does not explicitly include each of the individual binary predictors that were used in the model. Instead a single variable was used to represent the polytomous predictors.

approximately 7.19%. From the decomposition portion of Table 18, we can infer that if females had the same characteristics as do males (i.e. if females had the same age, rank at hire, school of hire, etc.), then this would increase the wages of females by 4.78%.

Thus 4.78% of the 7.19% wage differential is attributed to differences in explained characteristics between males and females. This leaves a wage gap of approximately 2.30% that still remains unexplained.

Table 17: Estimated coefficients and standard errors of the mean predictions for males, females, and the pooled model (dependent variable is the natural logarithm of yearly wages) for faculty ($n = 110$).

| <i>Variable</i> | <i>Males</i> | <i>Females</i> | <i>Pooled</i> |
|---------------------------|------------------------|------------------------|------------------------|
| yr04 | -0.1209*** [0.0243] | -0.1629*** [0.0266] | -0.1443*** [0.0180] |
| yr05 | -0.0822** [0.0235] | -0.0620* [0.0294] | -0.0827*** [0.0187] |
| yr06 | -0.0748** [0.0237] | -0.0330 [0.0285] | -0.0603** [0.0187] |
| yr07 | -0.0274 [0.0249] | -0.0226 [0.0260] | -0.0335~ [0.0183] |
| asst | -0.3725*** [.0434] | -0.2427*** [0.0635] | -0.3403*** [0.0365] |
| assoc | -0.1472** [0.0418] | 0.0328 [0.0588] | -0.0904* [0.0348] |
| ageathire | 0.0014 [0.0011] | -0.0004 [0.0010] | 0.0012 [0.0008] |
| as | -0.0665~ [0.0368] | -0.0482 [0.0329] | -0.0409 [0.0255] |
| business | 0.0520 [0.0410] | 0.0780~ [0.0424] | 0.0727* [0.0299] |
| engrtech | 0.0442 [0.0444] | 0.0346 [0.0633] | 0.0725* [0.0338] |
| educ | -0.0596 [0.0418] | 0.0305 [0.0349] | 0.0030 [0.0283] |
| _cons | 11.3561*** [0.0799] | 11.2395*** [0.0917] | 11.3074*** [0.0599] |
| <i>Gender</i> | ---- | ---- | -0.0227~ [0.0121] |
| <i>R-squared</i> | 0.9027 | 0.9182 | 0.8900 |
| <i>Adjusted R-Squared</i> | 0.8809 | 0.8939 | 0.8764 |
| <i>n</i> | 61 | 49 | 110 |

Standard errors are in brackets.

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 18: Blinder-Oaxaca decomposition for faculty by gender.

| <i>Differential</i> | <i>Coefficient</i> [standard error] | <i>Exponentiated</i> <i>Results</i> |
|-----------------------------|--|--|
| <i>Males</i> | 11.0213*** [0.0220] | 61160.46*** [1348.526] |
| <i>Females</i> | 10.9518*** [0.0224] | 57057.39*** [1275.899] |
| <i>Difference</i> | 0.0694* [0.0314] | 1.0719* [0.0337] |
| <i>Decomposition</i> | | |
| <i>Explained</i> | 0.0467 [0.0298] | 1.0478 [0.0312] |
| <i>Unexplained</i> | 0.0227* [0.0116] | 1.0230* [0.0118] |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

A similar analysis was conducted comparing the salary structure for tenured and tenure-track faculty by minority status. We were only able to look at the difference between Whites and non-Whites because the Blinder-Oaxaca decomposition can only decompose the wage difference between two groups. Furthermore, the sample across some of the different racial groups was too small to consider a more refined analysis. The results for a Blinder-Oaxaca decomposition by minority status are presented in Table 19 and Table 20. There is no wage difference between White and Minorities hired for tenured or tenure-track faculty positions.

Table 19: Estimated coefficients and standard errors of the mean predictions for Whites, Minorities, and the pooled model (dependent variable is the natural logarithm of yearly wages) for faculty ($n = 107$).

| Variable | Whites | Minorities | Pooled |
|---------------------------|------------------------|------------------------|------------------------|
| yr04 | -0.1481*** [0.0205] | -0.1294~ [0.0681] | -0.1535*** [0.0189] |
| yr05 | -0.0605* [0.0228] | -0.1325** [0.0395] | -0.0834*** [0.0190] |
| yr06 | -0.0571* [0.0223] | -.0874~ [0.0402] | -0.0600** [0.0191] |
| yr07 | -0.0401~ [0.0203] | -0.0343 [0.0599] | -0.0438* [0.0188] |
| asst | -0.3244*** [0.0438] | -0.4382*** [0.0836] | -0.3511*** [0.0379] |
| assoc | -0.0630 [0.0411] | -0.2251* [0.0773] | -0.0956** [0.0355] |
| ageathire | 0.0005 [0.0009] | 0.0010 [0.0019] | 0.0009 [.0008] |
| as | -0.0178 [0.0310] | -0.1019~ [0.0482] | -0.0415 [0.0260] |
| business | 0.1098** [0.0357] | 0.0058 [0.0637] | 0.0717* [0.0306] |
| engrtech | 0.0922* [0.0396] | NA | 0.0699~ [0.0362] |
| educ | 0.0113 [0.0334] | 0.0087 [0.0690] | -0.0029 [.0290] |
| _cons | 11.2842*** [0.0724] | 11.4720*** [0.1521] | 11.3246*** [0.0627] |
| Minority | ---- | ---- | -0.0089 [0.0157] |
| <i>R-squared</i> | 0.8941 | 0.9435 | 0.8885 |
| <i>Adjusted R-Squared</i> | 0.8784 | 0.8870 | 0.8742 |
| <i>n</i> | 86 | 21 | 107 |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 20: Blinder-Oaxaca decomposition for faculty by Minority.

| <i>Differential</i> | <i>Coefficient</i> [standard error] | <i>Exponentiated</i> <i>Results</i> |
|-----------------------------|--|--|
| <i>Whites</i> | 10.9854*** [0.0181] | 59004.71*** [1068.002] |
| <i>Minorities</i> | 11.0131*** [0.0389] | 60660.70*** [2357.852] |
| <i>Difference</i> | -0.0277 [0.0429] | 0.9727 [0.0417] |
| <i>Decomposition</i> | | |
| <i>Explained</i> | -0.0366 [0.0414] | 0.9641 [0.0399] |
| <i>Unexplained</i> | 0.0089 [0.0140] | 1.0090 [.0141] |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 21 presents the variable descriptions and coding scheme used for SUOAF-AFSCME personal, and Table 22 and Table 23 present the descriptive summaries for the variables used. Table 24 and Table 25 present the Blinder-Oaxaca decomposition for SUOAF-AFSCME by gender, and there was no wage difference based on gender.

Table 21: Variable descriptions and coding schemes for SUOAF-AFSCME initial wage data
($n = 55$).

| Variable Name | Description | Notes/Coding |
|---------------------------|---|--|
| Predictor Variable | | |
| <i>Ln(wages)</i> | Natural logarithm of the annual wages (in dollars). | Transformation is used so that the model approximates a constant percentage effect (Wooldridge, 2003). |
| Control Variables | | |
| <i>Year of Hire</i> | Binary variable which indicates the year hired. | $YR0x = \begin{cases} 1; & \text{hired in year } x \\ 0; & \text{otherwise} \end{cases}$ $4 \leq x \leq 8$ |
| <i>Grade</i> | Binary variable which indicates the salary grade at hire. | $GRADE0x = \begin{cases} 1; & \text{hired at grade } x \\ 0; & \text{otherwise} \end{cases}$ $2 \leq x \leq 7$ |
| <i>Age at Hire</i> | Continuous variable which represents the age at hire. | Minimum value of 22. Maximum value of 60. |
| Group Variables | | |
| <i>FEMALE</i> | Binary variable which represents gender. | 1 = Female 0 = Male |
| <i>MINORITY</i> | Binary variable which represents race/ethnicity. | 1 = Non-White 0 = White |

Table 22: Mean and standard deviation for the continuous variables wages and age at hire for SUOAF-AFSCME employees ($n = 55$).

| Variable Name | Mean | Standard deviation |
|----------------------|-------------|---------------------------|
| <i>Yearly Wages</i> | 54534.45 | 18040.26 |
| <i>Age at Hire</i> | 39.73 | 12.05 |

Table 23: Percentages for binary variables for SUOAF-AFSCME employees.

| Variable Name | Percentage |
|------------------------|-------------------|
| <i>Year of Hire 04</i> | 7.27 |
| <i>Year of Hire 05</i> | 10.91 |
| <i>Year of Hire 06</i> | 21.82 |
| <i>Year of Hire 07</i> | 40.00 |
| <i>Year of Hire 08</i> | 20.00 |
| <i>Grade 2</i> | 25.45 |
| <i>Grade 3</i> | 47.27 |
| <i>Grade 4</i> | 12.73 |
| <i>Grade 5</i> | 3.64 |
| <i>Grade 6</i> | 3.64 |
| <i>Grade 7</i> | 7.27 |
| <i>Female</i> | 61.82 |
| <i>Male</i> | 38.18 |
| <i>Minority</i> | 23.08 |
| <i>White</i> | 76.92 |

Table 24: Estimated coefficients and standard errors of the mean predictions for males, females, and the pooled model (dependent variable is the natural logarithm of yearly wages) for SUOAF-AFSCME employees ($n = 55$).

| <i>Variable</i> | <i>Males</i> | <i>Females</i> | <i>Pooled</i> |
|---------------------------|------------------------|------------------------|------------------------|
| yr04 | -0.1116 [0.1926] | 0.0247 [0.1545] | -0.0673 [0.1034] |
| yr05 | -0.0794 [0.1267] | -0.0735 [0.1429] | -0.0499 [0.0879] |
| yr06 | 0.0889 [0.1241] | -0.0804 [0.1078] | -0.0112 [0.0727] |
| yr07 | 0.0284 [0.1141] | -0.1101 [0.1107] | -0.0052 [0.0714] |
| Grade 2 | -0.9004*** [0.1300] | -0.8752*** [0.1901] | -0.8946*** [0.1055] |
| Grade 3 | -0.6316** [0.1332] | -0.4934* [0.1924] | -0.5735*** [0.1053] |
| Grade 4 | -0.2559~ [0.1239] | -0.2199 [0.2568] | -0.2752* [0.1102] |
| Grade 5 | -0.2816 [0.1795] | -0.4094 [0.2879] | -0.2801~ [0.1527] |
| Grade 6 | ---- | 0.0851 [0.2447] | 0.0075 [0.1610] |
| Age | 0.0000 [0.0034] | 0.0025 [0.0039] | 0.0019 [0.0023] |
| Gender | --- | --- | -0.0078 [0.0510] |
| _cons | 11.4118*** [0.1934] | 11.3108*** [0.2659] | 11.3626*** [0.1564] |
| <i>R-squared</i> | 0.8925 | 0.7793 | 0.8088 |
| <i>Adjusted R-Squared</i> | 0.8045 | 0.6834 | 0.7599 |
| <i>n</i> | 21 | 34 | 55 |

Standard errors are in brackets.

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 25: Blinder-Oaxaca decomposition for SUOAF-AFSCME by gender.

| <i>Differential</i> | <i>Coefficient</i> [standard error] | <i>Exponentiated</i> <i>Results</i> |
|-----------------------------|--|--|
| <i>Males</i> | 10.9303*** [0.0671] | 55844.99*** [3748.372] |
| <i>Females</i> | 10.8088*** [0.0560] | 49451.54*** [2770.134] |
| <i>Difference</i> | 0.1216 [0.0874] | 1.1292 [0.0987] |
| <i>Decomposition</i> | | |
| <i>Explained</i> | 0.1138 [0.0812] | 1.1205 [0.0910] |
| <i>Unexplained</i> | 0.0078 [0.0429] | 1.0078 [0.0433] |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 26 and Table 27 present the Blinder-Oaxaca decomposition for starting wages of SUOAF-AFSCME members by minority status. Again, no differences in initial salaries were found.

Table 26: Estimated coefficients and standard errors for the mean predictions for Whites, Minorities, and the pooled model (dependent variable is the natural logarithm of yearly wages) for SUOAF-AFSCME ($n = 52$).

| Variable | Whites | Minorities | Pooled |
|---------------------------|------------------------|------------------------|------------------------|
| yr04 | -0.0390 [0.1153] | ---- | -0.0719 [0.1043] |
| yr05 | 0.0879 [0.1252] | -0.2430 [0.1948] | 0.0245 [0.0956] |
| yr06 | 0.0861 [0.0969] | -0.2549 [0.1606] | 0.0147 [0.0785] |
| yr07 | 0.0151 [0.0866] | -0.2799 [0.1710] | -0.0355 [0.0720] |
| Grade 2 | -0.9111*** [0.1560] | -0.7871* [0.2282] | -0.9136*** [0.1197] |
| Grade 3 | -0.6337*** [0.1585] | -0.4620~ [0.1948] | -0.6111*** [0.1198] |
| Grade 4 | -0.3284* [0.1544] | -0.1355 [0.2793] | -0.3226* [0.1220] |
| Grade 5 | -0.3459~ [0.1985] | ---- | -0.3209~ [0.1663] |
| Grade 6 | -0.1127 [0.2424] | 0.2129 [0.2498] | -0.0182 [0.1677] |
| Age | 0.0013 [0.0027] | 0.0038 [0.0065] | 0.0017 [0.0023] |
| Minority | ---- | ---- | -0.0502 [0.0544] |
| _cons | 11.3842*** [0.2001] | 11.3354*** [0.2944] | 11.3944*** [0.1514] |
| <i>R-squared</i> | 0.7700 | 0.9589 | 0.7998 |
| <i>Adjusted R-Squared</i> | 0.6907 | 0.8495 | 0.7448 |
| <i>n</i> | 40 | 12 | 52 |

Standard errors are in brackets.

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 27: Blinder-Oaxaca decomposition for SUOAF-AFSCME by Minority.

| <i>Differential</i> | <i>Coefficient</i> [standard error] | <i>Exponentiated</i> <i>Results</i> |
|-----------------------------|--|--|
| <i>Whites</i> | 10.8548*** [0.0479] | 51781.22*** [2479.362] |
| <i>Minorities</i> | 10.8676*** [0.1003] | 52450.60*** [5258.914] |
| <i>Difference</i> | -0.0128 [0.1111] | 0.9872 [0.1097] |
| <i>Decomposition</i> | | |
| <i>Explained</i> | -0.0630 [0.0965] | 0.9389 [0.0906] |
| <i>Unexplained</i> | .0502 [0.0414] | 1.0515 [0.0436] |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Section V: Faculty Tenure and Promotion Decisions by Gender and Minority Status

In 2006, following President Miller's promotion and tenure decisions, the Committee on the Concerns of Women expressed a concern about possible gender discrimination. As a result, one of their members did an analysis on the tenure and promotion decisions for six years previous to 2006 and including 2006. It was concluded that there "was an indication of sex discrimination in the past 6 years taken together, but that apparent discrimination seems to be due almost entirely to data from the current year, as the pattern is almost eliminated by subtraction of this year's data."

In analyzing data for tenure and promotion applications and further expanding upon it through 2008, we used one-sided Fisher's exact tests to test whether promotion and tenure decisions depend on gender and race. We chose to use Fisher's exact test since the sample sizes were small. For these analyses, the data was broken down by year, type of promotion or tenure, (e.g. from assistant to associate and associate to full, and tenure), and by promotion and tenure decision makers (DEC, Dean, Promotion and Tenure Committee, and Final decision maker). This breakdown ensured that all the observations are independent and mutually exclusive. Table 28 presents the number of positive and negative tenure decisions between 2002 and 2008 that are based on year, gender, and each decision maker¹⁰. We ran a total of 24 different 2 X 2 comparisons for each year across gender and across each decision maker. However, we combined all the frequency data into a single table for simplicity. The only finding occurred during the 2006-2007 year, where the final decision maker and the deans supported more women for tenure as compared to men.

¹⁰ We were unable to partition these counts based on sixth-year tenure applications versus early tenure applications.

Table 28: Number of tenure decisions by DEC, Dean, Promotion and Tenure Committee, and Final Decision Maker, by year and by gender ($n = 116$).

| Year | Male | | | | | | | | Female | | | | | | | | |
|-----------|---------------------|---|----|---|------|---|-----|---|--------|---|----|---|------|---|-----|---|--|
| | Final ¹¹ | | PT | | Dean | | DEC | | Final | | PT | | Dean | | DEC | | |
| | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | |
| 2002-2003 | | | | | | | | | | | | | | | | | |
| 2003-2004 | | | | | | | | | | | | | | | | | |
| 2004-2005 | | | | | | | | | | | | | | | | | |
| 2005-2006 | | | | | | | | | | | | | | | | | |
| 2006-2007 | ~ | | | | ~ | | | | | | | | | | | | |
| 2007-2008 | | | | | | | | | | | | | | | | | |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

A similar analysis was completed for tenure decisions between 2002 and 2008 based on minority status. These results are provided in Table 29. We found that there does not appear to be a difference in positive or negative tenure decisions based on minority status.

Table 29: Number of tenure decisions by DEC, Dean, Promotion and Tenure Committee, and Final Decision Maker, by year and by minority status¹² ($n = 111$).

| Year | White | | | | | | | | Minority | | | | | | | | |
|-----------|-------|---|----|---|------|---|-----|---|----------|---|----|---|------|---|-----|---|--|
| | Final | | PT | | Dean | | DEC | | Final | | PT | | Dean | | DEC | | |
| | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | |
| 2002-2003 | | | | | | | | | | | | | | | | | |
| 2003-2004 | | | | | | | | | | | | | | | | | |
| 2004-2005 | | | | | | | | | | | | | | | | | |
| 2005-2006 | | | | | | | | | | | | | | | | | |
| 2006-2007 | | | | | | | | | | | | | | | | | |
| 2007-2008 | | | | | | | | | | | | | | | | | |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Tables 30 and 31 present a similar set of 2 X 2 comparisons for faculty promotions based on gender¹³. Notice in Table 30 that for the 2004-2005 academic year, the final decision maker

¹¹ Final decision maker represents either the President (2002-2007) or the Provost (2007-2008).

¹² There were five tenure applicants with no specified measure of minority status.

supported more women for promotion from Assistant to Associate professor than men. Also notice in Table 31 that during the 2003-2004 and 2005-2006 academic years, the final decision maker supported more men for promotion from Associate to Full professor than women. Also, notice in Table 31 that during the 2007-2008 academic year, the decision maker and promotion and tenure committee supported more women for promotion from Associate to Full professor than men.

Table 30: Number of promotion decisions from Assistant to Associate Professor by DEC, Dean, Promotion and Tenure Committee, and Final Decision Maker, by year and by gender ($n = 89$).

| <i>Year</i> | <i>Male</i> | | | | | | | | <i>Female</i> | | | | | | | | |
|-------------|--------------|----------|-----------|----------|-------------|----------|------------|----------|---------------|----------|-----------|----------|-------------|----------|------------|----------|--|
| | Final | | PT | | Dean | | DEC | | Final | | PT | | Dean | | DEC | | |
| | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | |
| 2002-2003 | | | | | | | | | | | | | | | | | |
| 2003-2004 | | | | | | | | | | | | | | | | | |
| 2004-2005 | ~ | | | | | | | | | | | | | | | | |
| 2005-2006 | | | | | | | | | | | | | | | | | |
| 2006-2007 | | | | | | | | | | | | | | | | | |
| 2007-2008 | | | | | | | | | | | | | | | | | |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

¹³ We were unable to distinguish candidates applying for early promotion.

Table 31: Number of promotion decisions from Associate to Full Professor by DEC, Dean, Promotion and Tenure Committee, and Final Decision Maker by year and by gender ($n = 117$).

| Year | Male | | | | | | | | Female | | | | | | | |
|-------------------------|-------|---|----|---|------|---|-----|---|--------|---|----|---|------|---|-----|---|
| | Final | | PT | | Dean | | DEC | | Final | | PT | | Dean | | DEC | |
| | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y | N |
| 2002-2003 | | | | | | | | | | | | | | | | |
| 2003-2004 | ~ | | | | | | | | | | | | | | | |
| 2004-2005 | | | | | | | | | | | | | | | | |
| 2005-2006 | ** | | | | | | | | | | | | | | | |
| 2006-2007 ¹⁴ | | | | | | | | | | | | | | | | |
| 2007-2008 | * | | * | | | | | | | | | | | | | |

~ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The number of promotion decisions for minority faculty from Assistant to Associate Professor and from Associate to Full Professor are presented in Table 32 and Table 33 respectively. There was no notable difference in positive or negative promotion decisions for Assistant to Associate Professor based on ethnicity. However, as presented in Table 33, during the 2007-2008 academic year, the final decision maker supported more Whites for promotion from Associate to Full Professor as compared to Minorities¹⁵.

¹⁴ One female withdrew her application before the Promotion & Tenure committee made a decision.

¹⁵ Because there were three observations with no minority status specified, this finding could be different if such observations could be included (note that with small sample analyses, adding or removing even a single observation may impact any noticeable findings). Coaches were not included in the P&T analysis as there was only one female coach, and therefore not enough variation.

Table 32: Number of promotion decisions from Assistant to Associate Professor by DEC, Dean, Promotion and Tenure Committee, and Final Decision Maker, by year and by ethnicity¹⁶ (*n* = 87).

| <i>Year</i> | <i>White</i> | | | | | | | | <i>Minority</i> | | | | | | | | |
|-------------|--------------|----------|-----------|----------|-------------|----------|------------|----------|-----------------|----------|-----------|----------|-------------|----------|------------|----------|--|
| | <i>Final</i> | | <i>PT</i> | | <i>Dean</i> | | <i>DEC</i> | | <i>Final</i> | | <i>PT</i> | | <i>Dean</i> | | <i>DEC</i> | | |
| | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | |
| 2002-2003 | | | | | | | | | | | | | | | | | |
| 2003-2004 | | | | | | | | | | | | | | | | | |
| 2004-2005 | | | | | | | | | | | | | | | | | |
| 2005-2006 | | | | | | | | | | | | | | | | | |
| 2006-2007 | | | | | | | | | | | | | | | | | |
| 2007-2008 | | | | | | | | | | | | | | | | | |

~ *p* < 0.10; * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001

Table 33: Number of promotion decisions from Associate Professor to Full Professor by DEC, Dean, Promotion and Tenure Committee, and Final Decision Maker, by year and by ethnicity¹⁷ (*n* = 114).

| <i>Year</i> | <i>White</i> | | | | | | | | <i>Minority</i> | | | | | | | | |
|-------------|--------------|----------|-----------|----------|-------------|----------|------------|----------|-----------------|----------|-----------|----------|-------------|----------|------------|----------|--|
| | <i>Final</i> | | <i>PT</i> | | <i>Dean</i> | | <i>DEC</i> | | <i>Final</i> | | <i>PT</i> | | <i>Dean</i> | | <i>DEC</i> | | |
| | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | <i>Y</i> | <i>N</i> | |
| 2002-2003 | | | | | | | | | | | | | | | | | |
| 2003-2004 | | | | | | | | | | | | | | | | | |
| 2004-2005 | | | | | | | | | | | | | | | | | |
| 2005-2006 | | | | | | | | | | | | | | | | | |
| 2006-2007 | | | | | | | | | | | | | | | | | |
| 2007-2008 | ~ | | | | | | | | | | | | | | | | |

~ *p* < 0.10; * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001

¹⁶ Two observations did not have minority status specified.

¹⁷ Three observations did not specify minority status.

Section VI: Applicant Pool

We also were interested if there was a difference between male and female applicants who made it to the finalist pool, and also whether there was a difference between minority and White applicants who made it to the finalist pool. Candidates who were judged to be minimally qualified or not qualified were placed in the non-finalist pool. Please note that all findings in this section should be approached with reservation, as there was no way to determine if there were applicants who applied to the university on more than one occasion and would be counted more than once in the analysis. Thus, the assumption of the observations being independent is not assured. Furthermore, many observations were missing self-reported measures of gender and/or ethnicity. Table 34 presents the frequencies of self-identified male and female applicants for faculty positions who made it to the finalist pool as compared to those who did not.

Table 34: Frequencies of self-identified male and female applicants for faculty positions who made it to the non-finalist pool (minimally qualified or not qualified) or the finalist pool.

| | <i>Females</i> | <i>Males</i> | Total |
|--------------------------|----------------|--------------|--------------|
| <i>Non-finalist Pool</i> | 1164 | 2108 | 3272 |
| <i>Finalist Pool</i> | 339 | 497 | 836 |
| Total | 1503 | 2605 | 4108 |

A two-sample difference between proportions test found a difference in the proportion of males applying for faculty positions (19.08%) and who made it to the finalist pool as compared to the proportion of females applying for faculty positions (22.55%) and who made it to the finalist pool ($p = 0.008$). Therefore, a higher percentage of females make it to the finalist

pool¹⁸. Table 35 presents a similar analysis for minority and White applicants for faculty positions, and the results suggest that a higher percentage of Whites make it to the finalist pool¹⁹.

Table 35: Frequencies of self-identified Minority and White applicants for faculty positions who made it to the non-finalist pool (minimally qualified or not qualified) or the finalist pool.

| | <i>Minority</i> | <i>White</i> | Total |
|---------------------------------|-----------------|--------------|--------------|
| <i>Non-finalist Pool</i> | 537 | 220 | 757 |
| <i>Finalist Pool</i> | 147 | 161 | 308 |
| Total | 684 | 381 | 1065 |

A two-sample difference between proportions test found that there is a difference in the proportion of Whites applying for faculty positions (42.26%) and who made it to the finalist pool as compared to the proportion of Minorities applying for faculty positions (21.49%) and who made it to the finalist pool ($p = 0.000$). Therefore, a higher percentage of Whites make it to the finalist pool.

We wondered if there might be a difference in gender for the finalist pool for SUOAF-AFSCME positions. Table 36 shows the frequencies of SUOAF-AFSCME males and females who made it to the finalist pool as compared with those who did not.

¹⁸ This finding is questionable because self-reported gender status were missing on 1,045 (20.28%) of the faculty applicants.

¹⁹ This finding is questionable because ethnicity measures were missing on 4,088 (79.33%) of the faculty applicants.

Table 36: Frequencies of male and female applicants for SUOAF-AFSCME positions who made it to the non-finalist pool (minimally qualified or not qualified) or the finalist pool.

| | <i>Females</i> | <i>Males</i> | Total |
|---------------------------------|----------------|--------------|--------------|
| <i>Non-finalist Pool</i> | 2856 | 2349 | 5205 |
| <i>Finalist Pool</i> | 448 | 512 | 960 |
| Total | 3304 | 2861 | 6165 |

A two-sample difference between proportion test found that there is a difference in the proportion of males applying for SUOAF-AFSCME positions (17.90%) who made it to the finalist pool as compared to the proportion of females applying for SUOAF-AFSCME positions (13.56%) who made it to the finalist pool ($p = 0.000$). Therefore, a larger percentage of males make it to the finalist pool. The results from a similar analysis for minority and White applicants applying for administrative positions is presented in Table 37.

Table 37: Frequencies of minority and White applicants for SUOAF-AFSCME positions who made it to the non-finalist pool (minimally qualified or not qualified) or the finalist pool.

| | <i>Minority</i> | <i>White</i> | Total |
|---------------------------------|-----------------|--------------|--------------|
| <i>Non-finalist Pool</i> | 125 | 93 | 218 |
| <i>Finalist Pool</i> | 110 | 232 | 342 |
| Total | 235 | 325 | 560 |

A two-sample difference between proportions test found a difference in the proportion of Whites applying for SUOAF-AFSCME positions (71.38%) and who made it to the finalist pool as compared to the proportion of Minorities applying for faculty positions (46.81%) and who made

it to the finalist pool ($p = 0.000$). Therefore, a higher percentage of Whites made it to the finalist pool²⁰.

Table 38 presents the frequencies of male and female applicants for faculty and SUOAF-AFSCME positions who were hired or rejected the offer, versus not being hired.

Table 38: Frequencies of being hired or rejecting the offer, or not being hired, for male and female applicants for both faculty and SUOAF-AFSCME positions.

| | <i>Females</i> | <i>Males</i> | Total |
|------------------------------|----------------------|--------------------------|--------------|
| <i>Hired or Reject Offer</i> | 117 | 137 | 1542 |
| <i>Not Hired</i> | 670 | 872 | 254 |
| Total | 787 | 1009 | 1796 |
| | $\chi^2(1) = 0.6048$ | $p\text{-value} = 0.437$ | |

There is no difference amongst males and females on being hired or rejecting the offer, versus not being hired.

A similar analysis for White and minority candidates applying for faculty and SUOAF-AFSCME positions is presented in Table 39.

Table 39: Frequencies of being hired or rejecting the offer, or not being hired, for White and Minority applicants for faculty and SUOAF-AFSCME positions.

| | <i>Minorities</i> | <i>Whites</i> | Total |
|------------------------------|-----------------------|--------------------------|--------------|
| <i>Hired or Reject Offer</i> | 52 | 135 | 187 |
| <i>Not Hired</i> | 205 | 258 | 463 |
| Total | 257 | 393 | 650 |
| | $\chi^2(1) = 15.1127$ | $p\text{-value} = 0.000$ | |

²⁰ This finding is questionable since ethnicity measures were missing on 5,982 (91.44%) of the SUOAF-AFSCME applicants.

More White finalists are hired or reject the offer for faculty and SUOAF-AFSCME positions ($n = 135$) as compared to Minority finalists ($n = 52$).

We also wondered whether or not there might be differences based on gender for faculty within the finalist pool. Table 40 presents the frequencies of male and female applicants for faculty positions with finalist status.

Table 40: Frequencies of male and female applicants for faculty positions who were hired or who rejected the offer, versus not being hired.

| | <i>Females</i> | <i>Males</i> | Total |
|------------------------------|----------------------|--------------------------|--------------|
| <i>Hired or Reject Offer</i> | 60 | 78 | 138 |
| <i>Not Hired</i> | 279 | 419 | 698 |
| Total | 339 | 497 | 836 |
| | $\chi^2(1) = 0.5878$ | $p\text{-value} = 0.443$ | |

There is no difference in the being hired or rejecting an offer for a faculty position amongst males and females. The results for a similar analysis examining Minority and White applicants are presented in Table 41.

Table 41: Frequencies of Minority and White applicants for faculty positions who were hired or who rejected the offer, versus not being hired.

| | <i>Minority</i> | <i>White</i> | Total |
|------------------------------|-----------------------|--------------------------|--------------|
| <i>Hired or Reject Offer</i> | 26 | 66 | 92 |
| <i>Not Hired</i> | 121 | 95 | 216 |
| Total | 147 | 161 | 308 |
| | $\chi^2(1) = 19.9257$ | $p\text{-value} = 0.000$ | |

As can be seen by Table 41, fewer Minority candidates were hired or rejected an offer for faculty positions ($n = 26$) as compared to White candidates ($n = 66$).

Similarly, we examined the number of male and female applicants who applied for SUOAF-AFSCME positions. Table 42 summarizes this data.

Table 42: Frequencies of male and female applicants for SUOAF-AFSCME positions who were hired or rejected the offer, as compared to not being hired.

| | <i>Females</i> | <i>Males</i> | Total |
|------------------------------|----------------------|--------------------------|--------------|
| <i>Hired or Reject Offer</i> | 57 | 59 | 116 |
| <i>Not Hired</i> | 391 | 453 | 844 |
| Total | 448 | 512 | 960 |
| | $\chi^2(1) = 0.3238$ | $p\text{-value} = 0.569$ | |

Thus, being hired or rejecting an offer for SUOAF-AFSCME positions is independent of gender.

Similarly, Table 43 provides the frequencies of minority applicants who applied for SUOAF-AFSCME positions who were hired or rejected the offer as compared to those not hired. We found that for SUOAF-AFSCME positions, there is no difference in the number of Minorities versus Whites being hired or rejecting the offer.

Table 43: Frequencies of Minority and White applicants for SUOAF-AFSCME positions who were hired or rejected the offer, as compared to not being hired.

| | <i>Minority</i> | <i>White</i> | Total |
|------------------------------|----------------------|--------------------------|--------------|
| <i>Hired or Reject Offer</i> | 26 | 69 | 95 |
| <i>Not Hired</i> | 84 | 163 | 247 |
| Total | 110 | 232 | 342 |
| | $\chi^2(1) = 1.3863$ | $p\text{-value} = 0.239$ | |

Experience

We also investigated whether there may be differences in the experience of candidates who applied for faculty and SUOAF-AFSCME positions. Please note that all findings in this

section should be approached with reservation, as there was no way to determine if there were applicants who applied to the university on more than one occasion and would be counted more than once in the analysis. Thus, the assumption of the observations being independent is not assured. Furthermore, many observations were missing self-reported measures of gender and ethnicity. Because the data presented on the number of years of experience had considerable variation, we decided to operationally define experience into two general categories: *no experience or weak experience*, and *moderate or strong experience*. We obtained measures of the degree of experience for some of the candidates who applied for faculty and administrative positions. Table 44 provides the breakdown for experience by males and females who applied for faculty positions.

Table 44: Frequencies of male and female applicants for faculty positions based on the level of experience.

| | <i>Females</i> | <i>Males</i> | Total |
|--------------------------------------|----------------------|--------------------------|--------------|
| <i>Weak or No Experience</i> | 783 | 1236 | 2019 |
| <i>Moderate or Strong Experience</i> | 285 | 411 | 696 |
| Total | 1068 | 1647 | 2715 |
| | $\chi^2(1) = 1.0182$ | $p\text{-value} = 0.313$ | |

There is no apparent difference in the experience level of faculty applicants among males and females.

Similarly, Table 45 provides the breakdown of experience by males and females who applied for SUOAF-AFSCME positions.

Table 45: Frequencies of male and female applicants for SUOAF-AFSCME positions based on the level of experience.

| | <i>Females</i> | <i>Males</i> | Total |
|---|-----------------------|--------------------------|--------------|
| <i>Weak or No Experience</i> | 2551 | 2016 | 4567 |
| <i>Moderate or Strong Experience</i> | 405 | 477 | 882 |
| Total | 2956 | 2493 | 5449 |
| | $\chi^2(1) = 29.4214$ | $p\text{-value} = 0.000$ | |

There is a difference between male and female SUOAF-AFSCME applicants based on their experience. More males ($n = 477$) were rated as having moderate or strong experience than females ($n = 405$). Similarly, females had more candidates rated as having weak or no experience as compared to males.

Table 46 presents the results of a similar analysis which examined differences in the experience of minority candidates as compared to White candidates who applied for faculty positions.

Table 46: Frequencies of Minority and White applicants for faculty positions based on the level of experience.

| | <i>Minority</i> | <i>White</i> | Total |
|---|-----------------------|--------------------------|--------------|
| <i>Weak or No Experience</i> | 309 | 93 | 402 |
| <i>Moderate or Strong Experience</i> | 123 | 145 | 268 |
| Total | 432 | 238 | 670 |
| | $\chi^2(1) = 67.3382$ | $p\text{-value} = 0.000$ | |

As can be seen in Table 46, more identified minority candidates presented with weak or no experience ($n = 309$) as compared to Whites ($n = 93$).

A similar analysis was done in Table 47 for minority and White applicants for SUOAF-AFSCME positions based on level of experience.

Table 47: Frequencies of Minority and White applicants for SUOAF-AFSCME positions based on the level of experience.

| | <i>Minority</i> | <i>White</i> | Total |
|--------------------------------------|-----------------------|--------------------------|--------------|
| <i>Weak or No Experience</i> | 130 | 119 | 249 |
| <i>Moderate or Strong Experience</i> | 99 | 195 | 294 |
| Total | 229 | 314 | 543 |
| | $\chi^2(1) = 18.9926$ | $p\text{-value} = 0.000$ | |

More White candidates were rated as having moderate or strong experience ($n = 195$) as compared to minority candidates ($n = 99$).

Research

Further, we wondered if there might be a difference in the degree of research experience by gender in the candidates applying for faculty positions at CCSU. We obtained measures of the quality of research for the candidates who applied for faculty positions. Please note that all findings in this section should be approached with reservation, as there was no way to determine if there were applicants who applied to the university on more than one occasion and would be counted more than once in the analysis. Thus, the assumption of the observations being independent is not assured. Furthermore, many observations were missing self-reported measures of gender and ethnicity. Table 48 provides the breakdown in the quality of research by males and females who applied for faculty positions.

Table 48: Frequencies of male and female applicants for faculty positions based on the level of research.

| | Females | Males | Total |
|------------------------------------|-----------------------|--------------------------|--------------|
| Weak or No Research | 109 | 365 | 474 |
| Moderate or Strong Research | 129 | 243 | 372 |
| Total | 238 | 608 | 846 |
| | $\chi^2(1) = 14.0676$ | $p\text{-value} = 0.000$ | |

There appears to be a difference between male and female faculty applicants based on their research. More of the male candidates were rated as having weak or no research ($n = 365$) as compared to female candidates ($n = 109$).

Table 49 presents a similar analysis examining the quality of research for Minority and White candidates applying for faculty positions at CCSU.

Table 49: Frequencies of Minority and White applicants for faculty positions based on the level of research.

| | Minority | White | Total |
|------------------------------------|-----------------------|--------------------------|--------------|
| Weak or No Research | 50 | 120 | 170 |
| Moderate or Strong Research | 108 | 51 | 159 |
| Total | 158 | 171 | 329 |
| | $\chi^2(1) = 48.8200$ | $p\text{-value} = 0.000$ | |

The frequencies described in Table 49 suggest that more minority candidates ($n = 108$) were rated as having a moderate or strong research program as compared to White candidates ($n = 51$). Further, more White candidates were rated as having weak or no research ($n = 120$) as compared to Minority candidates ($n = 50$).

Scholarship

We obtained measures of the degree of scholarship for some of the candidates who applied for faculty positions. Scholarship was defined as a professor's teaching ability or the ability to make scholarly presentations or verbally present within a specific subject area. Please note that all findings in this section should be approached with reservation, as there was no way to determine if there were applicants who applied to the university on more than one occasion and would be counted more than once in the analysis. Thus, the assumption of the observations being independent is not assured. Furthermore, many observations were missing self-reported measures of gender and ethnicity. Table 50 shows the breakdown for scholarship by males and females who applied for faculty positions.

Table 50: Frequencies of male and female applicants for faculty positions based on the level of scholarship.

| | <i>Females</i> | <i>Males</i> | Total |
|--|----------------------|--------------------------|--------------|
| <i>Weak or No Scholarship</i> | 33 | 87 | 120 |
| <i>Moderate or Strong Scholarship</i> | 52 | 76 | 128 |
| Total | 85 | 163 | 248 |
| | $\chi^2(1) = 4.7363$ | $p\text{-value} = 0.030$ | |

There is a difference between male and female faculty applicants based on their scholarship or knowledge of their field as more males ($n = 87$) were described as having weak or no scholarship as compared to females ($n = 33$). Similar results were found when we examined the breakdown for scholarship by minority status. Table 51 provides the results of this test.

Table 51: Frequencies of Minority and White applicants for faculty positions based on the level of scholarship.

| | <i>Minority</i> | <i>White</i> | Total |
|--|---------------------|--------------------|--------------|
| <i>Weak or No Scholarship</i> | 16 | 5 | 21 |
| <i>Moderate or Strong Scholarship</i> | 15 | 17 | 32 |
| Total | 31 | 22 | 53 |
| | Fisher's Exact Test | p -value = 0.032 | |

Thus, there is a difference between Minority or White faculty applicants based on their scholarship or knowledge of their field as more Minority candidates ($n = 16$) are identified as having weak or no scholarship as compared to White candidates ($n = 5$)

Section VII: Separation Data

We were also interested in whether gender or minority status played a role for faculty who left the university. Table 52 presents the separation data for faculty based on gender and their reason for leaving the university.

Table 52: Separation counts for faculty based on gender and reason.

| | <i>Females</i> | <i>Males</i> | Total |
|-------------------------------|----------------------|--------------------------|--------------|
| <i>Non-renewal</i> | | | |
| <i>Resigned Good Standing</i> | | | |
| <i>Service Retirement</i> | | | |
| <i>Voluntary Retirement</i> | | | |
| Total | 41 | 50 | 91 |
| | $\chi^2(3) = 2.4316$ | $p\text{-value} = 0.488$ | |

There is no apparent difference by gender in the reason why faculty members leave the university.

A similar analysis was done for minority status. Table 53 presents the separation data for faculty based on minority status and reason for leaving the university.

Table 53: Separation counts for faculty based on minority status and reason.

| | <i>Minority</i> | <i>White</i> | Total |
|-------------------------------|----------------------|--------------------------|--------------|
| <i>Non-renewal</i> | | | |
| <i>Resigned Good Standing</i> | | | |
| <i>Service Retirement</i> | | | |
| <i>Voluntary Retirement</i> | | | |
| Total | 22 | 66 | 88 |
| | $\chi^2(3) = 2.6911$ | $p\text{-value} = 0.442$ | |

There is no apparent difference between minority faculty and White faculty in their reasons for leaving the university.

Similarly, separation data was examined by gender and minority status for SUOAF-AFSCME personnel. Table 54 presents separation data based on gender and reason while Table 55 presents separation data based on minority status and reason for SUOAF-AFSCME personnel.

Table 54: Separation counts for SUOAF-AFSCME based on gender and reason.

| | <i>Females</i> | <i>Males</i> | Total |
|-------------------------------------|---------------------|-------------------------|--------------|
| <i>Transfer out</i> | | | |
| <i>Non-renewal</i> | | | |
| <i>Resigned – not good standing</i> | | | |
| <i>Resigned-good standing</i> | | | |
| <i>Service Retirement</i> | | | |
| <i>Voluntary Retirement</i> | | | |
| Total | 28 | 29 | 57 |
| | Fisher’s Exact test | <i>p</i> -value = 0.528 | |

Table 55: Separation counts for SUOAF-AFSCME based on minority status and reason.

| | <i>Minority</i> | <i>White</i> | Total |
|-------------------------------------|---------------------|-------------------------|--------------|
| <i>Transfer out</i> | | | |
| <i>Non-renewal</i> | | | |
| <i>Resigned – not good standing</i> | | | |
| <i>Resigned-good standing</i> | | | |
| <i>Service Retirement</i> | | | |
| <i>Voluntary Retirement</i> | | | |
| Total | 10 | 45 | 55 |
| | Fisher’s Exact test | <i>p</i> -value = 0.547 | |

Thus, there is no difference in the numbers or reasons why SUOAF-AFSCME personnel left the university based on gender or minority status.

Section VIII: Conclusions and Discussion

Institutions of higher education have taken a leadership role in protesting discrimination on the basis of gender and race (Haignere, 2002). We are not the first university to conduct a gender and race equity study in the pursuit of fairness and equity for all. There is a recognition that even small differences in salary can lead to large differences over the course of an individual's lifetime (Haignere, 2002).

We found that at all levels of rank at CCSU, there are significantly fewer numbers of women and minority faculty/SUOAF-AFSCME employees. Hiring and retaining minority faculty continues to be a difficult challenge for institutions of higher education (Singh & Cooper, 2006). In addition, historically, women's pay in higher education has consistently lagged behind the earnings of men for the same work performed and in the same job category (Association of American University Professors, 2005). There is a plethora of literature showing that women are paid less in similar ranks, at the same departmental level (Benjamin, 2004). We found the salary wage gap for gender at CCSU is smaller than is reported by other universities of higher education nationally. Benjamin (2004) found that the wage gap was estimated to be at 81 cents on the dollar for public universities. Our estimated wage gap is 97 ½ cents on the dollar. This 2.30% differential was the difference in salary when we factored in age, rank at hire, and other important variables. Once faculty are in the system, their salary advancement occurs at prescribed increments based on the AAUP contract. Nonetheless, any difference is significant for the person experiencing less salary. There were no significant differences in salary for SUOAF-AFSCME employees based on gender or race.

We need to do a better job recruiting experienced women and minority faculty/SUOAF-AFSCME employees. We found that there are more minority finalists selected for faculty and SUOAF-AFSCME positions. However, with SUOAF-AFSCME positions, males are being rated as having more experience as compared to females and with faculty and SUOAF-AFSCME positions, Whites are being rated as having more experience than minority candidates, and ultimately White males seem to get the positions. We need to be doing a better job at seeking out women and minority candidates who are equally qualified. This is not just a problem at CCSU, however. Opp and Gosetti, (2000) found that there are significant discrepancies within higher education for racially diverse administrators and faculty. They conducted a study examining the proportion of women minority administrators and found that they were disproportionately underrepresented at almost every institution of higher education, with the exception of institutions that typically serve minority students. These authors point to the campus climate as one that might impede women in general to succeed in administrative and academic positions. At CCSU, we are identifying minority candidates in the finalist pool for faculty positions, but there is more of a tendency to hire a White candidate. We have recently upgraded the Affirmative Action Officer who is overseeing that all searches meet the affirmative action guidelines and comply with existing law and policies. Finally, we need to do a better job of collecting and reporting minority status for our search candidates as much of the data was missing from the available records.

We also examined the number of promotion and tenure decisions from 2002 through 2008. Although we did not find a consistent pattern of discrimination across these years, there were different years in which more men were denied tenure and promotion than women, more

women were denied promotion than men, and more Minorities were denied promotion as compared to Whites. Furthermore, it is difficult to make overall generalizations about the promotion and tenure decisions because the makeup of the faculty applying for promotion and/or tenure, and the university promotion and tenure committee varies. Furthermore, because there have been four different final decision makers throughout 2002-2008, it is no surprise that some discrepancies would exist.

This was a study that examined direct experiences of gender and racial inequity by way of salary and promotion and tenure. We did not address indirect experiences of inequality that may lead to the perception of discrimination (Bagihole, 2002). Skelton (2005) found evidence that universities frequently have inhospitable and hostile environments for women. Krefting (2003) noted that women in academia are frequently marginalized. Women report a lack of respect from both students and colleagues alike more often than do men in academia. Further, they are more likely to complain about authority issues, isolation, and difficulties balancing work and family (Krefting, 2003). Probert (2005) found that there is discrimination or bias in the appointments, promotions and workloads of women. They are less likely to have access to mentoring and other factors that may contribute to their ability to progress in their careers. Female faculty were 2.5 times more likely to perceive gender discrimination in the academic environment than were male faculty (Carr, Ash, Friedman, Szalacha, Barnett, Palepu, & Moskowitz, 2000). This discrimination may come in the form of a hostile work environment, sexual harassment, and policies that prevent advancement (Carr et al., 2000). In addition, we did not examine some of the family outcomes that may lead to disparate impacts on the lives of women and men faculty (Perna, 2005). Research that includes family issues in the experiences

of men and women in academia routinely cite work-family life issues as factors in the ability to attain tenure and high-status work (Perna, 2005). Having children was associated with lower salaries for women. Perna indicates that little attention has been paid to these issues related to family and their impact on the productivity of women. The potential variables that still need to be studied include issues like child care, family and home responsibilities, and caregiving. Women perceive more conflicts between work-life balance and family demands, than do men (Perna, 2005). Women may be fearful of bringing up these issues that impact their work life for fear that it will negatively impact tenure and promotion (Krefting, 2003).

For our minority faculty at CCSU, there does not appear to be significant salary differences when comparing Whites versus Minorities. However, we did not examine indirect measures of inequity that may lead to the perception of discrimination. Allen et al. (2000) conducted research on the status of African American faculty members at U. S. colleges and universities and found persistent problems with underrepresentation and low academic status of Minorities in six predominantly White Midwestern universities. This also continues to be a problem for CCSU. The absence of African American faculty members may have a role in lessening the chances of African American students completing graduate work at the same rate as White students (Allen et al., 2000). The same argument can be made for other underrepresented groups. It is crucial that underrepresented groups have access to minority faculty and staff as role models (Carrol, Tyson, & Lumas, 2000). Allen et al., and the American Psychological Association (2000), also discuss problems associated with being a minority faculty member in terms of excessive service and teaching responsibilities. Anecdotally, several minority faculty members have discussed this as a problem for them at CCSU. In an effort to

have diverse committees, they are often asked to serve extensively which may impact their ability to complete research expectations and ultimately affect their promotion and tenure status. While we did not address these concerns, we would like to see more exploration to identify qualified minority candidates. Further, an examination of the current campus climate that adds to the perception of inequity and discrimination seems warranted. Singh & Cooper (2006) refer to a “chilly” climate for minority faculty that leads to undermining of research and teaching. They note that once minority faculty are hired, they rarely receive the same level of mentoring within the department that White faculty receive, nor do they receive the resources they need to be successful both in the classroom and with their own research program.

Section IX: Recommendations

- 1) Based on the results of this study, we recommend better recruitment of qualified women and minority candidates at all ranks, especially at higher ranks and in SUOAF-AFSCME. We may want to consider forming a task group to work on improved recruiting or consider setting aside additional monies to provide incentives for qualified women and minority faculty, e.g. additional research monies, supporting mentoring programs, etc.
- 2) There needs to be an improvement in the reporting of key information during our searches, such as minority status of all job applicants, level of experience, research, etc.
- 3) It is recommended that we develop standardized procedures at the level of the Department Chairs and Deans in determining initial salary for all applicants. We need to be cognizant of the 2.30% salary inequity for women faculty. To illustrate the impact of a 2.3% salary difference, imagine a male faculty member is hired at \$50,000 his first year. The female counterpart earns 2.30% less, which is equivalent to \$48,850, a \$1,150.00 difference. If we then add a yearly 5% raise and assume no promotions along the way, after 30 years, the female faculty member has earned \$76,405.00 less than her male counterpart. Department Chairs and Deans need to pay careful attention to lower salaries at the time of hire. Direct all Department Chairs and Deans to develop and institute appropriate mechanisms for ensuring gender equity in salary at the time of hire. At every level of the administration, from Department Chairs to Deans to the Final decision maker, we need to be ensured gender equity. There needs to be policies and

procedures in place so that accountability and feedback can routinely be given regarding gender equity (American Psychological Association, 2000). One method for accomplishing this could be to establish a standardized salary rubric that takes into account Likert scale ratings of experience, research, and scholarship.

- 4) There continues to be the perception at the university that gender and race inequities exist. We recommend that these perceptions be examined in further detail. We propose an additional study in which the perceptions of inequity are examined further to determine what factors, other than salary and promotion and tenure, continue to spark the perception that there is inequity at CCSU. We are not alone in the view that in academia women and Minorities are not treated fairly. More subtle forms of discrimination currently exist as many are aware that overt forms are not only intolerable, but actionable (American Psychological Association, 2000).

- 5) There have been a number of male, female, and minority faculty who were denied promotion and/or tenure. We are not sure why this is. When examining these trends collectively from 2002 through 2008, the final decision-makers have denied women, men, and minority faculty for promotion to full professor without showing a consistent pattern of discrimination against any one group of individuals. Given that information, one explanation for this might involve a lack of understanding on the part of faculty as to what is expected for promotion to the level of full professor. We have recently had a restructuring of the promotion and tenure guidelines in response to some of these decisions. Whether or not that will help remains to be seen. Further, it is

recommended that we conduct a study examining the faculty who are denied promotion to full professor. What happens at that point? Are they promoted at a later time? What is involved with the changes that are made in order for them to be successful? Did they meet with their departmental DEC's? Did they get further instruction and feedback from the university promotion and tenure committee? What changes were made in order for them to be successfully promoted to full professor at a later time? It is possible that the guidelines for expectations associated with becoming a full professor are not clear?

- 6) Conduct a longitudinal study following a representative sample of faculty where measures of experience, research, and scholarship along with personal and family measures are incorporated. This would allow us to get a more complete picture of differences in the experiences of men and women and Minorities as they follow their career paths at CCSU.

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Appendix A

Gender Equity Study

Gender Equity Study

Carolyn R. Fallahi, Ph. D.

Faculty Senate Diversity Committee

Background: Last year the Faculty Senate diversity committee met with AAUP and committed to a gender equity study here at CCSU.

At the beginning of the fall semester, I received a letter from President Miller asking the Diversity Committee to investigate possible gender inequity here at CCSU.

At the meeting with President Miller, he stated that he would be interested in a two phase approach to examining this question.

Phase I: utilize existing data at CCSU to examine gender equity.

Phase 2: a more in-depth exploration of gender equity to help us answer the questions raised by phase 1.

The Committee put together the following questions based on data that we believed was available here at CCSU:

1. Why aren't we hiring more women and Minorities here at CCSU? Are the position ads biased in a way that prevents us from attracting Minorities to CCSU?
2. Are we putting in enough effort to attract minority candidates and women?
3. Once the applicants come for an interview, if we deem that there are not enough Minorities or women in the search, what process do we use to extend the search or make sure that departments or other university units comply with our Affirmative Action goals.
4. Have there been any efforts made to extend the searches in order to provide additional time to recruit Minorities and women?
5. What percentage of female and minority candidates were turned down for promotion and tenure?
6. What percentage of potential female and minority candidates dropped out before the Promotion and Tenure decision and actually left the university?

7. What is the break down by gender and ethnicity for money awarded for grants at CCSU?

Some of these questions proved difficult to answer. There isn't data on many of the questions listed above. For example, we don't keep data on the number of searches that are extended in order to search for minority candidates. We don't keep data on the percentage of potential female and minority candidates that drop out before the promotion and tenure decision and actually leave the university. We don't have data on whether or not female or minority candidates lobby for higher initial salaries.

Below, please find the data I was able to look at and my analysis of that data.

Analysis

1) Tenure and Promotion Decisions: The first analysis was compiled by David Spector in Biology. He concludes that there is evidence for sex discrimination based on Promotion and Tenure data. Please see Appendix 1 for his analysis.

2) Load Credit and Number of Students Taught – Are there differences between males and females in terms of load credit or number of students taught? The load credit data was provided by Tuan Du, Director of Institutional Research. The data was divided into 3 categories: teaching load credit, non teaching load credit, & overall load credit. I examined the load credit activity in teaching first.

2002: An independent samples *t* test indicated that females ($M=6.25$) were not significantly different from males ($M=6.57$); $t(842)=-1.250$, $p=.212$ (2-tailed) in terms of load credit during 2002.

2002: An independent samples *t* test indicated that females ($M=46.16$) were not significantly different from males ($M=49.97$); $t(842) = -1.633$, $p = .103$ (2-tailed) on number of students taught during 2002.

2003: An independent samples *t* test indicated that females ($M=6.33$) were not significantly different from males ($M=6.58$); $t(828) = -.965$, $p = .335$ (2-tailed) on load credit during 2003.

2003: An independent samples *t* test indicated that females ($M=48.02$) were not significantly different from males ($M=52.05$); $t(828) = -1.66$, $p = .098$ (2-tailed) on number of students taught during 2003.

2004: An independent samples *t* test indicated that females ($M=6.15$) were not significantly different from males ($M=6.33$); $t(865) = -.669$, $p = .503$ (2-tailed) on load credit during 2004.

2004: An independent samples *t* test indicated that females ($M=47.92$) were not significantly different from males ($M=50.56$); $t(865) = -.1056, p = .291$ (2-tailed) on number of students taught during 2004.

2005: An independent samples *t* test indicated that females ($M=6.25$) were not significantly different from males ($M=6.46$); $t(844) = -.814, p = .416$ (2-tailed) on load credit during 2005.

2005: An independent samples *t* test indicated that females ($M=51.78$) were not significantly different from males ($M=53.07$); $t(844) = -.493, p = .622$ (2-tailed) on number of students taught during 2005.

2006: An independent samples *t* test indicated that females ($M=6.09$) were not significantly different from males ($M=6.29$); $t(899) = -.800, p = .424$ (2-tailed) on load credit during 2006.

2006: An independent samples *t* test indicated that females ($M=48.42$) were not significantly different from males ($M=50.46$); $t(899) = -.829, p = .407$ (2-tailed) on number of students taught during 2006.

Then I wondered whether or not there were differences in teaching versus nonteaching load credit for males and females. An independent samples *t* test indicated that females ($M=4.2$) were not significantly different from males ($M=4.25$) in teaching load credit hours.

However, when I examined nonteaching load credit hours, an independent samples *t* test showed that females ($M=.045$) had significantly more nonteaching load credit than males ($M=.007$); $t(1174) = 2.400, p = .017^*$ (2-tailed). I'm not sure why this data shows that women have significantly more nonteaching load credit than do men. Another study might look into whether or not women are engaged in more special projects here at the university.

In addition, when I showed these analyses to the Committee on the Concerns for Women, they brought up a question that I could not answer. What is our definition of load credit? This data shows that both men and women are carrying an average of slightly more than 6 load credits of teaching seems erroneous.

3) Are there gender differences in the awarding of grants at CCSU or the monetary awards?

I obtained the data on grants from Dein Kleinart. He was able to provide me with all of the grant awards since 1995.

I first wondered if there was significant gender differences associated with the number of men and women who received grants. No significant differences were found, $\chi^2(1, n=1716) = .061, p = .804$.

Then I wondered if there were significant differences in the monetary grant awards between men and women. An independent samples *t* test indicated that females

($M=\$2008.18$) were not significantly different from males ($M=\$2065.33$); $t(1714)=-.655$, $p=.512$ (2-tailed).

4) Initial Salary Data – this database was very difficult to get. As a result, I was only able to get data on initial salaries for the years 2004-2007. I broke the data into three different categories: (1) AAUP members, (2) SUOAF-AFSCME members, and (3) Administration.

AAUP: The initial salaries (bi-weekly) of Females ($M=\$1,945.18$) were significantly different from males ($\$2,103.64$) with males receiving higher overall initial salaries; $t(206)=-2.454$, $p=.015^*$ (2-tailed). [Please note, this analysis might be different if we were to analyze the data by department or school].

SUOAF-AFSCME: The initial salaries (bi-weekly) of Females ($M=\$1,796.54$) were not significantly different from those of Males ($M=\$2,208.84$); $t(75)=-1.716$, $p=.090$ (2-tailed). Please note: the starting salaries for classified employees are set by merit system pay requirements. According to Anne Alling, there is no discretion whatsoever.

Administration: The initial salaries (bi-weekly) of Females ($M=\$2,811.09$) were significantly different from those of Males ($M=\$4,822.26$) with males receiving higher overall initial salaries; $t(25)=-3.65$, $p=.001^*$ (2-tailed). Please note: there were some significant outliers in this data set, including the hiring of our president and provost. Given that this data set is skewed, we should interpret with caution.

(4) I met with Tommie Carr. She gave me the following information about hiring goals.

Multicultural Affairs has goals for hiring. The current work force is based on the 2000 census. The goals for hiring are set by the current work force and the unemployment report. Tommie and HR are charged with increasing awareness of recruitment. In her words – “it’s everyone’s job.”

There is a lack of minority hiring. During September, 2006, at the assistant professor rank, they hired 12 women and 15 men. Out of the 12 women, there were 2 Black women candidates and no Black male candidates. This has nothing to do with the hiring committee. Tommie feels that we have not found a way to get diverse applicants into the applicant pool. However she did note that they try to intervene to make an effort when they can.

Each month Multicultural Affairs sends out monthly reports that tells who was hired, goals, and goals yet to be achieved. Tommie feels that the search committees are trying to do their best to get qualified minority candidates. The CHRO – Connecticut Commission on Human Rights

and Opportunities – found that they weren't getting the necessary information about candidates, so they changed the procedure in which they make suggestions and overview who is interviewed. The procedure: the individual department puts forth a candidate. The application goes to HR. HR reviews and determines who is qualified. The list is sent to the department and Multicultural Affairs and the Director of Affirmative Action. The department hiring manager looks at the list and sends it to Tommie who looks at the reasons to hire or not hire.

Unclassified positions that include management, directors, deans, associate deans, faculty, and professional non faculty members all go through a search process. Classified positions usually are more local than professional non-faculty. Ads are placed at our website, Department administrative services website, etc. University classified positions and unclassified positions include Classified [regulated by state statute; Certification list to be applied or hired] and Unclassified [clericals, maintenance, custodians, police, facilities, etc.]

Search committees do not have any demographic information and should not know about race or ethnicity when making decisions about qualifications. Search committee decides what the qualifications are and if the candidates match those qualifications based on the vita.

The basic process is not different for SUOAF-AFSCME personnel. No demographic information is available. But here we mostly get local applicants.

How do we get minority candidates? We take out ads in minority journals and try to track how they found out about the job. All candidates fill out cards, but they are not put into a database. They are just in a closet in a box. All positions are advertised in higher education jobs. They also advertise in Journal of Blacks In Higher Education; web ads; Hispanic Outlook, etc. These automatically go out every time there is a faculty search. Departments also sometimes add other journals. This is funded through AAUP. They also place ads in the chronicle. HR will pay for 1 reasonably priced ad. Ads run in the chronicle for \$1,000 or more. Web ads are much less money. Departments sometimes have discretionary funds for additional ads. We don't know how effective the advertising is for getting qualified candidates.

Some universities are engaging in partnerships with high minority universities or who have large minority populations. Tommie suggested that partnering with other universities that have a large minority population might help us increase the numbers of qualified candidates. In addition, she suggests that we could "bend the rules a bit" in order to get a minority candidate, e.g. do you have an ABD? Finally, Tommie notes that the best way to recruit minority personnel is if people within the departments know minority candidates and try and recruit them personally. Taking out ads is the minimum. She feels that in the last couple of years, we have not done well with minority recruiting. I examined many of the ads placed and they seem

to be very inviting to minority candidates. However, we need additional research to answer the question, does ads placed in minority journals do a good job of attracting qualified minority candidates?

Recommendations

The analyses presented above suggest several areas in which gender discrimination has occurred at CCSU. A quick study of surface statistics by full-time faculty members who are not experts in employment statistics and who do not have access to individual files cannot even fully examine all relevant issues at a crude statistical level, and certainly cannot get at the underlying issues of causation. In an atmosphere in which gender equity cases against CCSU are advancing at CHRO, and in which the federal government is starting to apply Title IX to opportunity in academic fields at universities, these issues must be addressed. CCSU should be proactive, not waiting for complaints or for government investigations. We need to understand what is happening here and what we can do to correct any problems. Only an outside, expert investigation can have the credibility to address these concerns in a meaningful way.

- (1) Hire a professional to complete a gender equity study. This person should be an expert in employment and discrimination statistics and in survey and interview techniques, and the hire be made by a joint committee of the administration and of the faculty, who would also serve as a steering committee to work with the outside consultant. The faculty representatives should be the chairs of the diversity committee and the Committee on the concerns of women, the two union presidents, and the Senate president (or designates). The consultant should have full access to personnel files and any other data. While this is a tall order, it might cost somewhere in the range of \$30,000 in fees and \$10,000 in expenses.

This current study is a simplistic method for looking at gender equity. It does not address pertinent questions like:

- a. Are there gender differences between departments or schools in terms of promotion and tenure, initial salary, and current salary?
- b. Are there gender differences because of conflicts between work and family? Research studies on gender equity have demonstrated that women experience significant conflicts between work and family demands.
- c. Is there gender differences experienced based on discrimination within the university environment?

- d. Is there proper support for dealing with stereotypes or discrimination for women and Minorities within the university environment?
- e. Are there gender differences with expectations for service within the university environment?
- f. Are there gender differences in the assignment of classes, the teaching schedule, mentoring, etc.?
- g. Are there gender differences in advising students, advising clubs or organizations on campus, service within the department, and service on university committees?
- h. Are there differences in a reduction in teaching loads in order to help with research and publication? Reassigned time?
- i. Is there fairness in terms of office space? Research facilities?
- j. Are women and Minorities subjected to more sexist and discriminatory remarks at work?
- k. Is there a perception of sexism and discrimination at the university?
- l. Is there a difference in the way the administration deals with women and Minorities?
- m. Is sexual harassment a problem at this university?
- n. Are departments doing a good job being collegial and supportive to women and Minorities?
- o. Do we train our women and Minorities to have the same skills to succeed in the workplace as men?
- p. Do women and Minorities have to be silent about issues that are bothering them in order not to jeopardize tenure?
- q. Are women and Minorities satisfied at this university?
- r. Why does there seem to be a differential loss of minority faculty (especially Black females) before tenure decision? There are anecdotes and rumors floating around; someone should investigate this issue. People who have left should be interviewed.

****Please note....many of these questions was asked on the survey that I proposed to the president at the beginning of the 2006-2007 academic year.

- (2) Put forth a campus wide initiative to bring more qualified women and Minorities to campus. Maybe we could set aside funds for “hires of opportunity” in any department that identifies a minority candidate. In many fields there are very few minority candidates available, and in others the gender make-up of the pool is highly skewed. As CCSU expands in nursing and engineering over the next few years, how can we avoid skewed hiring in those departments without dedicating funds to making large offers to male nursing faculty or female engineering faculty?
- (3) Put in place the Faculty Senate Diversity Committee’s recommendations for salary negotiation (recommended during the 2005-2006 academic year). This was the recommendation that was made by the Faculty Senate Diversity Committee last year:

Re: Suggestions from the Faculty Senate Diversity Committee regarding upcoming contract negotiations.

For the 2005-2006 academic year, our committee has been looking into gender/race inequities in the hiring process at CCSU. There is much anecdotal evidence even within our own committee regarding the inequities which exist with salary for new hires. Further, it has been stated openly that “women just don’t negotiate as well as men do.”

- All new hires will be given a “hiring guide” to help them negotiate their salary.
- This “hiring guide” will explain the process involved with negotiating their salary. This will include the name of who they negotiate with (e.g. Dean, not Chair of the department), the salary range within their department, and a list containing the salary information of all new incoming faculty/staff for a period of time, e.g. the last 2-3 years.

(4) There should be a study of what CCSU is doing, and what can we do to change the pipeline. We need to find out where our graduates go and what biases there might be (e.g., are males and females with similar academic records equally likely to go to graduate or professional school?). If there are biases, we need to examine our advising and mentoring processes. With the expansion of our engineering and nursing programs in particular, are there ways that we can encourage enrollment by male students in nursing, female students in engineering, and minority students in both programs? Can we use the proposed magnet high school on our East Campus to address pipeline equity? At a more advanced level, what, if anything, are we doing to mentor and develop faculty and mid-level administrators to move on to higher levels (here or elsewhere)? It might seem that we hurt ourselves if we train a

promising department chair to take a deanship elsewhere, but we need to contribute to the overall professional pool, and that person might one day return as a provost or president.

Respectfully Submitted,

Carolyn R. Fallahi

Carolyn R. Fallahi, Ph. D.

Assistant Professor of Psychology

cc: AAUP President, Cindy White

Faculty Senate, via President Craine

Appendix B

Some summaries and statistical tests on tenure and promotion data for the current year and the past five years as provided by PandT.

Compiled by David Spector, Biology.

Notes.

All statistical tests are Fisher's exact tests for 2 X 2 tables.

All probability values are one-tailed.

Tests on or summaries of tenure and promotion-to-associate data are not independent, as many individuals are undoubtedly in both categories.

Summaries of data over more than one year undoubtedly include cases in which the same person applied for promotion in more than one year.

Abbreviations:

M--male

F--female

PY--President Yes (i.e., the President approves promotion or tenure)

PN--President No (i.e., the President denies promotion or tenure)

p--the probability of seeing such an extreme result or a more extreme result by chance alone under the null hypothesis of no difference. For those with little background in statistics, here is a rough primer on the interpretation of "p": The lower p is, the less likely an observed result is due to chance alone, and the more likely a researcher is to reject the "null hypothesis" that there is no difference between categories (e.g., in this case, promotion rates of males and females). With a low "p" a researcher is more likely to favor an alternative hypothesis (e.g., that there is sex discrimination), but such a conclusion depends not only on the "p" but also on knowledge of how the data set was gathered and of the processes involved. There is no magic "p" below which the null hypothesis is automatically rejected, but there is a tradition of treating "p" values below 0.05 as being "statistically significant." Lower values, e.g., below 0.01 are often considered especially "significant." I hope that the above discussion helps the statistical newcomers without providing too much offense by oversimplification to the statistically sophisticated.

My interpretation is given in italics below each table.

2006

Cases in which the DEC, Dean, and PandT all recommended promotion to full professor:

| | PY | PN | |
|---|----|----|-------------|
| M | 8 | 0 | $p = 0.018$ |
| F | 1 | 3 | |

The data are very unlikely to come from a distribution in which males and females are treated equally. The data by themselves do not demonstrate discrimination on the part of the President, but they are quite consistent with and suggestive of such discrimination.

All decisions in 2006 in which the DEC, Dean, and PandT all recommended tenure or promotion:

| | PY | PN | |
|---|----|----|-------------|
| M | 19 | 0 | $p = 0.011$ |
| F | 10 | 5 | |

The data are very unlikely to come from a distribution in which males and females are treated equally. The data by themselves do not demonstrate discrimination on the part of the President, but they are quite consistent with and suggestive of such discrimination.

“Rescues,” i.e., cases in which one or more of the DEC, Dean, and PandT voted no on a candidate, but the candidate was approved for tenure or promotion by the President:

| | PY | PN | |
|---|----|----|------------|
| M | 2 | 4 | $p = 0.27$ |
| F | 0 | 5 | |

The President “rescued” a third of the males eligible for such rescue, but none of the eligible females. With the small sample size, “statistical significance” is not reached, but the data are suggestive of a discriminatory pattern.

Promotions to full professor 2001-2006

All years 2001-2006

| | PY | PN | |
|---|----|----|-------------|
| M | 49 | 18 | $p = 0.048$ |
| F | 24 | 19 | |

2001-2005

| | PY | PN | |
|---|----|----|------------|
| M | 40 | 15 | $p = 0.39$ |
| F | 23 | 11 | |

There is an indication of sex discrimination in the past 6 years taken together, but that apparent discrimination seems to be due almost entirely to data from the current year, as the pattern is almost eliminated by subtraction of this year's data.

Comparisons of the 5 previous years (2001-2005) with the current year (2006) for promotion to full professor.

Both sexes

| | PY | PN | |
|--------|----|----|-------------|
| 2001-5 | 63 | 26 | $p = 0.041$ |
| 2006 | 10 | 11 | |

Males

| | PY | PN | |
|--------|----|----|------------|
| 2001-5 | 40 | 15 | $p = 0.59$ |
| 2006 | 9 | 3 | |

Females

| | PY | PN | |
|--------|----|----|------------|
| 2001-5 | 23 | 11 | p = 0.0034 |
| 2006 | 1 | 8 | |

There was a decrease in the proportion of candidates promoted to full professor from the previous five years to the current year, and that decreased success rate was due entirely to the difference in female success rates between the previous and current years.

Overall conclusion: There is a prima facie case for sex discrimination on the part of the current President who has taken the unusual step of frequently overriding unanimous recommendations of the DEC's, Deans, and Promotion and Tenure, and of doing so disproportionately to decide against promotion of women. More detailed statistical analyses might refine the estimate of extent of apparent discrimination, but only careful examination of the cases in a court of law or similar appropriate institution can determine if the discrimination is real. Finally, it is important to remember that these are not just numbers, but are the lives of humans, our colleagues, denied employment, raises, promotion, and respect.

Appendix C

Diversity Survey

Have you experiences stereotypes from

Students

Colelagues

Supervisors

Have you experienced prejudice from

Students

Colelagues

Supervisors

Have you experiences discrimination from

Students

Colleagues

Supervisors

How would you rate the climate for diversity?

How would you rate the level of acceptance for diverse groups on campus?

How would you rate your personal level of comfort on campus?

Do you thing the following are doing enough to increase diversity on campus:

Administration

Your colleagues

Faculty Senate

Diversity Committee

Appendix D

Central Connecticut State University

Senate Diversity Committee Report

2006-2007

Dear Colleagues,

In terms of diversity, 2006-2007 has been a difficult year for our university. Originally, the committee had decided to focus this year on religious diversity, because since the beginning of the decade, we have seen increased stereotypical portrayals of Muslims, and the resurgence of old Jewish stereotypes. The committee put together a series of lectures on this topic with several world-renowned scholars. However, issues much closer to home ended up taking precedence.

We started the year under the cloud of confusing tenure and promotion decisions that many people believed were evidence of gender discrimination by the current administration, an event that set the tone for much of the year. President Miller requested that the committee conduct a basic study of general issues related to gender discrimination. Dr. Carolyn Fallahi volunteered to conduct the study, and her full report is attached to this report. Her main conclusions, however, are as follows:

- There is some statistical evidence of gender discrimination in tenure and promotion in the last few years, but most of the variance is explained by the 2006 decisions.
- There is a very significant difference in starting salary between men and women. The mean starting faculty biweekly salary for women is \$1,945, whereas for men is \$2,104. For management, the differences are even greater. The mean initial biweekly salary of females is \$2,811.09, whereas for men is \$4,822.
- There is no significant gender difference in teaching load or number of students taught, but female faculty have a higher number of non-teaching load credit hours than males.

We do not have enough data at the moment to explain this difference.

In addition to the already discouraging situation of women at CCSU, In February the student newspaper “The Recorder” published an infamous op-ed titled “Rape only hurts if you fight it” that put our campus on the national news. The fact that the writer and publisher of “The Recorder” were able to publish such an offensive and misogynistic piece without having to pay any serious consequences, helped cement the image of CCSU as a place that is unwelcoming to women.

As chair of the diversity committee, I received numerous complaints from many of the faculty and staff at CCSU about the unwelcoming climate for minority groups at Central, and the lack of genuine efforts on the part of the administration to foster diversity. For instance, the Latin American Association at Central has complained for several years that in the last two years of his administration, President Judd systematically fired or demoted every Latino in top administrative positions. This resulted in CCSU being the only institution of higher education in Connecticut without a single Latino above the level of assistant dean. In spite of explicit promises by the current Miller administration two years ago, The LAAC has complained that this situation has still not being corrected.

The African American Caucus has documented dozens of instances of prejudice and discrimination against Black faculty and staff, including racist messages and E-mails, unfair treatment, and discrimination in promotion and hiring. They complain that in the past two years, there has not been any serious effort to address this bias.

Members of our Gay/Lesbian and Bisexual community have been the targets of hate speech and aggressive messages, some in public fora like the university E-mail list-serve or “The Recorder.” They too complain of a lack of intervention on the part of the Miller administration.

Because of these complaints, the Committee decided to conduct a short Diversity Climate Survey for faculty and staff, which is included as Attachment B. In total, 121 faculty and staff members completed the survey. The results confirm the general perception that many members of ethnic and sexual orientation minority groups already have: there is a clear climate of prejudice and discrimination on campus, coupled with a lack of intervention by the administration. Some highlights:

- While 64% of White/European respondents said they never have experienced prejudice by colleagues, only 14% of African Americans and 9% of Latinos responded similarly.
- 100% of the African American respondents reported being victims of discrimination by supervisors (86% often, 14% occasionally). 73% of Latinos reported likewise. In

comparison, only 8% of White/Europeans reported experiencing discrimination often and 18% occasionally.

29% of members of sexual orientation Minorities reported experiencing discrimination by colleagues often. Only 14% of other respondents reported at the same level.

About 70% of all respondents found the climate for tolerance and diversity to be medium or low. However, 86% of African Americans and 46% of Latinos responded that it was low.

Overall, there is a general consensus that the administration is not doing enough to foster diversity and tolerance. Only 12% of respondents believe that the Administration is definitely doing enough to reduce prejudice and discrimination. Furthermore, 0% of African Americans and Latinos responded at the same level!

RECOMMENDATIONS

There is no question that there is an urgent need to address the issues of discrimination and prejudice on this campus. The administration should take firm action by promoting programs that foster and actively seek diversity. The faculty should move without delay to include diversity as a major component of general education. One way to promote effective programs and send a clear message against prejudice and discrimination, would be to upgrade the current position of coordinator of multi-cultural affairs to a position of Vice-president for Diversity, following the model of universities like Texas A&M, University of Virginia, or University of Washington, with a clear, proactive mandate to fight prejudice and promote diversity in our campus.

In any event, it is clear that CCSU is right now in an intolerable position and I call on the Faculty Senate of this institution to exhort the administration to take firm steps to resolve a problem that has, by all objective means, reached a crisis proportion.

Respectfully Submitted

Moises F. Salinas

Chair Diversity Committee